
Choice, Rules and Collective Action

The Ostroms on the Study
of Institutions and Governance

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Introduced and Edited by
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Chapter Two

Polycentricity: The Structural Basis of Self-Governing Systems¹

Vincent Ostrom

[It] was asserted that traditional patterns of metropolitan government make up a 'polycentric political system', in which there exist many decision-making centres, formally independent of each other. To the extent that these political jurisdictions take each other into account in competitive relationships, enter into contractual and cooperative relationships, or turn to central mechanisms to resolve conflicts, they may exhibit coherent, consistent, and predictable patterns of behavior and may be said to function as a 'system'. These assertions referred to units of government in the context of metropolitan areas. They raise the question of whether general sets of relationships can exist where multiple units, formally independent of one another, can function interdependently as polycentric systems capable of yielding emergent patterns of order. Systems of governance occur wherever complementary arrangements for formulating, using, monitoring, judging, and enforcing rules exist.

If the conditions applicable to polycentric orders can be generalized to apply to all patterns of order in a society, we might then meet the conditions specified by Madison in essay 51 of *The Federalist* where he suggests that 'this policy of supplying by opposite and rival interests, the defects of better motives, might be traced through the whole system of human affairs, private as well as public' (Hamilton, Jay, Madison 1788: 337, my emphasis). If the whole system of human affairs is capable of being organized on principles of polycentricity rather than monocentricity, we could have human societies that no longer depend upon a unity of power to achieve coherence. Such an idea is of radical proportions; but this is what Madison is saying in what I would regard as the single most important assertion about the organizing principle of American federalism to be found in *The Federalist*. This assertion, then, is fully consistent with Tocqueville's observation that American democracy is a self-governing society: 'there society governs itself for itself' (Tocqueville [1835] 1945, 1: 57).

If we view a federal society as a covenanting society capable of generating rich assemblages of associations, we would expect to see social units of one sort or another, formally independent but choosing to take each other into account, functioning in mutually accommodating ways to achieve many different patterns

1. Initially published in Vincent Ostrom's *The Meaning of American Federalism: Constituting a Self-Governing Society*, (1991) 223–44. San Francisco: ICS Press.

of order. How these patterns of order are constituted is, at least in part, an empirical question. In any general system of polycentric order, we would expect particular patterns of polycentricity to be interdependently related to other such patterns.

The appearance of disorder that prevails at the surface, to paraphrase Tocqueville, may upon further inquiry reveal coherent patterns of order. Conversely, the appearances of order that are presumed to exist may be seriously misleading. A bureaucracy, for example, cannot function as the basis for a rational legal order, as Max Weber presumed, when those who exercise the prerogatives of rulership use their discretion to waive the requirements of law. The founder of the Ming dynasty discovered that holding the reins of rulership taut yields oppression, while relaxing them yields corruption (Dardess 1983). The Faustian bargain inherent in the constitution of order in human societies does not allow perfection.

Aspects of polycentricity are likely to arise in all systems of social order because human beings are capable of thinking for themselves and acting in ways that take account of their own interests. When power is used to check power, careful attention should be paid to the way that polycentricity serves as a structural basis for the emergence of actual self-governing arrangements. If such a system is to be extended literally ‘through the whole system of human affairs’, including the ‘distribution of the supreme powers of the State’ (Hamilton, Madison, Jay 1785: 338), it is necessary to explore the application of polycentricity to the realm of international affairs as well. When we contemplate how the principles of polycentricity might apply to the whole system of human affairs, we are exploring the fuller implications of the American experiment.

The concept of polycentricity

As formulated by Ostrom, Tiebout, and Warren (1961), a poly-centric political system would be composed of (1) many autonomous units formally independent of one another, (2) choosing to act in ways that take account of others, (3) through processes of cooperation, competition, conflict, and conflict resolution. The resolution of conflict need not depend upon ‘central mechanisms’ as stated in that formulation. Noncentral mechanisms for conflict resolution also exist.

It was not until after the essay just cited had been published that I became aware of the prior use of the concept of polycentricity by Michael Polanyi in *The Logic of Liberty* (1951). Polanyi distinguishes between two different methods for organizing social tasks, methods that are constitutive of two different types of social order. One is referred to as a ‘deliberate’ or ‘directed’ social order, coordinated by recourse to an ultimate authority exercising control through a unified command structure. I presume that this type of order is equivalent to Hobbesian sovereignty, in which there is a single ultimate authority exercising a monopoly over rulership prerogatives and the instruments of coercion in a society.

The other type of order for organizing social tasks is identified by Polanyi as ‘spontaneous’ or ‘polycentric’. It is conceptualized as an order where many elements are capable of making mutual adjustments to one another within a general system of rules where each element acts independently of the other elements.

Within a set of rules, autonomous decision-makers are free to pursue their own interests subject to the constraint inherent in those particular rules being enforced.

I have difficulty with the use of the term ‘spontaneous’ in the development of social orders. When juxtaposed with the term ‘deliberate’, as it is by Polanyi, the term ‘spontaneous’ implies that a development has occurred without the intention of those involved. I readily recognize that such possibilities may exist. Whether vehicles in meeting one another on the same roadway move to the right or to the left probably derived from experiences in which the rule accrued with significant spontaneity at different places in human history. However, a great deal of deliberateness may be required to establish a federal system of governance where power is used to check power amid opposite and rival interests. A polycentric political system, where rule-ruler-ruled relationships are organized by reference to many autonomous decision structures within each unit of government, requires a good deal of deliberateness in order to function. Anyone who has read Madison’s ‘notes’ on the Philadelphia Convention of 1787, not to mention *The Federalist*, will appreciate that formulating the rules for the federal union called the United States of America did not occur spontaneously, nor was it an edict issued by a supreme authority.

As Jean Piaget ([1932] 1969) demonstrates, children at play can, in light of their accumulated experiences and maturation, learn to modify and create games by formulating mutually agreed upon rules that they themselves proceed to enforce. But such capabilities depend upon a sophistication about rule-ordered relationships that must be added to the skills needed for shooting marbles or playing ball.

To expect a democratic society not only to emerge spontaneously, but to modify and sustain itself in the same way, is not plausible in light of the problems of and probable threats to the viability of democratic institutions. I prefer, then, to presume that polycentric systems of order depend upon a good deal of deliberateness in their creation, operation, and maintenance over time. Yet Polanyi, F. A. Hayek (1973) and others who use the language of ‘spontaneity’ in referring to social orders are emphasizing points that have considerable merit. Such systems depend upon accumulated experience and cannot be laid down by simply putting words on paper, whether in the form of constitutions, statutory enactments, or the edicts of an autocrat. They depend upon people who know what they are doing and have acquired workable standards by which they can measure successes and failures. We can expect more failures than successes to accrue from the type of ‘spontaneity’ that might be associated with trial and error. Liberty and justice are performance criteria that cannot be measured in the same way as net monetary return.

The autonomous character of polycentric systems implies self-organizing capabilities. The many autonomous elements or units seek to order their relationships with one another rather than by reference to some external authority. Self-organizing systems become democratic self-governing systems when those being governed have equal liberty and equal standing in the constitution of an order where rulership prerogatives are subject to effective limits among multiple agents, each exercising a limited public trust. I assume that the rules of such associations are open to public scrutiny, to constrain the organization of unlawful conspiracies.

In a theory of polycentric orders I further assume that individuals are the basic units of analysis. Individuals will occupy positions where decisions are taken on behalf of the interests of others in the exercise of agency and trust relationships. Business firms, units of government, agencies of government, legislative bodies, political parties, courts, and nation-states may also be used as units of analysis having to do with relationships at incremental levels of analysis. Societies then become richly nested assemblages of associations that include the diverse forms of association developed within and among units of government.

Diverse autonomous units can then be subject to analysis in relation to specifiable rules of association. The rules of association within business firms at one level of analysis need then to be explored in relation to the rules of association pertaining to market relationships at another level. But markets, electoral contests, and international relations may involve such different strategic calculations that, when polycentric systems of orders apply through the whole system of human affairs, few predictable inferences can be made regarding units of all types. Most inferences will apply to the relationships of particular types of units functioning in particular forms of polycentric order characterized by particular types of rules and payoff functions. If the whole system of human affairs were subject to systems of polycentric orderings, it would be as though all patterns of order in a society were conceptualized as a series of simultaneous and sequential games. A general system of polycentric ordering, then, would be one where each actor participated in a series of simultaneous and sequential games and where each act had the potential for being construed as a move in simultaneous games. Time out in the play of any one game might be taken to reach resolution of disagreements and conflicts.

We might further anticipate that general systems of polycentric orderings applicable to whole systems of human affairs would take on the characteristics of competitive games: contestability, innovative search for advantage, and convergence toward successful strategies. If the whole system of human affairs were organized in this way, we would expect to see the emergence of a civilization with greater evolutionary potential than can be achieved by those who call for revolutionary change.

The emergence of patterns of order in polycentric structures

In this section I shall consider the patterns of polycentric orderings as these apply to (1) competitive market economies, (2) competitive public economies, (3) scientific inquiry, (4) law and adjudicatory arrangements, (5) systems of governance with a separation of powers and checks and balances, and (6) patterns of international order. The challenge is to understand how patterns of polycentricity might extend to the whole system of human affairs.

Competitive market economies. Since Adam Smith's *Wealth of Nations* (1776), competitive market economies have been celebrated as systems of economic order that manifest patterns of polycentricity and significant degrees of spontaneity. Competitive markets are open systems where anyone is free to enter as a

trader subject to the condition of conducting exchange relationships by mutual agreement. The ordering of market relationships responds by mutual adjustments to the activity of others. Competition occurs in the exercise of choice among the alternative options available. Exchange is itself a cooperative relationship between particular buyers and sellers.

Voluntary agreement implies that each party to an exchange is left better off by consummating the exchange. Competition implies that those offering a similar product for sale must meet the terms offered by their competitors. The buyer has incentives to take advantage of lower prices for any given quantity or quality of a good. The combination of these circumstances means that no single producer is free to maximize profits. Competition reduces returns to producers and increases returns to consumers.

These results are both counterintentional and counterintuitive. Each producer may seek to maximize profits, but instead his profits will be reduced by the presence of competitive alternatives. Consumer surplus is proportionately increased. It is consumers who benefit from competitive markets. Selfishness in seeking private advantage yields public benefits. It is this relationship that was dramatized in Mandeville's *The Fable of the Bees* ([1714] 1970).

Furthermore, the idiosyncratic pursuit of self-interest yields not chaos but a predictable system of order with tendencies to drive toward an equilibrium of supply and demand at a point where marginal price covers marginal costs. Such a system of relationships offers optimal opportunities for the alleviation of scarcity in human societies. Investment is no longer justified when costs of economic activities exceed benefits, for when they do the net effect is to leave people worse off. The best results are achieved where benefits are equal to or marginally greater than costs. Societies cannot hope to improve upon such conditions given comparable technologies, human skills, levels of knowledge, and access to information.

Given producer motives to maximize profit, incentives exist in any market economy for established producers to collude, restrict entry, reduce competition, and set prices to allow for a more favourable rate of return. To the extent that such strategies are successful, the competitiveness of market systems is reduced. So long as producers can turn to political authorities to fix the terms of trade and enforce cartel agreements among producers, the equilibrating tendencies of market arrangements shift to the advantage of producers and to the disadvantage of consumers. There are conditions where the equilibrating tendencies of an open (free) competitive market economy cannot be maintained and distortions can be expected to occur. A knowledgeable awareness of these conditions is essential to the maintenance of competitive market arrangements as a polycentric order. If courts treat cartel agreements as valid contracts, they are using their prerogatives to impair the competitive viability of a market economy. The viability of any polycentric order depends upon the maintenance of appropriate limits. Such structures are vulnerable to dominance strategies.

Market arrangements work effectively in relation to goods that are subject to exclusion, and are marketable in units that are both measurable and specifiable in equivalent quantities and/or qualities. Markets are facilitated by commensurate

institutions pertaining to private property, the enforcement of contracts, the existence of a reliable monetary system as a medium for exchange and as a measure of value, and access to appropriate public infrastructures pertaining to open spaces, roadways, and public utilities.

A competitive market economy contributes to the emergence of public information about the comparative prices of a vast array of goods and services. It is this information that provides participants in market relationships with an awareness of relative advantage that may accrue to entrepreneurial efforts and innovative potentials. It is the accretion of public information that enables each participant successfully to coordinate his or her pursuit of opportunities in relation to others, and to function in a system of order that works by mutual accommodation among the participants.

The contestability of markets offers rewards to those who discover innovative potentials including the use of new ideas, the development of new technologies, and whatever advantage is to be had from local knowledge. The significance of these rewards for innovations is given recognition in patent and copyright laws that allow an innovator to gain monopoly advantage for fixed periods of time because innovations are not easily appropriable as private property. Whenever a competitor gains an advantage from innovative potentials, all other competitors functioning in the same market have an incentive to acquire them. There is, in other words, a convergence toward successful innovations. The most important factors contributing to the success of competitive market economies are their information-generating features and incentives for innovation. Market economies, as Hayek and the Austrian economists have emphasized, appropriately constrained by patent laws, can then be viewed as facilitating processes of discovery and innovation. Appropriate constraining institutions are therefore necessary to the maintenance of competitive market conditions.

Competitive public economies. Competitive public economies can emerge in highly federalized systems of government where substantial fragmentation and overlap exists among diverse government units. These latter, in arranging for the provision of public goods and services, function as collective consumption units. The competitive rivalry in public economies cannot be expected to achieve equilibration between marginal cost and marginal price that economists expect from a ‘perfectly’ competitive market economy. We would expect, however, that there would be similar pressures toward enhanced efficiency where diverse communities are organized as collective consumption units, and where competitive alternatives exist among production units. So long as the communities of beneficiaries bear the costs of providing public services and there is an appropriate fit between the nature of the good and the boundaries of the collective consumption unit, we can expect increased sensitivity to benefit-cost calculations so that benefits cover costs. The structures of incentives under these conditions work in the proper direction. Such structures can be expected to yield different results from what would be achieved by supplying public services through a system of public administration organized in the kind of unified command structure characteristic of an integrated public

bureaucracy. The more highly federalized a political system, the higher the degree of competitive viability that can be expected to exist in fitting patterns of demand to patterns of supply.

It is in achieving a fit between consumption and production functions that configurations of relationships need to be established among the government units responsible for each. Size economies applicable to the consumption of collective goods and services can function independently of economies-of-scale in transforming factors of production into outputs. To assume that overlapping jurisdictions yield wasteful duplication of services fails to take account of collective consumption functions that need to be organized in public economies as distinguished from market economies. The existence of overlap among collective consumption and production units means that competitive options become available. Contestation is then facilitated in circumstances where increasing information on comparative performance can be expected to emerge, where incentives for innovation occur, and where participants become knowledgeable about the successful and unsuccessful arrangements that become available. Patterns of order are maintained by mutual adjustment among informed participants choosing from among the alternatives that are available to them.

Scientific inquiry. Polanyi's *The Logic of Liberty* (1951) draws heavily upon the organization of scientific communities as manifesting the characteristics of a polycentric order. To engage in the pursuit of scientific inquiry, Polanyi argues, requires that any particular investigator take account of the achievement of others. Whatever it is that becomes problematical is so in light either of some anomaly that arises between a theoretical formulation and the consequences that follow from acting upon it, or of the existence of some alternative way of addressing some problematical situation. An awareness of either of these circumstances depends upon an awareness of the formulations and achievements of others. The merit of any new formulation turns first upon its public reproducibility. The particular formulation and the results achieved, if appropriately formulated and acted upon, are not idiosyncratic to particular human personalities but are presumed to be publicly reproducible by others possessing comparable skills and knowledge.

There are, then, basic presuppositions about the essential coherence of a universal order that enable scholars eventually to resolve puzzles or dilemmas and to choose among competing conjectures. The act of choosing accrues to others in the scientific community. Presumably, some ‘advantage’ must accrue to a new ‘discovery’ as an alternative way of addressing a problematical situation before others can be persuaded by its merit.

This taking account of the work of others and advancing alternative formulations presumes that ‘the scientific community is held together and all its affairs are peacefully managed through its joint acceptance of the same fundamental scientific beliefs. These beliefs, therefore, may be said to form the constitution of the scientific community and to embody its ultimate sovereign will’ (Polanyi 1951: 26). The ‘sovereign will’, in this case, is the concurrence of others in the scientific community rather than some ultimate authority who exercises

monopoly control over rulership prerogatives and instruments of coercion. Polanyi explicitly recognizes that a polycentric order among scientific investigators entails normative presuppositions that respect the search for truth, desire justice, and maintain mutual respect and reciprocity in their relationships with one another.

The tensions inherent in the work of the scientific community are, however, exceptionally high because every belief is potentially contestable. Inquiry in the scientific tradition represents, then, a challenge to every form of orthodoxy. Further, there is a danger that scientific investigators may abandon modesty, presume to know the Truth, and create their own form of orthodoxy, while engaging in sweeping rejections of other forms of belief and failing to pursue the merit of the arguments that may be at issue. Dogmas advanced in the name of science are no less dogmatic than other dogmas. Efforts to destroy or silence others is a manifestation of dominance strategies that are repugnant to polycentricity in scientific communities. A repudiation of religion, as such, fails to indicate an appreciation of those who teach that nature is the creation of a transcendent order. The study of nature as God's creation can provide scientific investigators with an appreciation for the existence of an order that gives coherence to all other forms of order. This is consistent with a presumption that a universe exists.

Science as a polycentric order depends, then, upon an autonomous pursuit of inquiry that requires a reciprocal respect for the autonomy of others. Contestability in the realm of ideas is an essential feature of science as such an order. Tensions must necessarily exist in such circumstances, but the reward for participating in contestable arguments in respectful ways is to reap the fruit of tilling the field of knowledge as civilization advances. The civilization advances only when innovations in human knowledge offer others opportunities to achieve net gains in the advancement of human welfare. It is the free professions and the institutions for the transmission of learning to each new generation that provide the essential links between those working at the frontiers of inquiry and the accessibility of knowledge to other members of a society. These institutional arrangements are potentially as open to a polycentric system of order as the scientific community itself. The rules of conduct applicable to these orders may be breached when the modesty appropriate to human fallibility is abandoned for the presupposition that omniscient observers can know what is good for others. Polycentric orders allow others to speak and act for themselves in light of the emergence of new ideas and the accretion of new knowledge.

Law and adjudicatory arrangements. Polanyi conceives of law courts and the larger legal community as forming a polycentric order. The judiciary and members of the legal profession are viewed as participating in processes to elucidate information and articulate contending arguments as means of resolving conflicts and rendering judgments; they do so under conditions where each participant exercises an independence of action in relation to each other participant, subject to common rules of evidence, procedure, and argumentation.

The possibility of conceptualizing courts and the judicial process as a polycentric order will depend upon the development of (1) legal concepts and

terms that can be known in a public interpersonal context, (2) legal criteria that can be used as a basis for judgment, and (3) methods of legal reasoning that can be used to organize thoughts and array evidence for the same purpose. Unless a community of agreement (in other words, substantial consensus) can exist regarding legal concepts, criteria for choice or judgment, and methods of legal reasoning, there can be no basis for a polycentric ordering.

A fundamental tension exists between conceptualizing law as command and law as rules grounded in consensus. When the emphasis is placed upon law as command by those who exercise rulership prerogatives, the correlative relationship on the part of those who are ruled is to obey and submit to the rule. Where law is conceptualized as rules grounded in consensus, those subject to the rules are free to contest how they are formulated and applied. The point of contestation is to allow for resistance and an opportunity to challenge either the formulation of a rule or its application. It is the emergence, then, of contestation with this end in view that has been critical in the emergence of an independent judiciary and the development of rules of procedure that allow for a polycentric legal order. Harold Berman, in *Law and Revolution* (1983), provides an account of the origin of Western law with the papal revolution evoked by the dictate of Pope Gregory VII in 1075, when he was attempting to establish the independence of the Church from secular authorities in Western Christendom. The conception of a basic tie between God's law and secular law served as the basis upon which ecclesiastical authorities could judge whether the conduct of secular authorities conformed to religious precepts. A fundamental breach of God's laws and disobedience to the Church in ecclesiastical affairs were grounds for the excommunication of secular authorities, as church members from the Church itself. Excommunication was an act of banning an offender from partaking in the Christian community.

From the time of Pope Gregory VII onward, issues about the proper structure of authority relationships have been contestable in Western Christendom, and it is the persistence of this contestation that has led to the emergence of the systems of law characteristic of Western jurisprudence. The development of the Protestant tradition was an extension of principles of contestation as these applied to the organization of authority relationships in both the ecclesiastical and the secular realms.

The achievement of polycentricity in the function of the judiciary and the maintenance of a rule of law was an important step in the development of Western civilization. The natural response to any offense, unjust deprivation, or threat is to move toward a fight set. Threats or offenses yield a response by counterthreats or counteroffenses (Boulding 1963). Peaceful communication is breached; hostility easily escalates to destructive fighting; and the peace of the community is threatened. The judicial process affords a way, then, to have recourse to intermediaries who seek to do justice, maintain the peace of the community, and search for a constructive resolution of existing conflicts when adversaries are no longer on speaking terms with one another.

The road to justice depends upon suspending judgment and having recourse to a process where the adversaries have their say in mobilizing evidence and advancing arguments bearing upon the matters at issue. The parties are presumed to stand as

equals before the bar of the court and are entitled to seek justice through a due process of law. Judges are obliged to do justice by conforming to the requirements of a due process of law. The method of normative inquiry inherent in the Golden Rule is the methodological foundation for principles of equity.

Adherence to principles of polycentricity in the function of the judiciary and in the maintenance of the rule of law is important to the maintenance of polycentricity in other systems of order. Market mechanisms depend upon the existence of property rights, the enforcement of contracts, and the maintenance of a just system of commercial law. This requires a knowledgeable understanding of the appropriate limits that apply to a valid contract. Otherwise, established producers who enter into contracts to form cartels will call upon courts to enforce such contracts against new competitors. Not every contract can be a valid contract – only those that conform to valid principles of polycentric ordering.

Systems of governance. This same principle of polycentricity applies to the scope of judicial authority in systems of governance as polycentric orders. If the whole system of human affairs, including the distribution of rulership functions traditionally ascribed to a sovereign are subject to principles of polycentric ordering, then any controversies at issue pertaining to those functions must become contestable and justiciable. These in fact are the grounds for the development of a constitutional jurisprudence in the American federal system. A legislature that acts beyond the scope of its constitutional authority is presumed to be acting in circumstances that are without authority, that is, null and void. Such enactments are not entitled to enforcement; they cannot establish the basis for lawful claims, as Alexander Hamilton argued in essay 78 of *The Federalist* and as the U.S. Supreme Court asserted in *Marbury v. Madison*.

When the Supreme Court concludes that it has no grounds for establishing limits to the substantive powers assigned by the Constitution to the U.S. Congress, it is drawing limits to the application of the principles of polycentricity that apply to the American federal system of government. Constraining either the jurisdiction of an independent judiciary or limiting the independent standing of that judiciary has a significant bearing, then, upon the degree of polycentricity that can apply through ‘the whole system of human affairs’. It may even result in arbitrary rules becoming uncontested.

Polycentricity in each unit of government, then, is essential to the maintenance of polycentricity in ‘the whole system of human affairs’. Law acquires a publicness and a justness in proportion as it withstands critical scrutiny under conditions allowing for contestability in diversely structural political processes. Although provisional decisions can be taken by minimum winning coalitions, they can still be contested through diverse political processes that contribute to an understanding of their implications.

In the evolution of Western law, distinctions have long been made between the exercise of legislative, executive, and judicial authority. Such distinctions imply that there is a conceptual basis for distinguishing the different processes applicable to rule-ruler-ruled relationships. Distinguishable legislative, executive, and

judicial instrumentalities exist in all Western nations organized through ‘republican’ institutions. The critical controversies have pertained not to the distribution of authority as such, but to the patterns of dominance among the diverse instrumentalities of government. The doctrine of parliamentary supremacy, for instance, implies that parliament as a legislative assembly is supreme. The corollary of such a doctrine is a limitation upon judicial authority placing enactments of parliament beyond judicial scrutiny. Another correlative development in Westminster-type parliamentary systems, a development not consistent with parliamentary supremacy, is that of executive privilege associated with the oaths of secrecy taken by ministers by virtue of their membership in a privy council. This tradition is reinforced by acts to preserve official secrecy. The executive privilege of privy councillors interposes severe limits upon the supremacy of parliaments as representative assemblies while creating opportunities for establishing conspiracies of silence among those who exercise executive prerogatives. The doctrines of parliamentary supremacy and ministerial confidentiality are incompatible. Where an independent judiciary is denied jurisdiction with regard to the exercise of public authority, and its authority is confined to ‘civil law’ as distinguished from ‘administrative law’, even greater opportunities exist to establish conspiracies of silence.

If parliamentary supremacy is to yield responsible government, then a proper accounting must be given to limits upon the judiciary and to the existence of executive privilege. A critical scrutiny of how authority relationships are constituted always needs to take account of opportunities to usurp authority and pervert justice. In much of Latin America, limits upon the creation and maintenance of an independent judiciary create a pattern of executive privilege in which the military presume to be the ultimate guardians of the peace. There, parliamentary supremacy is little more than a pretence that gives way to the privileged standing of the military to assert supreme authority.

When the logic of American federalism is viewed from the perspective of a system of polycentric ordering, we can begin to understand how fragmentation of authority accompanied by contestation and innovation yields resolutions that achieve consensus among the members of society. [...] Stalemates occur, but those stalemates are indicative of the need to struggle with one another in a search for a better understanding of the way that conflicting interests yield to a community of relationships.

Any such system of polycentric order is, however, vulnerable to the pursuit of strategies in which some will take advantage of opportunities to gain dominance over others. Politicians may have incentives to form coalitions to gain dominance over political structures in the same way that merchants have incentives to form cartels. Such strategies came to fruition in the United States following the Civil War. If politicians could dominate the slating process and offer slates of candidates for all legislative, executive, and judicial offices, the ones who controlled the winning slate could then exercise dominance over all instrumentalities of government and override the checks and balances inherent in the constitutional separation of powers. A surprising degree of success in putting together such coalitions was achieved during the era of machine politics and boss rule.

So long as competitive rivalry exists among political parties, they can contribute to maintaining polycentricity as part of the system. In those circumstances, politicians will attempt to advance proposals for collective action that will offer sufficient appeal to voters to win them the next election. Contestation yields information and critical assessments of alternative proposals. Tendencies exist to converge toward an appeal to median voters.

But success in gaining dominance over all decision structures can also yield extreme corruption, as revealed in the era of machine politics and boss rule. The method pursued by the Progressive reform movement was to reestablish conditions of polycentricity by constitutional modification of electoral arrangements in each of the states. With the introduction of systems of primary elections, which allowed any dissident to challenge the candidates offered by party leaders, and other electoral reforms, contestation was reestablished in electoral processes and strategies of dominance were sharply constrained. Every system of polycentric ordering is potentially vulnerable to circumstances where some achieve dominance at the cost of others. Spontaneity is not a sufficient condition for the maintenance of polycentric systems of order. A self-governing people need to understand when failures occur and how to reform their systems of order.

If polycentric arrangements were spontaneous systems of order, we might expect peace to occur spontaneously among the nations of the world. I do not expect that to occur. Rather, we can expect struggles for dominance to occur. We do, however, confront a challenge: If conditions of polycentricity were to apply through ‘the whole system of human affairs’, how might such a system of relationships apply to all the nations of the world? As we turn to this question, we will also be exploring some of the implications that follow from the American experiment in constructing a federal system of governance.

Patterns of international order. Over the course of the past one thousand years the nations of Western Christendom have achieved some important degrees of polycentricity in their patterns of relationships with one another. I ascribe these developments, in their origin, to the quest by the Western clergy to establish the conditions for God’s peace by renouncing retribution and to their efforts to establish the conditions of peace in the Western reaches of the Roman Empire after the fall of Rome. The papal revolution elicited by the dictate of Pope Gregory VII can be construed as one such effort to establish God’s peace in Western Christendom. The constitution of the Holy Roman Empire evolved over a period of nearly a thousand years through processes of oath-taking mediated through the Church amid struggles for papal and imperial supremacy. The rituals of investiture in both ecclesiastical and secular offices involved the acknowledgment of obligations to others. Struggles over authority relationships were sustained both within the ecclesiastical realm, and within the *secular* realm as well as between these two realms. Popes, bishops, monks, and parishioners engaged these issues with reference to the governance of the Church just as emperors, kings, princes, dukes, counts, merchants, and villagers did with reference to secular affairs.

Wars persisted; but the presumptions of God’s peace interposed limits against violating churches as places of refuge, of assembly, and of worship, and in establishing the presumption that rules of war applied among knights as the warriors of Western Christendom. Church officials, in their exercise of secular prerogatives, were not immune to participating in warfare, but they had an important place in maintaining a balance of power among contestants who aspired to imperial dominance.

Even such a limited system of order was marked by significant achievements. The basic contestability of the European balance of power system was marked by important advances in economics, science, and technology. In turn, authority relationships were continuously being altered in the struggles for empire mediated by balance-of-power strategies. While some of these struggles were marked by efforts to achieve dominance that might appropriately be labelled ‘absolutism’, others were marked by successful forms of resistance. The American federal system, much like Bismarck’s Second Reich, can be regarded as a by-product of struggles for imperial dominance. The Americans were successful in resisting imperial dominance; and the Germans, in identifying the future of Germany with a system of imperial dominance, fashioned the Second and Third Reichs. The Swiss maintained their *Eidgenossenschaft* by resisting Austrian, French, and German imperialism. ‘Whether Europe will be able to achieve constitutional arrangements under which its whole system of human affairs is ordered by principles of polycentricity remains to be seen’.

The mediating place of polycentric systems of order in Western Christendom requires some comparative sense of proportion. The casualties – unarmed peasants – in Stalin’s campaign to collectivize Soviet agriculture were as numerous as the total Russian casualties in World War II. Hitler’s effort to create a Third Reich was met by an organized resistance that prevailed in a relatively few years against his imperial aspirations.

The world still faces the problem of achieving a peaceful order among its nations. The instruments of autocratic rule have been sufficiently well perfected that a so-called dictatorship of the proletariat exercised in the name of the workers of the world proved feasible for an extended period of time. But such a system of autocracy can be achieved only under conditions of servitude. Societies that place substantial reliance upon polycentric patterns of order present contestable options that must necessarily challenge systems organized on autocratic principles. The world cannot remain half free and half in servitude. Each is a threat to the other.

The irony is that the liberation of the world cannot be achieved by strategies of dominance: the world cannot be made safe for democracy by warfare. Liberation can be achieved only by building polycentric systems of order that can emerge in ways that, in Madison’s words, apply through the ‘whole system of human affairs’. There is no one strategy and no one way for building systems of polycentric ordering. We cannot expect such systems either to be constructed or to work in only one way. They have too much spontaneity and creativity to conform to a single mould. The American federal system suggests that polycentric systems can generally apply in human societies: human societies can exist without a monopoly

of authority relationships. It is possible for societies to become self-governing rather than state-governed. The state, in such circumstances, withers away even when agents who may exercise limited authority are nominally designated as 'heads of state'.

If relationships among societies are to be achieved by extending principles of polycentricity through the whole system of human affairs, these conditions cannot be achieved when governments presume to govern other governments. Principles of polycentricity require critical attention to the equal standing of individuals with one another in a system of lawful relationships that meet the conditions of equal liberty and justice. The American way, however, is not the only way to achieve polycentric systems of order. Polycentric orders are open systems that manifest enough spontaneity to be self-organizing and self-governing. But the maintenance of such orders depends upon a sufficient level of intelligent deliberation to correct errors and reform themselves.

Conclusion

We can rule out the possibility that a polycentric system of order among the nations of the world will emerge spontaneously. Instead, it is necessary, as Tocqueville suggested, to draw upon a science and art of association in learning how to put polycentric systems of order together. Such systems can be expected to work well only under limited conditions. All are vulnerable to strategies of dominance. Difficulties arise because all polycentric systems of order are subject to counterintentional and counterintuitive patterns of relationships. The appearance of disorder, which is presumed to prevail at the surface, can be expected to generate emergent patterns of order that require deeper investigation.

Economists have long engaged in praise of competitive markets as systems of spontaneous order. But markets, like any other such systems, are vulnerable to the strategies of those who seek to acquire dominance over economic relationships. When the structure of human societies is conceptualized in terms of markets and states, there is strong reason to believe that the formal structure of economic relationships will succumb to dominance strategies pursued in collusion with state officials. Principles of polycentricity need to be extended through the whole system of human affairs. This applies to public economies as well as to market economies, to the constitution of particular units of government and to federal systems of government, to the conduct of elections and to the organization of political parties, to the operation of open public realms, to the deliberations of legislative bodies, to the function of executive instrumentalities, to communities of scholarship, to spiritual affairs, to institutions of education, and to the practice of professions – in short, to all of the conditions of life.

The radical implication of American federalism can be appreciated only if principles of polycentricity are to apply through the whole system of human affairs. It is then that we can begin to appreciate how that experiment was an effort 'to construct society upon a new basis', why theories 'hitherto unknown or deemed impracticable' were to have a special significance, and why that experiment was

'to exhibit a spectacle for which the world had not been prepared by the history of the past'. Tocqueville was one of the few observers who in the conduct of his analysis showed an appreciation for the way that principles of federalism, viewed as principles of polycentricity, might apply through the whole system of human affairs.

It is in that context, then, that I interpret his observation about the need for 'a new science of politics' for 'a new world' (Tocqueville [1835] 1945, 1: 7). We cannot rely upon spontaneity alone. Instead, human beings need to draw upon an art and science of association that will enable them to recognize the essential limits to every system of polycentric ordering, and see how strategies of dominance always pose threats. Contestation, innovation, and convergence toward mutually productive arrangements are the most likely ways to achieve progress in human societies. Once we accept this, we can begin to appreciate why the use of power to check power need not yield deadlock, stalemate, and immobility. Sufficient degrees of spontaneity exist to yield counterintuitive results. But such systems of order are always vulnerable to circumstances where bonds of mutual respect and methods of normative inquiry give way to efforts to gain dominance over others and to enjoy the fruits of victory by exploiting others.

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Chapter Three

The Quest for Meaning in Public Choice¹

Elinor Ostrom and Vincent Ostrom

Logical foundations of democracies

In our efforts to understand the logical foundations of constitutional democracy we both found that *The Calculus of Consent* (Buchanan and Tullock 1962) gave us basic tools for acquiring some analytical leverage in addressing particular problems that people are required to address about public affairs. Vincent had for example, served as a consultant to the Alaska constitutional convention working with others in committees and subcommittees to prepare the draft of Article VIII on Natural Resources. The principle of conceptual unanimity gave meaning to what he had observed and what was accomplished. The physical and cultural exigencies of Alaska loomed large in considering the juridical principle of property relationships to apply to the appropriation of natural resources in the public domain.

Elinor explored the way that pumpers in West Basin, California, used equity jurisprudence to engage efforts to craft public enterprises for governing and managing groundwater basins as common-pool resources. The processes of equity jurisprudence sought to achieve conceptual unanimity in establishing the nature of the problem, in adjudicating water rights, in formulating the rules that were constitutive of water user associations, the way they related to one another, and in monitoring performance.

Adjudicating water rights, establishing pump taxes, and developing exchange relationships suggested efforts to minimize the costs of time and effort to be expended and potential deprivation costs. Public enterprises capable of levying taxes and enforcing regulations became the essential complement of private for-profit enterprises and voluntary nonprofit enterprises. Public entrepreneurs in the Southern California region crafted numerous, diversely constituted enterprises to facilitate the development of that region. Water supply depended on extensive analytical capabilities worked out in different political arenas (E. Ostrom 1965 1990).

These tiny events in the sea of human endeavours impelled us to explore efforts to address the logical foundations for order in human societies. In addition to

1. Ostrom, Elinor, and Ostrom, Vincent (2004) 'The Quest for Meaning in Public Choice'. *American Journal of Economics and Sociology* 63 (1): 105–47. Special Invited Issue: The Production and Diffusion of Public Choice Political Economy: Reflections on the VPI Center (Jan., 2004).