

I

Constitutional Quandaries and Social Choice

I. I INTRODUCTION*

[I]t may be concluded that a pure democracy, by which I mean a society, consisting of a small number of citizens, who assemble and administer the government in person, can admit of no cure for the mischiefs of faction. A common passion or interest will . . . be felt by a majority of the whole . . . and there is nothing to check the inducements to sacrifice the weaker party. . . . Hence it is that such democracies have ever been spectacles of turbulence and contention; have ever been found incompatible with personal security, or the rights of property; and have in general been as short in their lives, as they have been violent in their deaths.

A republic, by which I mean a government in which the scheme of representation takes place, opens a different prospect.

The two great points of difference between a democracy and republic, are first, the delegation of the government, in the latter, to a small number of citizens elected by the rest; secondly, the greater number of citizens and the greater sphere of country, over which the latter may be extended.

It may well happen that the public voice pronounced by the representatives of the people, will be more consonant to the public good, than if pronounced by the people themselves . . .

If the proportion of fit characters be not less in the large than in the small republic, the former will present a greater option, and consequently a greater probability of a fit choice.

As each representative will be chosen by a greater number of citizens in the large than in the small republic, . . . the suffrages of the people . . . will be more likely to centre on men who possess the most attractive merit. . . .

The other point of difference is, the greater number of citizens and extent of territory which may be brought within the compass of republican, than of democratic government; and it is this . . . which renders factious combinations less to be dreaded in the former, than in the latter. . . . Extend the sphere, and you

* This chapter is partly based on a talk presented at the Conference on Constitutional and Scientific Quandaries, at the International Center for Economic Research, Turin, June, 2005.

Cambridge University Press

0521832020 - Architects of Political Change: Constitutional Quandaries and Social Choice Theory

Norman Schofield

Excerpt

[More information](#)*Architects of Political Change*

take in a greater variety of parties and interests; you make it less probable that a majority of the whole will have a common motive to invade the rights of other citizens . . .

Hence it clearly appears, that the same advantage, which a republic has over a democracy . . . is enjoyed by a large over a small republic – is enjoyed by the union over the states composing it.

—James Madison, *Federalist X*, 1787

This book may be thought of as an extended interpretation of Madison's argument, using ideas from the work of Douglass North, William Riker, and Mancur Olson, and aimed at developing "social choice" approaches to the evolution of society. As I suggest at the end of the book, I see this research program as continuing the work of Madison's contemporaries, Condorcet and Laplace.

North's early work with Thomas (North and Thomas, 1970, 1973, 1977) attempted an economic explanation of the transition from hunter/gatherer societies to agriculture. Later, he proposed a "neo-classical theory of the state," wherein contracts with "Leviathan" set up a system of property rights and taxes (North, 1981). His later work has focused on institutions and how they change as a result of incentives, knowledge, and beliefs (North, 1990, 1994, 2005). One of his most persuasive pieces is his work with Weingast (North and Weingast, 1989) on Britain's Glorious Revolution in 1688 and how this transformed Britain's ability to manage debt, fight wars (particularly with France), and develop an empire.

Riker's earliest work was on American Federalism, particularly the logic underlying the need for Union in 1787 (Riker, 1953, 1964) and the stability of parties as coalitions (Riker, 1962). After working for a number of years on rational choice theory (Riker and Ordeshook, 1973), Riker returned to American political history, to interpret key events in terms of "heresthetic" (1982, 1984, 1986, 1996). Riker coined the word *heresthetic* from the greek *αἰρετικός*, meaning "able to choose." His book, *Liberalism against Populism* (1982), argued that social choice theory implied that populism, in the sense of existence of a "general will" was vacuous. At best, all democracy could hope for was the liberal capacity to remove autocrats.

Much of Olson's work attempted to grapple with understanding how some societies are successful and others much less so. In his early book, Olson (1965) used the idea of the prisoner's dilemma to suggest that cooperation may fail as individuals pursue their selfish ends (through strikes, revolutions, etc.) and indirectly constrain economic growth. Later, Olson

Constitutional Quandaries and Social Choice

(1982a, b) used this argument to provide a “declinist” explanation of why stable democracies such as Britain and the United States appeared less vital (in the 1980s) than the newer democracies of the post–World War II era (such as France, Germany, and Japan).

In this book I attempt to construct the beginnings of a theory of democratic choice that I believe can be used as a heuristic device to tie together these differing historical accounts. The basic underlying framework is adapted from social choice theory, as I understand it, on which I graft a “stochastic” model of elections. This model is an attempt to extend the Condorcetian theme of electoral judgment. I shall argue that its logic was the formal principle underlying Madison’s justification for the Republican scheme of representation that he made in *Federalist X*. While this logic does not imply a general will in the sense of Rousseau, it does suggest that Riker was overly pessimistic about the nature of democracy. On the other hand, the social choice framework suggests that democracy, indeed any polity, must face difficult choices over what I call chaos and autocracy. These difficult choices are the *constitutional quandaries* of the subtitle of this book. The historical choices that I discuss often involve a leader or theorist—an *architect of change*, either in the realm of politics or economics—who interprets or frames the quandary troubling the society in a way that leads to its resolution.

1.2 BALANCING RISK AND CHAOS

Figure 1.1 is intended as a schematic representation of the formal results of social choice theory. This figure is replicated in Chapter 2, where a more detailed discussion is provided of its interpretation. This figure is intended as a theoretical construct whose purpose is to suggest the relationship between the many differing results of the theory. The vertical axis denotes the “axis of chaos.” The theorems of social choice, from the earliest result by Arrow (1951) to the later work on spatial voting theory (McKelvey and Schofield, 1986, 1987) imply that as factionalism increases, then utter disorder can ensue. The term *chaos* was introduced to describe the possible degree of disorder by analogy to *mathematical chaos*, which was used to characterize a deterministic dynamical system, f , with the feature that for almost any pair of outcomes x, y in the state space, X , there exists a trajectory (see Li and Yorke, 1975)

$$x \rightarrow f(x) \rightarrow f^2(x) \rightarrow \dots f^t(x) = y. \tag{1.1}$$

Architects of Political Change

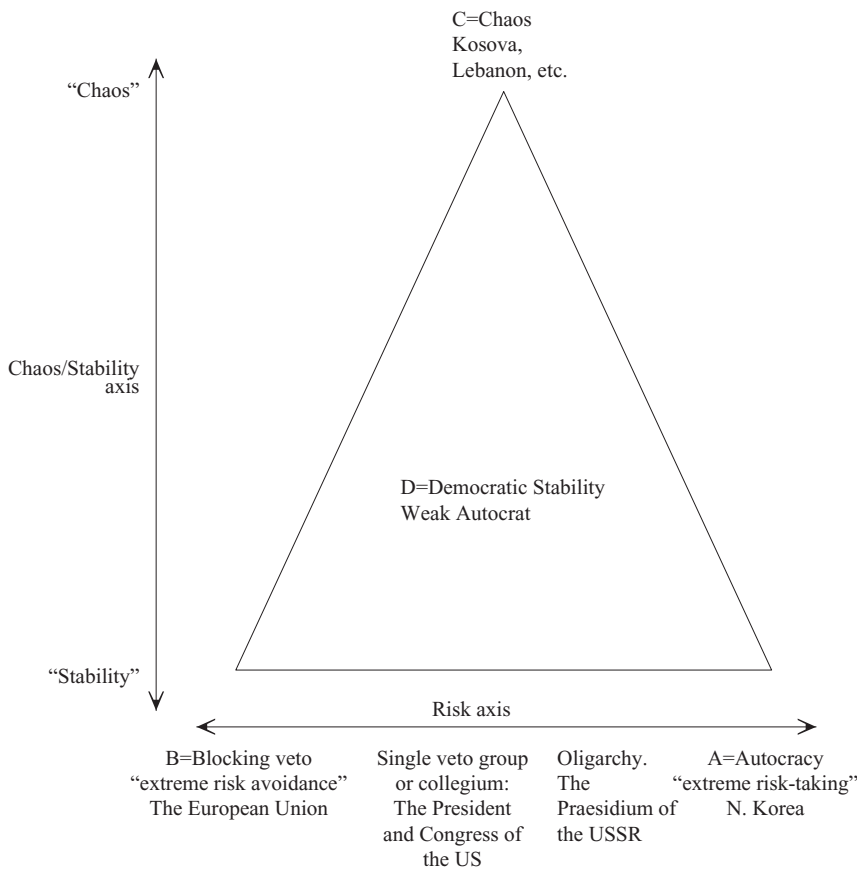


Figure 1.1. Chaos or autocracy in a polity.

For a voting rule, with specified voter preferences and an initial point x , let $f(x)$ be the set of alternatives that beat x . More generally, we can think of the set, $f(x)$, as the set of alternatives that can come about from x , as determined by the social rule. The idea of *social chaos* is that there are conditions under which, starting from almost any x , it is possible to reach almost *any* possible outcome $y = f^t(x)$ by reiterating the social rule. When the set Y that can be reached is large, in a formal sense, then we can call Y the *chaotic domain*, $Chaos(f)$. In contrast, we can identify the *core* or *social equilibrium*, $Core(f)$, as a singularity of f , where y is in $Core(f)$ if and only if $f(y)$ is empty. An element y of $Core(f)$ may be an attractor of f , that is, a single outcome with $y = f^t(x)$, which results from any x , after some number of iterations of the rule.

Constitutional Quandaries and Social Choice

The *social chaos theorem* sets out the conditions for existence or otherwise of the social equilibrium and for the situation where the chaotic domain becomes almost the whole of X . For example, for any voting procedure, f , without a dictator, oligarchy, or collegium¹ able to control, or at least restrict, social choice, then, as the dimension of X increases, so does the extent of voting chaos.² For a general social rule, f , Schofield (1985a) formally defines $Chaos(f)$ in terms of local cycles of the rule and then shows that the union of $Chaos(f)$ and $Core(f)$ is non-empty. Thus, if the rule has the property that $Chaos(f)$ is empty, then $Core(f)$ must be non-empty. The theoretical problem for democratic theory is that if $Chaos(f)$ for the social rule, f , is non-empty, then there may be no social equilibrium. However, as discussed at length below, it may be the case that democratic power resides in veto groups. Since a veto group is a collegium in some limited domain of policy (namely a subset of X), then $Chaos(f)$ will be empty, and the social chaos theorem will not apply.

Note however that chaos, as I interpret it, is not just a property of voting procedures. For a society where the social rule, f , is war rather than voting, then I suggest that the chaotic domain, $Chaos(f)$, is likely to be a large subset of X . For less violent methods, the chaotic domain will typically depend on the heterogeneity of preferences in the society. These results do not imply that democracies are necessarily chaotic, but they do suggest that they can be.³ Throughout this book I shall use the term *chaos* somewhat loosely, to refer to a social situation where there is

¹ Chapter 2 gives more detail on this assertion. Roughly speaking, a voting rule is characterized by a family of winning coalitions, D , say. A *dictator* is a single agent who belongs to every winning coalition and is also winning. An *oligarchy* is a group that belongs to every winning coalition and is itself winning, while a *collegium* is a group of voters that belongs to every winning coalition in D , but need not be winning.

² Chapter 8 discusses the similar results on chaos in different domains. For social choice, the chaos theorem is presented for a voting rule D , with specified voter preferences. If D is collegial, in the sense that there is a collegium, then the core, $Core(f)$, of the social rule, f , will generally exist. If D is non-collegial, then there is an integer, $w(D)$, called the “chaos dimension,” which characterizes D in the following sense: If the dimension of the space, X , exceeds $w(D)$, then the chaotic domain, $Chaos(f)$, of the social rule, f , will be almost the whole of X . What I call the *social chaos theorem* is the result of a long sequence of results by Plott (1967), Kramer (1973), McKelvey (1976, 1979), Schofield (1978, 1980, 1983), McKelvey and Schofield (1986, 1987), Banks (1995), Saari (1996), and Austen-Smith and Banks (1998, 1999).

³ There has been much debate about the applicability of the social chaos result to democratic theory. See, for example, Riker (1980, 1982, 1984, 1986), Hammond and Miller (1987), and the essays in Ordeshook and Shepsle (1982).

Cambridge University Press

0521832020 - Architects of Political Change: Constitutional Quandaries and Social Choice Theory

Norman Schofield

Excerpt

[More information](#)*Architects of Political Change*

reason to believe that it is impossible to determine, even in general terms, where the social trajectory will go.

When war, or intense and unrestrained conflict, dominates, then we can expect chaos, as in Kosova, in Lebanon during the civil war, and in Iraq at the present time. For a pessimist like Hobbes, it was obvious that any society could fall into chaos, unless mitigating institutional devices were constructed. The quote from Madison's *Federalist X* suggests that Madison certainly viewed direct democracy as subject to chaos. Indeed, in his other writings, he used the phrase "the mutability of the law" in commenting on the possible choices of the legislature. I take his comments to mean that he considered that legislative bodies such as the House and Senate were subject to a degree of disorder—possibly not the complete disorder of chaos. It should be noted that the chaos theorem refers to situations where individuals with specific and heterogeneous preferences come together in either war or assembly and are in conflict over an *outcome*. Thus a legislative assembly can be understood as a direct democracy, and consequently can exhibit chaos, as suggested by the social choice results. Madison was very clear that representative democracy involves the choice of a *person*, and he obviously believed that the voters in the Republic could make a sound choice for the Chief Magistrate if their judgments were not contaminated by preferences. One purpose of this book is to explore the nature of social choice when it depends on judgment rather than simply individual preferences.

The rationalizability of social choice may hold when an electorate makes a specific and limited choice, particularly in a binary situation of yes or no. For example, the negative referenda votes in May and early June 2005 in France and the Netherlands over the European Union (EU) Constitution, while unexpected, cannot be seen as truly chaotic, because they were one-off events. However, the frantic responses by the political leaders of the EU may have elements of considerable disorder. At the same time, there are many institutional devices within the EU that are designed to control disorder.

The effect of these institutional "equilibrium" devices are well understood from the point of view of social choice theory. They all force "rationality" by concentrating power in various ways. This is shown in Figure 1.1 by the power characteristics of the decision rule, f , along the *risk axis*. The work on social choice by Arrow (1951) considered a very strong rationality axiom. Using this he showed that if this rationality property is to be satisfied then the most extreme form of power concentration, namely "dictatorship," is a *necessary* condition in the case that individual

Cambridge University Press

0521832020 - Architects of Political Change: Constitutional Quandaries and Social Choice Theory

Norman Schofield

Excerpt

[More information](#)*Constitutional Quandaries and Social Choice*

preferences are unconstrained. Less extreme forms of power concentration include existence of an “oligarchy,” or “collegium,” or multiple veto groups. Because a “dictator” can make any choice “he” deems fit, and such a degree of power concentration almost never occurs in a polity, I shall use the term *autocrat* for one who controls the levers of power of the polity and has at least the ability to declare war without being constrained by some form of political veto. Clearly, Saddam Hussein was not a dictator in the formal sense, but he certainly was an autocrat. Similarly, I use the term *oligarchy* for a group who, if they agree, have “autocratic” powers. A *collegium* is a group without full autocratic powers, but who must all agree before the exercise of such power to pursue war or other endeavors. A *veto group* is one with collegial power within a specific restricted domain of policy. Obviously there can be many veto groups in any complex society.

Figure 1.1 presents my hypothesis that autocrats are likely to be extreme risk takers. To some degree, this is an empirical assertion. One only need make a list: Genghis Khan, Attila, Philip II of Spain, Napoleon, Hitler, Stalin. Kennedy’s book, *The Rise and Fall of the Great Powers* (Kennedy, 1987) argued that great nations tend to over-exert themselves in the military realm, and through lack of fiscal caution, bring about their own demise. If we translate this argument by regarding the lack of fiscal caution as an element of risk taking more generally, then Kennedy’s logic certainly seems valid for Philip II and Napoleon, and possibly for the leaders of the USSR during the cold war. Kennedy also argued that it applied to the United States in the post-World War situation. Table 2.1 in the next chapter gives the relevant data on military spending for the United States and USSR up until 1991 and suggests that there was little indication of this risk-preferring military incaution by the United States until that date. Whether the same inference is valid today is another question entirely.

On the risk axis, an autocrat is likely to be much more risk taking than an oligarchy. I also suggest that an oligarchy will tend to be more risk taking than a collegium. It is difficult to precisely differentiate between an oligarchy and a collegium. An example of an oligarchy is the Praesidium of the Soviet Union. All members of the Praesidium must agree, in principle, for a choice to be made, but if they do, then no decision-making body can override them. A possible example of a collegium is the U.S. President together with his cabinet, in a situation where the majority parties of the House and Senate are in line with the president, and agree with his policy initiatives. The more general situation, of course, is where the President may veto Congress, and Congress may, in turn, counter his veto, with a

Cambridge University Press

0521832020 - Architects of Political Change: Constitutional Quandaries and Social Choice Theory

Norman Schofield

Excerpt

[More information](#)*Architects of Political Change*

supermajority. Thus the U.S. executive and Congress, regarded as a unit, can be interpreted as having collegial power. Because the Congressional counter-veto requires a supermajority, only very extreme situations can lead to chaos as a result of presidential/congressional interaction. Note, however, that the President and Congress together do not comprise an oligarchy, since there are obvious policy domains in which Congress and the President may concur but are blocked by state legislatures.

Because Congress may be factionalized, it can, as Madison expected, exhibit what he called *mutability*—a degree of disorder or incoherence in the laws that are passed. My understanding of the U.S. Constitution is that it has a precise design to allow the presidential veto to overcome congressional mutability. Of course, if there is a well-disciplined majority party in Congress, then it can act as a collegium, thus ensuring stability of some kind. However, it is certainly possible for Congress to become factionalized, leading to the collapse of the collegium. One instance of this was the presidential election of 1844 and its aftermath, as discussed in Chapter 5. Because of the actions of Southern Democrats in blocking the candidacy of the New York Democratic, Martin Van Buren, the Northern and Southern wings of the Democratic party split, and Northern Democrats voted with Northern Whigs to suspend the gag rule, forbidding discussion of the issue of slavery in the House. This factionalization led eventually to a realignment of the party structure in the election of 1860.

Madison, of course, was concerned that the President would gain autocratic power, and to avoid this, the Congressional counter-veto was devised. However, even with the counter-veto, the President does have some autocratic power, and I shall use the term *weak autocrat* to characterize his power. It is evident that there is a tendency for U.S. presidents to display the degree of risk preference that characterizes autocrats. I judge that Congress will generally be risk-averse, which is why, I believe, power to declare war resides in Congress. Even when Congress and the President are aligned, then one would still expect the Presidential risk preference to be muted by Congressional risk avoidance.

On the other hand, Congressional risk avoidance has the effect of delaying the resolution of fundamental constitutional quandaries. Typically, a *quandary* can only be faced if there is a risk-taking leader capable of forcing resolution. Without such a leader, the result can be the opposite of chaos, namely “gridlock.” An illustration of this is given in Chapter 6, in the discussion of the passage of Civil Rights legislation in 1957, while Johnson was leader of the Senate (Caro, 2002). Decisions in the Senate

Cambridge University Press

0521832020 - Architects of Political Change: Constitutional Quandaries and Social Choice Theory

Norman Schofield

Excerpt

[More information](#)*Constitutional Quandaries and Social Choice*

could be blocked by the filibuster, and this could only be overcome by “cloture.” This rule required “support from two-thirds of those present and voting to impose cloture. This meant that a minority coalition of one-third plus one of those present and voting could prevent a vote” (Rohde and Shepsle, 2005). First, as leader of the Senate, and later as president in 1964, Johnson was a risk taker able to persuade the collegium (of one-third plus one) of Southern Democrats to lift its block.

Rohde and Shepsle (2005) go on to observe that “as a consequence of a huge upsurge in filibusters in the decade following the civil rights revolution, Rule 22 was amended in 1975, changing the requirement to an absolute standard—sixty votes—to close debate [in the Senate].” Obviously a group of forty-one senators has blocking power, and the change in the rule has reduced the collegial veto power of such a minority.

As I discuss in Chapter 4, and as indicated by the aforementioned quotation, Madison developed an argument in *Federalist X* that derived from Condorcet. This led him to expect that the election of the president could be assumed to be characterized by a high “probability of a fit choice.” In constrained situations where we may assume that judgments predominate and voters evaluate the options in a clear-sighted fashion, then their choice of Chief Magistrate may indeed be well formed in this way. For this reason I locate the weak autocrat in Figure 1.1 at a position where the risk taking of the autocrat is balanced by the risk avoidance of Congress, as well as by judgment of the electorate. It would be natural to assume that electoral judgment will generally be risk avoiding. However, there are situations where a society feels threatened in some fashion and may exhibit a degree of risk preference. It seems to me that the current situation with regard to the United States and Iraq is unusual, precisely because the electoral judgment has seemed to be much more risk preferring than is common. As the true risks of the current situation become apparent, this risk posture may change.

It is important for my interpretation of electoral judgment that when the “preferences” of the electorate are muted by judgments, then their choice of the Chief Magistrate need not be subject to the chaos results. Whether this is an entirely valid argument is a somewhat delicate matter. Madison hoped that, because the election of the Chief Magistrate involved the selection of a person, rather than an option (as in the passage of a law), judgment rather than preference or interest would predominate. To argue this formally requires analysis of an electoral model where judgment and preference are both incorporated. In this book, I present the tentative outline of such a model. It is of course entirely possible that beliefs or

Cambridge University Press

0521832020 - Architects of Political Change: Constitutional Quandaries and Social Choice Theory

Norman Schofield

Excerpt

[More information](#)*Architects of Political Change*

judgments in the electorate can be transformed in a chaotic fashion. Many of the illustrations of belief transformation presented in this book suggest that while the transformations are highly contingent, they are associated with changes in what I call a *core belief*. A *core*, in social choice theory, is an unbeaten alternative. By analogy, a *core belief* is a belief that has general acceptance in the society.

As Figure 1.1 indicates, at the opposite end of the risk spectrum from autocracy is the situation of extreme risk-avoiding blocking groups. Veto groups are like collegia but with power in a limited domain. As indicated earlier, social choice theory implies that veto groups induce stability, so the effect is the opposite of chaos. A good illustration is provided by the veto power that French farmers have over changes in the EU Common Agricultural Policy (CAP). Obviously French farmers, together with their agrarian allies in Germany and the new members of the EU, such as Poland, have a great deal to lose if the CAP is reorganized. CAP is only one instance of a variety of protectionist, risk-averse mechanisms that several veto groups have been allowed to deploy in the expanding European polity. As Table 2.3 in Chapter 2 indicates, the consequence seems to be that the core polities of France, Germany, and Italy in Europe have stagnating economies. As of August 2005, the estimates of growth by the Organisation for Economic Co-operation and Development were less than 2 percent (1.8 percent in France, 1.1 percent in Germany, and less than zero in Italy) with unemployment roughly 10 percent (about 8 percent in Italy, 10 percent in France and 11.6 percent in Germany). With risk aversion comes high saving, low imports, high trade surplus, and an appreciating euro. This will be increasingly exacerbated as the population structure ages. These facts compare with growth and unemployment of 3.6 percent and 5.0 percent respectively in the United States and 1.7 percent and 4.8 percent, respectively in Britain.

The “non” in France and “nee” in the Netherlands in May and June 2005 may have been induced by voter irritation at the apparent incompetence of the EU institutions, and it is reasonable to infer that these referenda were based on electoral judgment. The problem is that, outside Britain, almost every group, except possibly teenagers and students, has a veto over changes in crucial aspects of the social contract, particularly over unemployment and retirement benefits. Without doubt, it is much more comfortable to live in Europe rather than in the United States. The degree of risk avoidance could be reduced, but only by institutional mechanisms that are more risk preferring. The political institutions of the EU (the Commission, Council of Ministers, European Parliament, the