



Anarchy, State and Public Choice

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New Thinking in Political Economy

9. Public choice and Leviathan

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In 'Before Public Choice' (1972), Buchanan began exploring interaction between individuals in anarchy. Buchanan further developed his ideas in *The Limits of Liberty* (1975). This chapter is a partial response to both of these works that focuses on whether his derivation of a 'protective state' from Hobbesian anarchy is justified. Buchanan's analysis concluded that a government must be formed for people to escape a 'nasty, brutish, and short' life in the Hobbesian jungle. This chapter presents a public choice analysis of a government comprising the same Hobbesian individuals Buchanan modeled in anarchy. The first section reviews Buchanan's framework and conclusions. The second section uses his assumptions about individual behavior in anarchy to analyze his proposed third-party enforcer – government. Once this public choice approach is taken I examine whether people would 'conceptually' agree to form a state for third-party enforcement.

THE BUCHANAN MODEL

Buchanan's analytical starting point is Hobbes's *Leviathan*.¹ Like Hobbes, Buchanan believes that conflicting claims over resources in anarchy will lead people to invest heavily in attacking others and defending against attacks. Society will plunge into a war of all against all, where the resulting lives will be nasty, brutish and short. Buchanan argues that individuals will achieve higher levels of utility if they leave anarchy and create an enforcement mechanism that forces them to respect each other's property.² He concludes that although anarchy, which allows for maximum personal liberty, is ideal, a government is necessary for people to achieve a higher level of utility. Unlike Hobbes, Buchanan believes the solution to anarchy is a limited government, not an all-powerful leviathan state.

Buchanan attempts to show why people would 'conceptually' agree to a social contract establishing a government. He never argues that historically an agreement actually took place.³

In Buchanan's model of anarchy, individuals' incentive to respect each other's property is examined. Buchanan looks solely at a person's economic

		B	
		Respect property	Don't respect property
A	Respect property	19, 7	3, 11
	Don't respect property	22, 1	9, 2

Figure 9.1 Payoff matrix for choices to respect property rights

incentives, acknowledging, but excluding, any moral reasons that might influence someone not to steal or commit an act of aggression. He frames the individuals' choices in a prisoner's dilemma game, as in Figure 9.1, where the numbers in the cells reflect A and B's utility.⁴

Although both people would be better off if they concentrated solely on producing, they are each individually better off engaging in some plunder, regardless of whether or not the other does. The bottom right corner is the Nash equilibrium, where both people are worse off than if they had respected each other's property. In this model the utility gains and losses are not symmetrical – reflecting differences in individuals' natural abilities.

Because both people are better off if they respect each other's property, they will enter into an agreement not to plunder. This agreement moves the equilibrium from the bottom right cell to the upper left cell. Buchanan wrote, 'Each person may respect the agreed-on assignment because he predicts that defection on his part will generate parallel behavior by the other party' (Buchanan, 1975: 85). In two-person interaction, if one person defects from the agreement, the other will immediately recognize it and also defect. Due to repeated plays, each person will abide by the contract knowing that if they do not, the other will also defect.

Buchanan claims that when there are many anonymous individuals in the contract it becomes optimal to defect. He wrote, 'As more parties are added to the initial contractual agreement, in which an assignment of rights is settled, the influence of any one person's behavior on that of others becomes less and less.' He continues, saying, 'In large-number groups, each individual rationally acts as if his own behavior does not influence the behavior of others. He treats others' behavior as part of his natural environment, and he adjusts his

behavior accordingly.' His conclusion is, 'Each person has a rational incentive to default; hence, many persons can be predicted to default and the whole agreement becomes void unless the conditions of individual choice are somehow modified' (Buchanan, 1975: 85). Since it is individually optimal to defect, the society plunges back into the Hobbesian jungle where life is nasty, brutish and short.

Because of the individual incentive for defection, Buchanan concludes that a third-party enforcement mechanism is necessary.⁵ Buchanan's conclusion is that the third-party enforcer has to be government. In the following section I explore the players' expected utility payoffs when government is analyzed with the same assumptions about individual behavior that Buchanan uses when modeling individuals in anarchy.

THIRD-PARTY ENFORCEMENT BY GOVERNMENT

The individual incentive for plunder in Hobbesian anarchy stems from the fact that there is no institution to punish people who defect from the social contract. The creation of an institution with the amount of power necessary to punish any defectors creates its own problems, though. Buchanan wrote, 'The design and location of this [enforcement] institution becomes all important, however; neither party will entrust enforcement to the other, and, indeed, the delegation of such authority to one party in contract violates the meaning of enforcement' (ibid.: 120–21). The ideal third-party enforcement mechanism would be some sort of machine that is entirely outside of the 'game'. This would be similar to a radar that could determine whether a pitch was a ball or strike in a baseball game. Absent the possibility of an impartial machine, an outside referee is optimal. This is the function of the umpire in a baseball game. If the catcher were calling the balls and strikes, the enforcement of rules would be incredibly biased. Buchanan wrote, 'In the game analogy that we have used several times before, the protective state is the umpire or referee, and, as such, its task is conceptually limited to enforcing agreed on rules' (ibid.: 206). Does the analogy of a baseball umpire apply to government as an interpreter and enforcer of rules?

The nature of the social contract, as described by Buchanan, is that everyone in a particular area unanimously agrees to the assignment of rights and then forms a government to enforce the assigned rights. The government, however, is not like the baseball umpire. The game being played is 'life' and the players, by the nature of the social contract, are all the people in a given location, including those who work for the government. The umpires are players. The government, as a third party, has the job of interpreting and enforcing the rules in discrepancies between players. It also has the job of interpreting what functions the social contract gave to itself.

Buchanan is widely known for introducing economic methodology to the analysis of government (Buchanan and Tullock, 1962). The public choice movement in economics challenged the romantic notions of how government works by insisting that the incentives facing bureaucrats and politicians must be analyzed. Public choice has been successful at showing that government failure is a likely outcome when interventions attempt to correct alleged 'market failures'. Ironically, in 'Before Public Choice', and in *The Limits of Liberty*, Buchanan does not analyze government with the same assumptions he makes about the people in anarchy. He leaves government 'conceptually external' and does not analyze the incentives facing individuals in that government. In the case of the models used in 'Before Public Choice' and *The Limits of Liberty*, the individuals modeled in anarchy lacked any moral or ideological constraints. These assumptions must be carried forth into our analysis of Buchanan's proposed solution – government.⁶

In the scenario of two citizens with government contract enforcement, citizens will now abide by their contracts with each other. However, Buchanan never models a second prisoner's dilemma of 'social' contract enforcement between the government and the citizens. The question becomes: will the government adhere to the initial social contract? If the government is the only interpreter and enforcer of the contract, then there is no third-party enforcement constraining it. There is a crucial difference between the incentives facing an official in the government and the people in the original prisoner's dilemma in Figure 9.1. If the government defects, the other players do not have the same option to defect because they still face an enforcer – the government. The game now can be modeled as in Figure 9.2.

		Citizen	
		Obey social contract	Don't obey social contract
Government	Obey social contract	19, 7	18, 1
	Don't obey social contract	25, 1	24, 0

Figure 9.2 Payoff matrix for choices to obey social contract

Following the assumptions from the model of anarchy, people, including government officials, only act according to their economic incentives. Even though the initial social contract or 'constitution' may have provided only for a limited government, the people in government will defect on that contract because there is no third party constraining them.⁷ A representative citizen is modeled at the top in Figure 9.2. If the government abides by the agreed-on contract, the citizen will achieve a utility of 7. The government is now modeled on the side. It may depart from the contract (although it will interpret it to be within the contract) and confiscate a citizen's wealth. If the citizen attempts to defect after seeing that the government has, the government will use its enforcement monopoly and find him guilty of deviating from the contract (treason?) and will take away all his remaining utility. The reason the government does not take all the utility when it first departs from the contract is to leave the citizen some incentive to continue to abide by the contract.

The above example only shows one citizen's choice set against a government that departs from the social contract. The threat of many citizens simultaneously departing from the contract, in a rebellion, might provide some form of 'external enforcement' on the government. However, the individual calculus that each citizen faces when deciding to participate makes this a weak constraint because a public-goods problem has to be overcome (Tullock, 1971). In the real world morality and ideology help to overcome the public-goods problem in revolutions, but these things are assumed away in Buchanan's model, so only the narrow economic calculus can be looked at. The threat of rebellion will not force a government in Buchanan's framework to abide by the social contract.

In the simple prisoner's dilemma game above, government was modeled as a single individual; however, in reality governments comprise many individuals with a separation of duties and powers among them. Randy Barnett characterized the system by saying, 'The essence of this strategy [checks and balances] is to create an oligopoly or a "shared" monopoly of power. This scheme preserves a monopoly of power but purports to divide this power among a number of groups' (1998: 253). The above model can still accurately represent government with a separation of powers. Even with a separation of powers between different branches of government, or different levels of government through federalism, there are gains to be had from cooperation between the branches. Even though, in an individual round of play, the interests of different government branches may be opposing each other, over multiple plays they can all gain in utility from cooperating to expand the power of government. Barnett (*ibid.*: 254) wrote:

Even in the beginning of such a regime, since each has the other by the throat, no one is willing to squeeze too hard. Eventually, entrepreneurs of power – master

politicians, judges, executives, or outsiders called 'special interest groups' – figure out ways to teach those who share the monopoly that each has an interest in cooperating with the others in using force against those who are outside the monopoly.

Rothbard (1973: 48) described the system of checks and balances by writing:

As we have discovered in the past century, no constitution can interpret or enforce itself; it must be interpreted by men. And if the ultimate power to interpret a constitution is given to the government's own Supreme Court, then the inevitable tendency is for the Court to continue to place its imprimatur on ever-broader powers for its own government. Furthermore, the highly touted 'checks and balances' and 'separation of powers' in the American government are flimsy indeed, since in the final analysis all of these divisions are part of the same government and are governed by the same set of rulers.

Because of the assumption that individuals only act in their narrow economic interests, and feel no moral need to honor commitments, it must be questioned why a separation of powers would ever be obeyed. In the American system, the executive branch enforces, the judicial branch interprets, and the legislative branch writes laws. But with an executive branch that controls the enforcement agency of the army and police, why would the executive branch ever obey a court's interpretation, or the laws that Congress passes even if they did attempt to constrain the executive?⁸ There is no reason for the branch of government that controls the coercive powers to obey any other branch, because the other branches simply do not have the coercive powers to force them to obey. Government collapses back into the initial prisoner's dilemma with the head of the coercive enforcement branch as the sole government decision maker because of the narrow assumptions of Buchanan's model.⁹

One slight modification might need to be made to the above utility payoffs between government and citizens. If the government continually steals all but subsistent living from its citizens, soon the people will stop producing much of a surplus for the government to seize. Depending on the type of government chosen and the leader's time preference rate, the government will find it in its own interest to seize less now in order to continue to seize more later.¹⁰ Hoppe (2001: 18) describes the situation by saying, 'Assuming no more than self-interest, the ruler tries to maximize his total wealth, i.e., the present value of his estate *and* current income. He would *not* want to increase current income at the expense of a more than proportional drop in the present value of his assets.' Although this might change the magnitude of the payoffs, the result remains the same – government can defect because there is no third-party constraint on it. Unless citizens actually chose a social contract that maximized the rulers' income at the expense of the ruled, the government would defect. The Nash equilibrium remains the lower left box of the prisoner's dilemma game.

The essential feature of government is that it has a geographical monopoly over the use of coercive force. Because in Buchanan's model the only constraint on individuals' behavior in anarchy is economic incentives provided by the use of force from others, the only thing that can be expected to constrain government is also force. Since a government is defined as a geographic monopoly on the legal use of force, there is no social contract or piece of parchment that can constrain it. Hobbes's Leviathan will result from any attempt to establish a limited government to enforce contracts. Buchanan (1975: 87) seemed to recognize this when he wrote, 'There is no obvious and effective means through which the enforcing institution or agent can itself be constrained in its own behavior. Hence, as Hobbes so perceptively noted more than three centuries ago, individuals who contract for the services of enforcing institutions necessarily surrender their own independence.' Buchanan (*ibid.*: 88) later speaks of government as if it is external to the game, saying, 'The state emerges as the enforcing agency or institution, conceptually external to the contracting parties and charged with the single responsibility of enforcing agreed-on rights and claims along with contracts which involve voluntarily negotiated exchanges of such claims.' Leaving the state external to the game leads Buchanan to the erroneous conclusion that the state will necessarily enable people to achieve a higher level of utility.

Once it is consistently recognized that the state is not external to the game but is instead composed of players, a public choice analysis shows that individual utility levels could be even lower with a state than under the simple Hobbesian anarchy described in Buchanan's model. Which system will provide individuals with higher utility will depend on the time preference for wealth extraction of the leader of the government. The state will have the ability, because of its monopoly over the use of force, to seize more than anybody could under anarchy.¹¹ The state may refrain from maximum extraction in order to extract more in the long run by leaving the people more wealth to maintain their incentive to produce. The choice Buchanan leaves you with is between many roving bandits or one large stationary bandit, who is able to steal more than any roving bandit, but may limit his short-term theft in order to extract more in the long run.¹²

If people in anarchy face a choice between the natural distribution under anarchy or a Leviathan, it is not at all clear that conceptually they would ever unanimously agree to form a government. Buchanan is only able to find a justification for the existence of the state because he fails to analyze it with the assumptions he makes about individuals in anarchy. The use of force is the only available constraint with Buchanan's assumptions. Wagner (1993) has written that it is essential to align a system's guns in a way that it is in no one's incentive to fire. Buchanan gives all of the guns to one enforcer, so it is not constrained. Since Buchanan's original work, much has been written on

polycentric legal and enforcement systems.¹³ This literature describes situations where power is divided between different enforcement agencies so that they constrain each other. The task left for these systems is to see if they are theoretically robust enough to work with Buchanan's Hobbesian assumptions about behavior. Buchanan's monopoly enforcement by government still leaves him in the Hobbesian jungle where he started.¹⁴ The only hope to get out of the jungle with these assumptions is a polycentric division of enforcement power.

NOTES

1. He was also influenced by Winston Bush's (1972) mathematical modeling of Hobbesian anarchy.
2. Buchanan (1975) separates his analysis into the 'productive state' which produces public goods and the 'protective state' which is the enforcement agency. This chapter deals exclusively with an analysis of the 'protective state'.
3. 'We know that, factually and historically, the "social contract" is mythological, at least in many of its particulars. Individuals did not come together in some original position and mutually agree on the rules of social intercourse. And even had they done so at some time in history, their decisions could hardly be considered to be contractually binding on all of us who have come behind' (Buchanan, 1972: 27). His work is thus untouched by Lysander Spooner's (1870) attack on the legitimacy of a constitution.
4. Figure 9.1 is from Buchanan (1975: 84). A similar figure appears in 'Before Public Choice' but due to a typographical error the payoffs do not result in the same equilibrium.
5. To some extent, continuous dealings, even among a large group of people, can serve as an enforcement mechanism (Stringham, 2003). In this chapter I will accept it as true that some type of third-party enforcement is necessary.
6. Nozick (1974: 5) recognizes this basic point and suggests that we might want to use the 'minimax' criteria in comparing anarchy to states, saying, 'the state would be compared with the most pessimistically described Hobbesian state of nature. But in using the minimax criterion, this Hobbesian situation should be compared with the most pessimistically described possible state, including *future* ones. [In] such a comparison, surely, the worst state of nature would win.'
7. Even if a 'veil of ignorance' (or uncertainty) is assumed the result does not change. The citizens could write an optimal social contract (constitution) not knowing what their positions will be. As soon as the contract is put into effect, some particular people must fill the roles of government to enforce contracts. They will now know who they are and will be able to defect on the contract that was initially written behind a veil of ignorance.
8. Landes and Posner (1975) have written that an independent judiciary enables Congress to extract more rents because it forces Congress to abide by a law that it passed giving a privilege to one group. Without a credible commitment that Congress will not reverse a privilege granted in the following period, special interest groups would not be willing to pay much to Congress for privileges because their expected rents would be small. This does not affect the analysis in this chapter though. The judiciary is only obeyed because it enables Congress to receive more rents from individuals through lobbying. The executive branch can still defect from its original contract with citizens to expropriate resources and the judiciary has no enforcement recourse. The judiciary is only obeyed in the areas where it helps Congress (or a similar argument for the executive branch) receive more money, not less.
9. This does not mean that ideology, tradition and morality play no role in helping to provide somewhat of a check on the expansion of a limited government into a Leviathan, but since these same things are assumed away in Buchanan's analysis of anarchy, they cannot then be reintroduced when analyzing government.

10. See Olson (2000) and Hoppe (2001) for analyses of how time horizons will impact rulers' incentives for theft.
11. Rothbard (1973 [1996]: 47) notes that 'Historically, by far the overwhelming portion of all enslavement and murder in the history of the world have come from the hands of government.' Providing evidence for this observation is Rummel (1994), who attempts to document the number of citizens killed by their own governments in the twentieth century.
12. This is the situation McGuire and Olson (1996) and Olson (2000) model. See Powell and Coyne (2003) for a critique showing that Olson's stationary bandit does not necessarily improve individual welfare compared to anarchy.
13. For detailed analysis of many of the workings of similar polycentric systems see: Rothbard (1973); Friedman (1989); Benson (1990; 1998); Barnett (1998: 238–97) and Stringham (1999). For recent debates about power relations, networks and collusion in a polycentric system see Cowen (1992), Friedman (1994), Sutter (1995), Cowen and Sutter (1999), and Caplan and Stringham (2003).
14. As Alfred Cuzan (1979) noted, we never get out of anarchy by forming a government. We only move from market anarchy to political anarchy.

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