Chapter 5

A Theory of Political Systems

Systems have been defined, and therefore I can use my general theory of systems in order to construct theories of particular systems. The goal of this chapter is to construct a theory of political systems for two main reasons: first, in order to define a Great Power in a theoretically consistent way; and second, to be able to construct a theory of a higher level of system, specifically, a system of political economy. A theory of systems of political economy will then be used to generate hypotheses concerning the subject matter of this study, the rise and decline of Great Powers.

Defining the Political Domain

The process of rise and decline of Great Powers is a phenomenon which falls within the domain of the social sciences. One could analyze this process in terms of psychology, cultural studies, economics, sociology, political science, or many other fields. It was previously asserted that it is sometimes useful to disaggregate domains into subdomains. How are the subdomains to be chosen, and how can these subdomains be defined?

Rise and decline clearly involves political and economic factors. The power of Great Powers is manifested politically, and the strength or weakness of the industrial sectors has been of great importance since the 19th century. Many scholars have written of other influences; for example, Joseph Nye (Nye 1990, 188-201), among others, has

argued for the importance of "soft power", that is, the ideological and cultural influence of one country over another.

Since the process of rise and decline is very complex, this study will restrict itself to the two most obvious causal forces, politics and economics. In order to understand the interaction of the two, it is necessary to model the two subdomains, economics and politics, as well as their combination, political economics – a total of three systems. If the domain of culture were added, for instance, it would be necessary, not only to understand the three subdomains, but the three combinations (culture-politics, culture-economics, and politics-economics), and then the combination of all three – for a total of seven systems. The complexity of the project would increase in a nonlinear way.

By restricting the inquiry to the subdomains of politics and economics, this study will be able to restrict the discussion mainly to material factors. There will be little recourse to the causal importance of incentives, demands, or desires. The theories as developed here will not exclude such considerations from future research; the theories will serve as the material skeleton on which these future studies might be constructed. Any studies which wished to concentrate on cultural or other factors would benefit from a useful modeling of the material basis of human affairs, and any discussion of that material basis should include the domains of political and economic systems.

If these two subdomains are to be chosen, then it must follow that there is some complete domain which can be divided into two subdomains. If the complete domain involves the material aspects of human social reality, then there must be some way to characterize the whole of material reality which can easily be split in two.

To some extent, any attempt to make such an abstract division of reality is metaphysical, that is, is itself based only on introspection and an artificial imposition of categories on an underlying reality. However, one can not proceed with any scientific research without making certain distinctions. Physics has used a categorization of material reality since Newton, and the important consideration is that the categorization has been useful. Newton divided reality into force, matter, time and space, and Einstein changed the categorization to *energy*, matter, time, and space. Einstein's categorization was useful for constructing his theories.

Similarly, this study will use Einstein's categories as a starting point for the task of dividing human material reality. Einstein aggregated his four categories into two larger categories, time/space and matter/energy. The relation of time and space was the subject of his theory of relativity, while the relation of matter and energy was summed up in his famous equation, $e = mc^2$. This categorization is also suggestive for the social sciences (without implying that there is a strict analogy between physics and social sciences). It will be useful to investigate a sphere of inquiry which is mainly concerned with the human use of space, and a sphere which is mainly concerned with the human use of matter/energy.

Since this is a study of change, however, time must be an integral element of any domain under discussion. As argued in the previous chapter, systems often contain sequences, and sequences are ordered in time. Therefore, it will be useful to include time in both spheres, space and matter/energy.

If one subdomain involves space through time, and the other involves matter/energy through time, then the political subdomain can be initially defined as "the

human control of space through time", and the economic subdomain can be initially defined as "the human transformation of matter/energy through time".

Economics is often defined as the production and distribution of goods and services. In the previous chapter, instead of the terms 'production' and 'distribution', the terms 'generation' and 'allocation' were used to characterize the different aspects of a system. The production of goods and services involve the transformation of matter/energy into other forms of matter/energy. Therefore, an improved definition of the economic domain would be "the human transformation of matter/energy into different forms and the allocation of those forms, through time".

The subject of the political domain, accordingly, should be restricted to space. In terms of social reality, the term "territory" is equivalent to the concept of space. Territory is one way in which humans (and other animals) experience space socially, that is, in relation to one another. Except for occasional activities such as the creation of land by the use of dikes in Holland, space is not created. Instead, space is *controlled*. But the idea of controlling space makes no sense except in the sense of controlling the objects that are contained *within* the space. In the political domain, the main objects of control will be assumed to be people.

In order to keep the model simple, the type of control to be assumed will be the control of people in space, and more particularly, the control of the *position* of people in space. The most important type of control, according to this line of reasoning, is to put people in a particular position in space.

This control manifests itself in two major ways in society. First, prisons are used to restrict the position of a person in space. The placement of a person in prison is the

most obvious manifestation of the working of a political system, according to my definition of the political domain.

The second manifestation of control of humans in space is to control their existence within the space. There are three main ways of enforcing such control: first, the person can be killed; second, the person can be expelled from the territory; and third, the person can be allowed to enter the territory.

Under what circumstances a person should go to prison and for how long, whether a person should be put to death or expelled, and who should be let into a society, are questions that are at the core of the meaning of a political community. Thus, any definition of the political domain should include these issues, and the simplest definition of such a domain could end with such a definition.

In order to keep the definition simple, then, the political domain will be defined as "the generation of control of a population within a particular territory through time, and the allocation of that control". The generator of control will be called the state; the population, over which control is generated, is a generator of people. There are therefore two generators in the domestic political system: the state and the population.

The State

My definition of the political domain, despite its simplicity, includes much of the meaning that scholars have attributed to the concept of the state.

A state has been necessary in order to manifest control over a territory. Max Weber famously claimed that "a state is a human community that (successfully) claims

the monopoly of the legitimate use of physical force within a given territory" (Weber 1946, 78).

Many scholars have accepted some version of this definition. For Charles Tilly, who traced the development of the modern state,

> An organization which controls the population occupying a definite territory is a state insofar as (1) it is differentiated from other organizations operating in the same territory; (2) it is autonomous; (3) it is centralized; and (4) its divisions are formally coordinated with one another. (Tilly 1975, 70)

Poggi, a political sociologist, agrees with this definition (Poggi 1990, Chapter 2), as do Weiss and Hobson (1995), and Michael Mann (1985, 67). Similar definitions are used by Skocpol (1985) and many others.

Michael Mann claims that "the definition of the state concentrates upon its institutional, territorial, centralized nature…only the state is inherently centralized over a delimited territory over which it has authoritative power" (Mann 1985, 70). The idea of space is paramount: "Unlike economic, ideological or military groups in civil society, the state elite's resources radiate authoritatively outwards from a centre but stop at defined territorial boundaries. The state is, indeed, a *place* – both a central place and a unified territorial reach" (Mann 1985, 70, italics in original).

Tilly, Mann, Poggi and others agree that one of the main functions of the state is to control the violence which occurs within the territory of the state. As Poggi argues, "Since all human beings are potentially violent and intrinsically exposed to each other's violence, it is in the interest of individuals to vest in an artificially constituted sovereign all capacity to exercise violence, as that sovereign's exclusive, unchallengeable prerogative" (Poggi 1990, 13).

Some forms of violence are more important than others: "Whoever is in a position, credibly to threaten others with physical annihilation, has at his disposal a sanction potential which is incomparably superior to all other sanctions…Having it, on this account, constitutes the very core of the political experience" (Narr, quoted in Poggi 1990, 10).

Thus part of the control of space, or territory, involves the potential elimination of a person from that space. The most important forms of violence are those that impinge on the position of a person in the territory.

The ability to control violence, and to threaten violence in order to control space, implies a capability on the part of the state to *generate* violence. In the modern (and even ancient) state, this state-sanctioned violence is enforced by agents of authority such as police, internally, and the military, externally (or internally as well). These *enforcement agents* or *means of violence*, in turn, are controlled by a group of people ordered in a hierarchy, called a *bureaucracy*. For instance, in the Federal branch of the United States government, this bureaucracy is comprised of the President at the top, the Attorney General at one level down, followed by various deputies, until finally the actual wielders of authority will be various kinds of U.S. Marshalls, Immigration and Naturalization Service officials, and prison officers. Alongside this hierarchy there also exists a hierarchy of courts which try and sentence people who have been accused of braking the law.

The *state elites* make the laws that the bureaucracy enforces; the bureaucracy enforces these laws using the means of violence, which are composed of enforcement agents and corresponding technology. The state elites not only make the laws, but they

shape and create the bureaucracy. They are metagenerators, in the sense defined in the previous chapter; they create the generators (in this case, the bureaucracy), and they may also regenerate themselves.

Part of Weber's analysis of the workings of the state can be seen as an attempt to divide the concept of the state between state elites and the bureaucracy. The division is manifested in his concept of "legitimation".

For Weber, it was important that the state have *legitimate* means of coercion. This sense of legitimacy, he claimed, changed through time. At first, traditional polities dominated states, and rules were followed because tradition required adherence to customs. In the second stage, charismatic leaders upset the traditional order, and were obeyed because of the personal qualities of the charismatic leader. Finally, in the modern era, "The bureaucratic state order is especially important; in its most rational development, it is precisely characteristic of the modern state" (Weber 1946, 82).

Bureaucracy, like the machine, has made the modern world more rational and organized, if less magical (as Adorno and others have commented). Control emanating from the state is now legitimate because orders flow from a bureaucracy. Each person in the bureaucracy is important, not because of his or her intrinsic qualities, but because of his or her *position* in the structure of the bureaucracy.

The bureaucracy, then, has a structure, just like any other system, and the bureaucratic office is ordered according to its position on an organization chart; the officeholder is expendable. Since the source of legitimation is the bureaucracy, Weber's definition of the state can be reformulated as "a set of organizations that claims the monopoly of the *bureaucratic* use of physical force within a given territory".

The bureaucracy, however, receives its legitimation from an "artificially constituted sovereign", or state elites, to use Poggi's conception of sovereign (Poggi 1990, 13), just as the enforcement agents receive legitimacy from the bureaucracy. There is a sequence of the generation of control, as befits a generative system. First, the state elites create the laws which specify in which cases coercion is to be imposed, and then the bureaucracy uses the laws created by the state elites to create control over territory using the means of violence. Laws are the guidelines by which control is enforced.

The sequence within the state can be diagrammed in the following way, in which the arrows indicate direction of control:

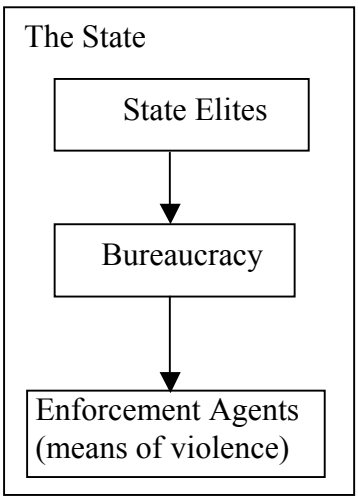

Fig. 19. Structure of the state.

The state, then, is a generative subsystem with a tripartite structure, as introduced in the previous chapter on systems. That is, there is a production of output, called the means of violence, which is generated by generators, that is, by the bureaucracy. In turn, this bureaucracy, and the laws it implements, is created by a metagenerator, the state elites. The state elites can change their own structure (say, by changing the workings of a particular branch of government). The state elites, as a group, may regenerate

themselves; a King is literally reproduced, while an oligarchy generally chooses the next dictator.

One generative subsystem of a domestic political system is the state. The structure of the state contains a distribution of causal capability. That is, each stage of the sequence has differing abilities to affect other stages. The first stage, that of the state elites, is the most important, because state elites affect the other two stages. The importance of the elite stage is reflected in the historical struggle to establish democracy; if the state elites are most important, then they must be controlled by the general population if the people of a polity are to have control over the use of violence within their territory.

For Weber, the control of these metagenerators is the essence of the political domain: "The state is considered the sole source of the 'right' to use violence. Hence, 'politics' for us means striving to share power or striving to influence the distribution of power, either among states or among groups within a state" (Weber 1946, 82). Control over the state or among states is *allocated*, or distributed, among units, either to the population or to states, respectively.

The product of the state, the means of violence, is used to control the population. Thus, the state, which is comprised of the state elites, bureaucracy, and means of violence, is one element in the domestic political system, and the population is another element in the domestic political system. The population is a generative system, as is any population of organisms.

The state controls *all* of its output, that is, the state monopolizes the means of violence. As Waltz points out, the domestic political system is hierarchical. The means

of violence, or enforcement agents, are legitimized by their association with the bureaucracy, which itself is legitimized by its association with the sovereign, the state elites.

Most states attempt to use some kind of ideological means of control in addition to coercive means of control, and the main goal of this ideological output is to convince the population that the state is legitimate. In addition, when citizens voluntarily obey laws, the cost of enforcement is greatly reduced, and a state which is felt to be legitimate has a greater capability to elicit voluntary compliance than a state in which the citizens do not feel loyalty.

In a democracy there is a cycle of legitimation and control, because the population which is subject to the enforcement of the bureaucratic means of violence, does itself control the state elites which direct the bureaucracy. In a dictatorship, the population exists only as the receiver of political power, and has no political power of its own.

The polity, by which I mean the domestic political system, is composed of a state which generates control over space, a population which generates itself, and a method of allocating control over the state. Thus there are two generative subsystems in a polity, and an allocative subsystem which consists of *rules* for choosing state elites. In most modern states, these rules are summarized in a part of a constitution. The part of the constitution specifying electoral rules, or an equivalent set of rules in a nonconstitutional system, is therefore the allocative subsystem of a domestic political system.

The state elites are either chosen by other state elites, in the case of a dictatorship, or they are chosen by the population, in the case of a democracy. Of course, there are

many cases in between these two, but for the purposes of keeping the model simple, this bifurcation of types will serve the purposes of this study.

The two types of polity can be diagrammed thus:

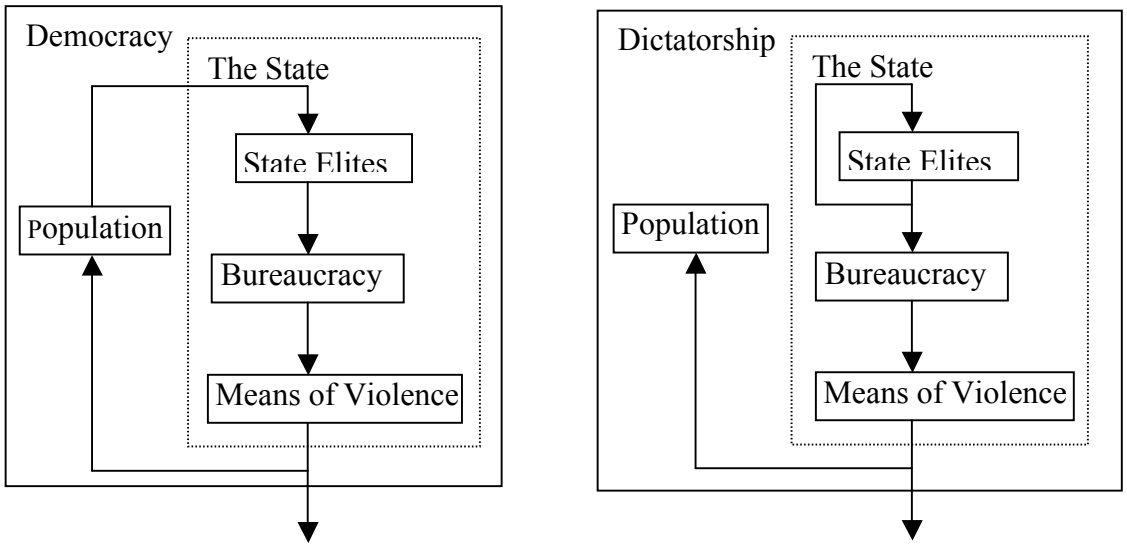

Fig. 20. Two types of polity.

The arrows in figure 20 indicate sources and targets of control. In a democracy, the objects of enforcement, that is, the people of the polity, choose state elites. In a dictatorship, only the state elites choose the state elites. The arrows pointing out of the political system indicate that the means of violence include the military, which is used to project power towards other political systems.

A change of the structure of a domestic political system is a change from a democracy to a dictatorship or from a dictatorship to a democracy. A change in the elements themselves would result from a change of their structure. For instance, the state elites might be organized according to the United States Constitution, or they might be structured as in a British parliamentary system. Structural change at the level of the state

elites usually takes place as a change in the appropriate sections of a constitution, in a constitutional system. An example of the bureaucracy changing its structure would be the separation of the United States Federal Department of Health, Education and Welfare into the departments of Health and Human Services, on the one hand, and Education, on the other. Such changes may be set into a constitution in constitutional systems, but may also simply be mandated by state elites without a change to the constitution.

In addition to a structure, political systems also contain feedback processes. As shown by Tilly (1985, 181), the original development of the modern state occurred as the result of a positive feedback process among the factors of war making, state making, protection, and extraction. As the state centralized power, there was a tendency for the state to expand its power throughout the society, culminating in dictatorship. On the other hand, there is a negative feedback process also inherent in the domestic political system, such that the population as a whole may constantly push back the expansion of the state, in order to overthrow a dictatorship. Tilly has also written extensively about processes of rebellion and revolution. In general, negative feedback is manifested by the tendency for balances to appear within the polity in the form of coalitions.

At this point in this study, the definition of political system is so narrow that I have not even considered the issue of revenue extraction, raised by Tilly and his associates. Taxation and other interactions of the state with the economy will be dealt with in chapter 9, where most hypotheses concerning the state will appear.

However, based on the model as drawn here, it is possible to hypothesize that *a dictatorship will impose greater violence on the population than a democracy will*. This will constitute the first hypothesis about political systems. In a dictatorship the

population is at the very bottom of a hierarchy and has no power; the state will therefore have little constraint on its behavior. The structure of the political system will enable great violence to be let loose on the population.

In a democracy, on the other hand, the population has control over the choice of the state elites. The population therefore has the power to prevent, or decrease, the execution of state violence on the citizens of the polity. This hypothesis will be used in chapter 10 as an explanation of Douglass North's observation that property rights, or distributed power, is essential in order to guarantee the security that makes economic growth possible.

By restricting the definition of the political domain to the control of space through time, then, it is possible to utilize many of the concepts employed by scholars of the state, and at the same time construct a parsimonious conception of the state and of a domestic political system. In addition, my theory of a political system mirrors the theory of systems elaborated in the previous chapter. My theory of systems has aided in the generation of a theory of political systems.

There have been other attempts to model political systems. David Easton attempted to construct such a theory in the 1950s. For Easton, "The study of politics is concerned with understanding how authoritative decisions are made and executed for a society" (Easton 1957, 49). His domain is much larger than the one specified in this chapter, and thus his construction of a system either had to be more complicated or more abstract; he chose abstraction. His system seems to be a combination of a thermodynamic and cybernetic system: first, the actual transformative element is a "black box", that is, its elements and processes are not specified; second, the focus is on the

system as an allocative system; and third, negative feedback is the only process given consideration.

The political system as specified in this study, by contrast, is more narrowly defined, includes positive as well as negative feedback, and involves generative processes. My theory of political systems is thus more appropriate than Easton's theory for understanding the rise and decline of Great Powers.

POWER AND CAPABILITIES

While Easton conceived of politics as the allocation of values, another tradition sees politics as a "struggle for power" (Morgenthau 1973, 31), in Hans Morgenthau's phrase. This formulation of politics transforms the problem of defining a political system into a problem of defining power: "When we speak of power, we mean man's control over the minds and actions of other men. By political power we refer to the mutual relations of control among the holders of public authority and between the latter and the people at large" (Morgenthau 1973, 32). Because the definition of political power often involves the state, the state becomes involved in a definition of the political system. The definition of the state as discussed in this chapter will be used to help construct a definition of political power.

As David Baldwin (Baldwin 1979) has advised, power is so varied that it is often helpful to specify the domain and scope of the kind of power to which one is referring. The kind of power explored in my definition of the political system involves control over space, which entails particular kinds of coercion and violence in association with

legitimation. Thus, the term "political power" as used in this study does not need the broad definition often associated with the word "power".

For instance, Robert Dahl's definition of power as "the ability to get people to do what one wants them to do when otherwise they would not do it" (Waltz 1979, 191) is often paraphrased in various ways. The main idea is that someone's behavior is changed from what it would have been in the absence of an action. This idea includes the possibility that the person may have been convinced that the action should not even be considered (Lukes 1986), or that the choice is not part of the agenda (Bachrach and Baratz 1970). In any case, the definition of power in terms of behavior is very general, and is very difficult to either quantify or use for comparative analysis.

These kinds of definition of power do, however, point to power as a type of force that is pushing against something. Something is being moved when otherwise it would not have been moved, be it a choice, the opinion of a nation, or a crowd. In order to move something, human or mechanical, it is necessary to have some capabilities, or resources, at one's disposal.

The definition of power as used in physics can be used to understand the nature of capabilities used within a political system in order to project power. In physics, power is the ability to do a particular amount of work in a particular period of time. Work, in turn, is the ability to apply a particular amount of force over a particular distance. So power, in the physical sense, is the ability to apply a particular amount of force over a particular distance in a particular period of time.

Similarly, military capability may be defined as "the capability to project a particular amount of armed force over a particular distance in a particular period of time".

Armed force may be quantified as either men or munitions, or as a combination of both. In addition, the ability to use armed force is often dependent on the amount of time taken to project armed force.

In physical terms, we say that dynamite has greater power than rain, because dynamite can blow a hole in the ground in seconds, while rain may take millennia to cut a gorge. Both might eventually do the same amount of work (given enough dynamite), but the time frames would be much different. Similarly, the German blitzkrieg of World War II was effective because of the speed with which the armed forces moved; the blitzkrieg led to a large projection of power. The Maginot line of the French, on the other hand, while capable of much force, and was not able to project power for a great distance beyond the Line itself, although within the range of the artillery the Line was powerful.

Distance is an important factor in the measurement of power. Usually, as Gilpin pointed out, the ability to project power decreases sharply with distance (Gilpin 1981, 56). In addition, a country such as the United States that can project armed force around the world is considered much more powerful than a country that can only project power across its borders.

Capabilities are useful for understanding how *powerful* a nation might be, but being powerful does not answer the question of what *power* is. Waltz (1979, 192) defines what it means to be powerful, but seeks to define power in terms of capabilities, not intentions: "An agent is powerful to the extent that he affects others more than they affect him", which implies that the more powerful agent has more capabilities. Another example of Waltz equating power and capabilities is his statement that "power is a means, and the outcome of its use is necessarily uncertain. To be politically pertinent,

power has to be defined in terms of the distribution of capabilities; the extent of one's power cannot be inferred from the results one may or may not get". If power is "defined in terms of the distribution of capabilities", then the definition of power is synonymous with the definition of capabilities.

Physicists make a distinction that may be of help in understanding the nature of power. In physics, a distinction is made between potential energy and kinetic energy, or between potential power and dynamic power. If a person is holding a rock in his or her hand, the rock has a *potential* energy. All of the potential energy will turn into kinetic energy, only if there is no resistance (such as friction) on the way down to the ground. Otherwise, much of the potential energy may turn into heat, and the energy which is felt on the ground will be less than the original potential energy. In international relations, as well as domestically, the attempt to project power is constantly being resisted; instead of realizing all of the potential power expended, much of the power or energy expended in international actions is dissipated before any work or goals can be accomplished.

Waltz's view of power as capabilities is similar to the concept of *potential* power in physics. The capabilities of a state in the international arena are of a potential nature. What the results of the projection of power will be cannot be determined from the relative power of the state vis-à-vis other states. The absolute capabilities of a particular state can be determined without reference to the system of which the state is a part, but the outcome of the projection of power can only be understood in the context of the system of states in which the projection of power takes place.

There is therefore a difference between *the power to achieve a goal* and *being powerful*. Usually, power is meant to signify the power to do something or achieve a

goal; for instance, the power to make someone do what they would not have otherwise done. Capabilities are used in the effort to accomplish a goal, but they do not guarantee the ability to achieve the goal. Capabilities are a measure of how powerful something is, not a measure of the power to accomplish a goal, although more relative capabilities are usually a better indication of probable success than less relative capabilities.

This study is concerned with the material capabilities of Great Powers. Therefore, I will concentrate on capabilities which indicate how powerful a state is, not on the power of a state to accomplish a goal. If the distribution of capabilities is understood, then the discussion of whether or not a state (or other social system) achieved its goals can be more easily accomplished, often in terms of the reasons why the distribution of capabilities did or did not lead to a particular outcome.

When a political system possesses a certain amount of political power, then, it possesses a certain quantity of political capabilities. Similarly, when a military possesses a certain amount of military power, it possesses the capability to project a certain quantity of armed force over a particular distance in a particular period of time. But this does not mean that the military possesses the power to achieve the goal of covering this distance; the outcome, like the difference between kinetic and potential power, will depend on the resistance the military forces encounter.

The term “distribution of power” will be synonymous with the term “distribution of capabilities”. But these capabilities will only be a means to obtaining an end. Since their distribution constitutes a structure, the distribution of capabilities only enables or constrains the actors. The actors themselves must use the capabilities they control, and as a result of their interactions, the actors arrive at a particular outcome. Structures reveal

how powerful the actors are, relatively; the units of the system, the actors, determine through their interactions which actors are able to achieve which goals.

The possession of political power implies the capability to control a certain amount of space and the population within that space, and to manifest control within a certain period of time. Since the domain of the political system is the control of space and the population within that space, then political power involves a measure of that control, in terms of distance and time, over that population and space. Therefore, *political power is the capability to control a certain population within a certain territory in a particular period of time*.

Political power is different than military power. Military capability can be a part of the political power of a state, but there are other capabilities as well. Domestically, the ability to control a population within a particular territory is usually at least somewhat dependent on the ideological capability of the state to bind the population to the state. In other words, the state tries to *legitimize* its monopoly of the means of violence by recourse to certain ideological instruments, such as propaganda, or the use of Weber's types of legitimacy, whether traditional, charismatic, or bureaucratic-rational.

Thus, domestically, the state has two sources of political power, military capabilities and ideological capabilities. Both of these capabilities imply a space over which control exists; ideological binding of the population to the state almost always involves reference to the particular territory of the polity. On the other hand, I will keep economic capabilities out of the definition of political power, in order to distinguish political power from political economic power, which will be dealt with in chapter 9.

This study will focus on the military part of political power, not the ideological. The link between economic output and military output is simpler to explain than the link between the economy and ideology. In addition, this study is concentrated on the material aspects of reality, not the psychological. In order to simplify my models, then, ideology will usually not be considered.

The state tries to monopolize political power within its territory. The state monopolizes the capability to project armed force over a distance in a particular period of time, and tries to monopolize the capability to ideologically bind the population to itself. In other words, the state monopolizes the bureaucratic (legitimate) means of violence, and the means to argue for its legitimacy. If both of these sources of political power should fail, then a revolution may occur, and the structure of the state may be changed (Skocpol 1985).

The state monopolizes direct sources of political power within the polity. The difference between a democracy and a dictatorship involves the different distributions of capability to indirectly control the state by controlling the choice of state elites. In a fully democratic polity, the distribution of capability to choose the state elites is equal among all members of the population. In a dictatorship, this indirect power is restricted to a few individuals.

In either case, a lock-in of structure is possible. That is, there may be positive feedback processes which keep the domestic political system stable. In previous discussions of positive feedback, I have highlighted their dynamic aspects. Positive feedback processes may also "lock-in" a system to a stable situation. In the case of a dictatorship, the centralization of control over the choice of state elites leads to the

greater and greater accumulation of control over all units of the state apparatus, until the state is completely dominated by one or a few people. This state of affairs is maintained because no other sources of power are allowed to emerge by the state elites, and a "lock-in" occurs.

In a democracy, the ability of the state elites to control their succession has been very much constrained, and because the choice now resides within the population, it is very hard for the state elites to wrest this choice from the population. A different kind of "lock-in" occurs.

Because of these positive feedback processes, changes in state structure are quite rare; they usually occur because of war and the consequent weakening as the state, as Skocpol (1985) has shown. The change in political structure is related to the definition of the possession of political power: the state is no longer able to control the population within a particular territory in a particular period of time, that is, the state in a revolutionary situation has lost political power.

The International Political System

My definition of political power is also appropriate for use in describing the international political system. Since the international political system is an allocative system, and does not include a generative subsystem, its domain is the allocation of territory and the territories' population among polities. The international political system is composed of domestic political systems, or polities, as its elements. There is no functional differentiation among the elements, and therefore there is no generative subsystem.

The definition of the structure of the international political system should include a specification of the common measure with which to compare the values, or capabilities, of the units. This specification should be based on territory and its associated population, since political power is defined as the control of the population within a space through time, and each polity controls a particular territory. The political means of control over a territory involve military and ideological power. Since this study is concerned with material aspects of reality, I will minimize or ignore the role of ideological power in the international political system. Therefore, the armed force which is contained within the territory of the polity will be the common measure to be used in comparing units in the international political system.

In chapter 9, a fuller definition of power will be given which will include economic considerations, which are obviously important in a discussion of the rise and decline of Great Powers. At that time, a discussion of the international political economy will take place. I am giving a narrow definition of the political realm in order to be able

to construct an understanding of the political economic realm which encompasses, but is separate from, the political realm.

Besides a distribution of capabilities based on military capability, the international political system also includes a distribution of causal capabilities. There are a set of states which have a greater capability to change the allocation of territory and the concomitant resources among polities than other states. In order to simplify the model, it will be assumed that there are only two possible types of states; those that can change the allocation of territory, and those that can not.

Great Powers are those polities that, collectively, control the change in the allocation of territory and the associated resources among polities. This is a testable hypothesis that flows from the logic of my theory of political systems, and constitutes the second hypothesis about political systems

For example, the Great Powers' capability to control territorial reallocation is very evident at the end of systemic wars. A systemic war may be defined as a war in which all of the Great Powers of an international political system participate on one of two conflicting sides. After such wars, the victorious Great Powers divide territory according to their own best interests. This redivision took place at the end of the Napoleonic Wars during the Congress of Vienna, after World War I in the Versailles Treaties, and toward the conclusion of World War II in the meetings of the Allied leaders (Holsti 1991).

The capability of the Great Powers can sometimes be seen in the midst of a systemic war as well. For example, by 1943, the five Great Powers had basically taken control of all the territory of the globe: the Germans controlled continental Europe; the British took advantage of their Empire; the Americas fell within the sphere of influence

of the United States; the Soviets retained control of central Eurasia; and the Japanese had conquered East Asia. The division of the world was almost as complete during World War I.

My definition of a Great Power is based on my theory of political systems, as opposed to the ad hoc definitions of scholars as reviewed in chapter one. I defined a political system in terms of the control of space, and that definition in turn was based on a discussion of the division of domains of inquiry, all of which flowed from my general theory of systems. The Great Powers are defined in terms of the concept of space, and also in terms of a particular aspect of systems, the distribution of causal capability, that in turn emerged from my general theory of systems. As will be seen in chapter 9, the definition of Great Powers as presented here will be profitably merged with the discussions of economic and production systems to construct a hypothesis about rise and decline, and the statistical appendix of this dissertation is presented as an attempt to validate that hypothesis. Thus, it is hoped, the labor expended in order to understand systems is being repaid by the presentation of a theoretically rigorous definition of a Great Power.

An international political system also includes feedback processes. Waltz, as well as many others before him, has been impressed by the recurrence of balances of power within the international political system. A balance of power is an example of a negative feedback process within an allocative system. That is, the units of the system are so arranged as to withstand the operation of a positive feedback process within the system. *A balance of power is a reaction to a positive feedback process in an international system*; this is the third hypothesis about political systems

When the structure of the international system is arranged in such a way that a stronger polity has the political power to overwhelm and conquer a weaker polity, then the structure can be said to *enable* change within the system. This change may become self-reinforcing, because once the stronger power has added the weaker power's territory and armed force to its own territory and armed force, the stronger power will now have a greater capability than before to conquer other polities (see Cederman 1994, Liberman 1993). This process of accumulation can snowball, until all of the weaker polities are contained within the orbit of the state of the imperialistic polity.

This process can be referred to as the *accumulation* of power, as opposed to the *balance* of power. The following diagram shows a simple example:

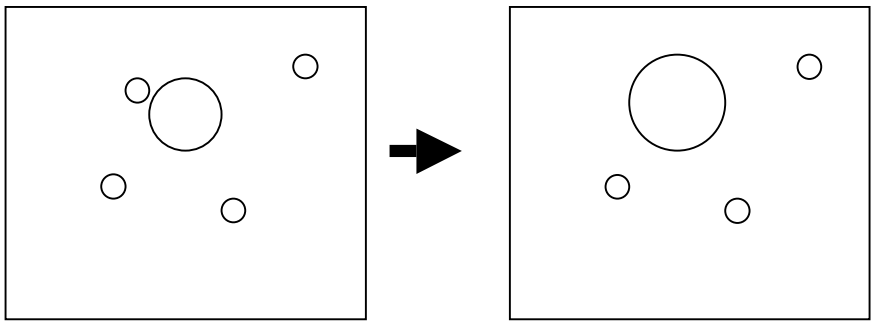

Fig. 21. The accumulation of power.

The structure of the system in this example is such that a large polity exists next to a small polity. Assuming no coalition of small polities against the big polity, the big polity is able to conquer the small polity, and now becomes even bigger, allowing it to conquer yet more small polities, and so on.

This snowballing capacity to conquer is an example of a positive feedback process in an allocative system. *Most polities have been created as a result of this*

positive feedback process of conquest; this is the fourth hypothesis about political systems.

Many of the major states today can be viewed as a verification of this hypothesis. For example, the small Mark of Brandenburg eventually became the Kingdom of Prussia, and then expanded to become the Empire of Germany. The Hohenzollerns slowly but surely, and with great persistence, added smaller polities to their territory. Also in Europe, the French state arose as a series of military campaigns against lesser lords, and the Spanish "reconquered" much of the Iberian peninsula piece by piece from the Moors, via a snowball effect. The Duchy of Muscovy was able methodically to assimilate the other principalities of Russia as a result of the power it gained from its association with the Mongols.

Asia has also seen the accumulation of power throughout its history. The original unification of China resulted from the growing power of one province, the Ch'in. In Japan, the revolt that became the Meiji restoration started in remote provinces. India was conquered by the British a small piece at a time, as the Indian princes did not form a balance of power to stop them.

In the Americas, the Spanish were aided in their conquest of the Aztecs by other American groups; when the Spanish eliminated the Aztecs, the former allies became easy targets of Spanish expansion. Similarly, the peoples of North America did not join forces against the European invaders, allowing Britain, Spain and France to expand their colonies. After its war of independence, the United States expanded against weaker adversaries, who did not coalesce against it, allowing the United States to become stronger and stronger.

Thus, the process of positive feedback can be used to explain the formation of polities, and in particular to explain the formation of Great Powers. Systemic wars usually involve some aspect of state formation by accumulation of power, as when Hitler sought to obtain "lebensraum" (living space) through serial conquest of Western Europe, then Eastern Europe, and finally the attempt to conquer all of the Soviet Union. The process of positive feedback in the international system has led throughout history to changes in the structure of the international political system.

A major motivation for the initiation and continuation of wars can be explained using my theory of political systems, for two reasons. First, state elites of a more powerful polity may perceive that they will not be challenged by a group of lesser powers in an attempt to conquer a smaller power. Second, once an imperialistic polity captures the territory and resources of another polity or polities, the greater power of the imperialist polity may make further conquest more desirable for their state elites, leading to a positive feedback process of more and more conquest. The structure of the international political system may encourage imperialistic behavior; an imperialist may find itself with large territories without initially intending such an outcome. For example, Great Britain has been described as having acquired its empire "in a fit of absent-mindedness".

Balances of power have constantly recurred. In particular, the concept of balance of power explains why no Great Power has been able to conquer the entire planet, and why systemic wars rarely lead to state formation; for example, in his attempt at lebensraum, Hitler was thwarted. If the process of the accumulation of power continued indefinitely, eventually one polity would become strong enough to overwhelm any other

state, and the international political system would be transformed into a world empire. Throughout history, states have formed alliances to stop the transformation of an international political system into a hierarchical political system.

However, attempts to accumulate power have also occurred continuously throughout history. The combination of the two concepts, snowballing conquest and balance of power, are therefore more powerful as an explanatory framework than either one by itself. By using the concept of the snowballing accumulation of power, it is possible to explain both state formation and balance of power.

CONCLUSION

My theory of systems has been used to generate a theory of political systems in the present chapter. My theory of political systems includes a parsimonious definition of political power, the polity, Great Power, democracy, and dictatorship. In addition, the main concepts of Waltz's theory of international political systems have been retained.

Several testable hypotheses have been generated: first, a democracy will visit less violence on its citizens than a dictatorship; second, Great Powers control the reallocation of territory among states in the international system; third, a snowballing accumulation of power in international political systems explains much of the history of state formation and its attendant wars; and fourth, balances of power form in reaction to the accumulation of power.

By divorcing the economic domain from the political, many important problems have been ignored. Hypotheses addressing the growth or stagnation of industrial power

cannot be addressed in a theory focusing on politics, as defined in this chapter. These issues require a discussion of the interaction of the political and economic realms. Before doing so, it is necessary to construct a theory of economic systems. This will be the task of the next three chapters.