CHAPTER 7

The System of Nation-States

Just like firms, states are hierarchical organizations producing services and using scarce resources. They provide those services to populations gathered together in nations, this term designating both a group of people relatively homogeneous culturally and the territory on which they live. As for the other firms, the state's size is measured by its output volume and the number of its workforce. And again, like them, it can increase its output and size either by selling more services to a given clientele or by selling a given service to a broader clientele. The first strategy is that of internal growth, where its size increases within a given nation or territory. In this case, the state increases its scope in an even wider range of activities. This phenomenon, often referred to as *state growth*, largely characterized the first twentieth century. But the state can also choose an external growth strategy by providing services to larger populations through the conquest of other territories or by taking control of other nations. And that strategy is even older.

But these two growth strategies—or sometimes dis-growth strategies—are not fully discretionary. They are subjected to a number of constraints. Faced with the competition of other states and even other potential leaders within their own nation, rulers have to make efficient

choices about the use of the resources they have collected, if they do not want to lose them. As a consequence, governments must optimize their allocation of public resources if they want to survive and reach their targets, whatever those may be. The state or government faced with competition must choose a more or less centralized production mode that will be the most efficient given the availability of goods and information, just like private producers do. The state pyramid will thus grow or shrink, depending of the relative scarcity of goods and information in that society, by combining internal and external growth in various proportions according to the circumstances and resilience of the population considered.

The internal dimensions of the state pyramid are measured by the share of the nation's resources that it absorbs, given the size of the population and territory of the considered economy, as explained in the previous chapter. But the state's strategy also concerns its external dimensions, the size of its territory and thus of the populations it controls.

Depending on how the various states define their geographical dimensions, the numerous political firms worldwide achieve a specific spatial balance in what is called the "system of states" or in other words "the society of nations," given by definition a state is supposed to be also a nation since the nineteenth century and the recognition of people's right to self-government. We have thus decided to continue to use the word "nation-state" in this book although the correspondence is not always exact.

The expansion of state hierarchies' territorial dimensions often results in geographical overlapping areas at their frontiers, zones that states fight over, and thus as many border conflicts result. The determinants of the external dimensions of state organizations thus shape their international political relations, the key to peace or war between countries, and the organizational structure of the society of nations, or in other words the world political system. Similarly, the internal

politico-economic system depends on the expansion of public and private hierarchies within the nation's geographical boundaries.

In this chapter, we will first study the factors that determine a nation-state's optimal geographical size, that is the size of the clientele it serves. That size first depends on the government's target: productive efficiency or growth. It also depends on the production costs of collective goods when the size of the population supplied increases. The territorial growth of a state is limited by the fact that the quality of public goods deteriorates as the clientele grows, while the cost of administrative management rises with the size of the bureaucratic firm.

As each state tries to reach its optimal size, a spatial equilibrium emerges between the various states of different sizes within the "global state industry." Contrary to what many people think, this industry does not necessarily evolve towards a single global monopolistic state and has been in fact characterized during the second twentieth century by fragmentation and increased competition.

To conclude, we will examine how this geopolitical balance is obtained, through military actions, negotiations, conquests or secession, as the global state industry is mostly reshaped by wars and revolutions. The general conditions determining peace or war between states will as a consequence be clarified.

THE STATE'S ADDED VALUE

Peace, law and order are public goods. They are the necessary complement to private goods as without them the agricultural, industrial and service producers would not be able to devote themselves fully to wealth creation as they would constantly fear to be deprived of the fruit of their efforts and thus spend most of their time and energy defending themselves against robbers. In contemporary societies, it is the state that produces these public services. But things were different throughout most of human history when peace and order were pre-

served through spontaneous (or at least decentralized) cooperation between individuals.

To estimate the state's added value (its contribution to collective wealth creation), we must first be aware of the forces that prevent this creation when the state does not exist. In other words, we must understand how an anarchic society works.

Before Agriculture: Social Order without the State

Throughout most of human history, there were only small-sized and stateless societies, that is societies without a hierarchical organization specialized in violence and in the production of order and security. The whole world's population lived in such societies 40,000 years ago and this was still true of most of it only 10,000 years ago before the development of agriculture in the Fertile Crescent of the Middle East. Today, it is only the case of a few populations living in remote areas of New Guinea and Amazonia, and of the Pygmees, Bushmen, Australian Aborigines and Inuits—human groups which are in a way the fossil survivors of prehistoric societies.

Before the advent of agriculture, societies were few and far between. Because of the way their economy was built, prehistoric hunters-gatherers had to live in nomadic bands consisting of a few dozens of people belonging to the same family or of a few allied families that rarely totaled more than 100 to 150 people. And several hundred thousand years later, our mentalities are still influenced by this past experience which explains why it is still deemed as the ideal size for a group of people. According to E.O. Wilson, this is the maximum number of people that can know one another well, whether in Namibia or in Manhattan. This is also the traditional size that is chosen by the army for a company or section. Other authors, like Ken Murrell from West Florida University, suggest that the optimal group size is slightly higher. His management surveys and professional experience with firms have taught him that beyond 200 people it becomes hard

to really know everybody and manage the complexity of human relations.[1]

In small societies of such sizes, conflicts were rather rare. When they occurred, they were settled without the intervention of a hierarchical authority, as customs codified the acceptable conditions for revenge. Indeed, small groups lend themselves to collective, decentralized and cooperative action that establishes spontaneous order much better than in large groups.[2] Many anthropologists have indeed confirmed that the most primitive tribes spontaneously managed to maintain relative peace within their group by mutual agreement, even if the number of lives wasted in the process was relatively high. And as Mancur Olson underlined, ancient observers like Tacitus and Caesar had already noted the same process in Germanic tribes, which was in sharp contrast with their Roman experience of life in society. In traditional societies, a universal form of human organizations which according to J. R. Hicks appeared before the command society and the market society, decisions are often made unanimously and without the help of a chief:

> Traditional economies . . . are known from historians and more especially anthropologists. The economy of a neolithic or early Middle-Age village or of the tribal communities who survived until recently in many areas of the world, was not organized around a ruler (if there were any) but rather a set of traditions. These traditions gave specific functions to individuals (and still do). It is important to underline that the "leader" of the organization (be it a King, a Chief, a Great Priest or the village elders) is itself part of the traditional structure. He too is given functions and related rights.[3]

1. Tom Brown, "How Big Is Too Big," *Across the Board*, July–August 1999.
2. Mancur Olson, *The Logic of Collective Action*, Harvard University Press, 1965.
3. J. R. Hicks, *A Theory of Economic History*, Oxford University Press, 1969, pp. 13–14.

Factors of Customary Order

In these small traditional societies, the production of social order is cooperative and decentralized. It consists of successive bilateral or multilateral negotiations that are governed by the elementary rules of kinship. That is why the members of these societies pay so much attention to their kinship and genealogy. It is on that knowledge that the survival of the social group depends.

Cooperation is made easier by genetic and cultural factors. The members of these small groups, which have been at the heart of human experience for over a million years, have a lot of genes in common. And because of the reproductive selection that occurred generations after generations, they are encouraged to show rational or selective altruism to the other members of their family who share the same genes. Some authors also call this "egoistic altruism" or "reciprocal altruism," as the "altruist" in this case will do whatever is good for him.[4]

But cultural factors are also at play. In nomadic bands of 20 to 25 people or groups of families of less than a hundred people, there is no private life. Everybody knows what the others have done, given information is extremely available.[5] That makes it easier to use the "tit-for-tat" strategy, a symmetrical behavior examplified by the traditional "an eye for an eye" type rule for instance, an incentive for each stakeholder to adopt a more cautiously cooperative behavior.[6]

Finally, in these small societies, the state of the social relations within the group depends directly and evidently on the responsibility of each of its members. Each individual automatically enjoys a sub-

4. R. L. Trivers, "The Evolution of Reciprocal Altruism," *Quarterly Review of Biology*, 1971; Richard Dawkins, *The Selfish Gene*, Oxford University Press, 1989; and Gary Becker, "Altruism, Egoism, and Genetic Fitness: Economics and Sociobiology," *Journal of Economic Literature*, September 1976.

5. Richard Posner, "A Theory of Primitive Society," *Journal of Law and Economics*, 1980.

6. Robert Axelrod, *The Evolution of Cooperation*, Basic Books, 1984.

stantial share of the benefits resulting from the peaceful attitude of all the others and consequently from its own.

There are thus many good reasons why a voluntary and spontaneous order should emerge, at a low personal and social cost, given little time and effort is required to make decisions in small groups. Thanks to the spontaneous biological hierarchy, which governs the deep psychology and instinctive behaviors of all animal societies and traditional patriarchal families, and the objective conditions for interpersonal relations in small groups, it is sufficient to establish rules to resolve conflicts through the simple arbitration of the chiefs and elders. In other words, customs and family relations are enough to maintain social order.

However, there are no widely-accepted rules regulating interaction between these simple societies because the aforementioned factors are not at play at this level. When two of them are in contact because of geographical proximity, conflicts arise mainly after murders and acts of revenge, most often because of rivalries concerning hunting areas or the women of rival bands, which are the main reproductive resource in these economies where the only type of capital is human capital, given equipment and financial capital do not exist. Anarchy prevails in the interactions between these societies and can cause high mortality rates among adult males.

Visiting anthropologists formerly idealized small band and tribal societies as gentle and nonviolent, because they observed no murder in a band of 25 people during a three-year study. Of course, they didn't: it is easy to calculate that a band of a dozen adults and a dozen children, faced with the inevitable deaths occurring for the usual reasons other than murder, could not perpetuate itself if one of the adults killed another in the band every three years. Indeed, much more extensive studies about tribal societies carried out over long periods reveal that murder is a leading cause of death.

As Jared Diamond underlines, when asked directly, the members of these societies speak of endemic violence often following incursions

of neighboring bands.[7] When asked about their life histories and the name of their husband, New Guinea's Iyau women named several sequential husbands, all of whom had died violent deaths. A typical answer went like this: "My first husband was killed by Elopi raiders. My second husband was killed by a man who wanted me, and who became my third husband. That husband was killed by the brother of my second husband, seeking to avenge his murder."

Against this background of intertribal anarchy and of conflicts due to growing proximity, the general rule of behavior when two individuals meet is very simple: if the other person is an acquaintance, he is almost certainly a relative or an ally. He is thus part of the same group and should be spared. On the contrary, if he is not already known, he is probably a stranger belonging to another society, competing for the resources available and especially the hunting areas, and he must die.[8]

This probably explains why spontaneous xenophoby has survived until now in the minds of many individuals and populations.[9]

And yet, collective and even endemic conflicts between societies of hunters-gatherers are limited given there are only few reasons to justify them. It is not worth fighting for a territory or slaves, as the latter would not improve the production per capita nor the living

7. Jared Diamond, *Guns, Germs and Steel: The Fates of Human Societies*, Norton, 1999, p. 277.

8. "Those ties of relationships binding all tribal members make police, laws, and other conflict-resolving institutions of larger societies unnecessary, since any two villagers getting into an argument will share many kin, who apply pressure on them to keep it from becoming violent. In traditional New Guinea society, if a New Guinean happened to encounter an unfamiliar New Guinean while both were away from their respective villages, the two engaged in a long discussion of their relatives, in an attempt to establish some relationship and hence some reason why the two should not attempt to kill each other." (Ibid., pp. 271–272.)

9. In primitive societies, the stories of strangers being spontaneously adopted by tribes are often only local myths about the return of lost gods or the necessarily divine nature of unfamiliar creatures. They can also simply be due to the surprise and curiosity to discover totally different people like the Europeans, who could not be rival neighbor societies given their unfamiliarity.

standards of the group, given they would not be able to generate an excess production above the subsistence level. It is thus no use capturing them if they cannot be put to a productive use. In a society that does not accumulate wealth and where the existing productivity is just enough to survive, each individual attends to his own business. There are few opportunities to rob the others or to have them work as slaves. There is neither slavery nor predation as the specialization in predation is a self-defeating proposition.

However, as the pre-agricultural populations grew slowly over several millenia, proximity conflicts between small groups of hunters-gatherers became more common and they eventually had to fight for a hunting or gathering area. And as Carneiro underlined, one of the two groups had to emigrate to try and find free land a little farther where he would not have to battle with rivals.[10] If one of these societies became too large, the factors limiting conflicts would wane and transaction costs would increase, threatening the production of social order. The resulting schism would force the break-away group to settle elsewhere, thus recovering its smaller initial size where collective agreement is easier to reach. All in all, spontaneous social order requires small density populations and freely available space.

The State and the Agricultural Revolution

During most of human history, people have lived in nomadic groups with stable living standards.[11] The boom in food production is a recent innovation that has enabled demographic growth. E.O. Wilson notes that the agricultural revolution occurred almost simultaneously in the Middle East, China and Central America around 10,000 years

10. Robert L. Carneiro, "A Theory of the Origin of the State," *Science*, August 21, 1970.

11. Vernon L. Smith, "Economic Principles in the Emergence of Humankind," *Economic Inquiry*, January 1992.

ago, increasing greatly the density of hunter-gatherer societies.[12] According to the Malthus model, and to what we have learnt from all the animal species, the demographic growth rate increases when food becomes more abundant.

The invention of agriculture saw the advent of richer societies where the population was geographically concentrated in the most fertile areas. As wealth could now be accumulated and concentrated on a given territory, violence and predation became more widespread. And this violence had to be stopped if wealth creation was to continue. But the long-established institutions of biological families and customs are no longer enough to guarantee spontaneous social order when wealth can be accumulated in big quantities by large groups where individuals are not relatives anymore. Anarchy is no longer a practical alternative.

According to the constant rule of the biological kingdom, when preys become more numerous, so do predators. Thus, the growing number of shark attacks on people is due to an increase in the population of their favorite prey—seals—which is now protected by human laws[13] and thus more numerous.

The Emergence of Political Authority

As the society turns richer, internal and external predators become fully specialized in robbery, just like producers become more specialized when a market grows.[14] In turn, this leads to a growing demand within the group for the help of violence specialists to organize the military defense against internal and external aggressors.[15] It is often

12. E.O. Wilson, *Consilience: The Unity of Knowledge*, Knopf, 1998, p. 253.

13. Even the dimension of the predators depends on the number of preys available; see Paul Colinvaux, *Why Big Fierce Animals Are Rare: An Ecologist's Perspective*, Princeton University Press, 1978.

14. George Stigler, "The Division of Labor Is Limited by the Extent of the Market," *Journal of Political Economy*, June 1951.

15. Michelle R. Garfinkel and Stergios Skaperdas (eds), *The Political Economy of*

difficult to tell the difference between both since external predators who conquer agricultural societies and settle there automatically turn into internal predators. And this is often how state dynasties took power in the past.

Many authors consider that the state was born from the will to protect oneself against external aggressions and wars between neighbor societies. But, although it is true that small pre-agricultural societies are often in constant conflict with their neighbors, that assumption is no more necessary nowadays: we can show that states also appeared in remote societies that were not faced with external threats, as is the case of the Andean valleys in Peru where the Inca imposed themselves. The invention of the state despite the absence of external predators tends to prove that the main problem of any agricultural society is internal predation for the use of the existing resources which become increasingly scarce—especially land—when the society has a large population confined to a small area because they are surrounded by natural obstacles: an alluvial basin or the proximity of desertic or unfarmable land.[16]

But the state is the organization that succeeded in monopolizing violence, thus curbing it. Without the state, it would tend to increase rapidly in large and densely-populated societies. Thus, the history of the birth of state results from the specialization of a few very well-trained individuals in violence in densely-populated areas which increase the return of predation.

While the traditional social order was mainly based on the family and customs in the pre-agrarian societies, in the agricultural societies where the concentration of resources increases, the predatory state will replace customs with a monopoly of violence reinforced by religion used for the maintaining of social order. Religion appeared and im-

Conflict and Appropriation, Cambridge University Press, 1996; and Jack Hirshleifer, "Anarchy and Its Breakdown," *Journal of Political Economy*, 1995.

16. As R. L. Carneiro claims in "A Theory of the Origin of the State," *Science*, August 21, 1970.

posed itself in the intermediate societies which saw the first settlements and the development of agriculture. It is a more solemn and authoritarian form of customs. It both exaggerates and emphasizes the role of the traditional chief in the group. This is how the first cities in Mesopotamia organized themselves around their gods' temples. But these city-temples were gradually replaced by city-states when the demand for order and security increased as McNeill showed.[17] And the security that the state provides in turn stimulated the production, the specialization and trade, which finally results, beyond a stronger activity and more developed information technologies, in the rise of markets.

Indeed, the agricultural prosperity encouraged several villages to merge to trade together. It thus gave birth to societies of a few hundred or thousand people consisting of tribes, themselves composed of distinct groups, clans, always organized according to kinship. The former spontaneous social order, where all the people in a group shared the same genes, remains the cornerstone of the society's social order and the collective organization principle.

In societies of a few hundred people, task specialization is very limited as the production is very small. There is not enough demand for any non-farm good for a producer to specialize in and devote all its time to another task, and consequently no specialized institutions such as bureaucracy, the police, justice or taxes. The conflicts between individuals are arbitrated by an elder or a "chief" who rarely interferes, as each producer remains able to use its own physical strength to defend rights. Any member of the society is both a hunter/breeder and his own part-time security guard (or "policeman"). But in view of the growing population, and thus the increased interactions which are as many opportunities of conflict, it becomes obvious quickly that large-scale production of arbitration and order will be required.

17. William McNeill, *The Rise of the West: A History of the Human Community*, University of Chicago Press, 1963.

Thereby, some people have to become full-time specialists in these fields of justice and police.

Archeological studies show that, in these larger societies, new ways of organizing social order were invented: chiefdoms arose by around 5500 BC in the Fertile Crescent of the Middle East and around 1000 BC in Mesoamerica and the Andes. Precisely with the advent of agriculture and the densification of agricultural populations in fertile valleys.[18] The abundance of resources and the density of the population are factors determining the centralization of authority. And indeed, several times in history, rather large populations organized in chiefdoms—even those who had not yet developed agriculture—when the natural hunting and fishing resources were very abundant. It was the case with the North Pacific Indians, the Kwakiutl, Nootka and Tlingit, who had neither farming land nor domestic animals but who gathered together to form rather large societies because of the local abundance of salmon and cod.

In such societies headed by a priest, an elder or a warrior, the chief's monopoly of legitimate force also enables him to monopolize the luxury goods acquired through long-distance trade. In a way, he is rewarded for his high social productivity, his great usefulness for the community. As the population grows, it becomes harder to maintain the production of social order. More supervisors are required. From one or two initially, the number of hierarchical levels increases substantially in chiefdoms. And obviously, so does the taxation of field workers in order to pay the administrative workforce which does not directly produce food resources.

Then, as the density of population rose further with the agricultural revolution, the production of social order became centralized and hierarchical. As Finer notes, it is likely that the state was born

18. See Vernon L. Smith (op. cit.) and Allen W. Johnson and Timothy Earle, *The Evolution of Human Societies: From Foraging Groups to Agrarian States*, Stanford University Press, 1987.

before writing.[19] It is indeed already mentioned in the first written documents found in Mesopotamia and Egypt. It thus exists since the beginning of human history, given the latter is conventionally marked by the invention of writing, which is itself functionally linked to the introduction of hierarchical societies ruled by centralized bureaucracies.[20]

The Arithmetic of Conflicts

As the growing wealth and population creates a potential for chaos, an increased production of security is required. Conflict opportunities increase more than proportionally to the number of individuals in the group.

Jared Diamond estimated these possibilities just like we calculated the number of possible market transactions in Chapter 3. Relationships within a band of 20 people involve only 190 two-person interactions, and consequently 190 conflict opportunities (20 people times 19 divided by 2), but a band of 2,000 would have 1,999,000 dyads. In other words, while the population grew 100-fold, the risks of conflict were multiplied by more than 10,000. And collective decision making becomes harder and more costly to implement just like market transactions when the number of participants increases.

According to Carneiro, the rise in the conflict opportunities is enough to explain the birth of a state. But one should also take into account the new possibilities to specialize in predation. There is now

19. S. E. Finer, *A History of Government*, Oxford University Press, 1997.

20. The larger the population, the more hierarchical grades a centralized administration must have. As each superior can only supervise a small number of subordinates, an increasingly stratified superstructure of controllers will be required. Two supervisors are enough for 10 field workers if each of them can control five. These supervisors will also have to be supervised by someone. So, there will be three administrative employees. As such, 100 field workers will require twenty grade-1 supervisors, four grade-2 supervisors and a hierarchical superior (i.e., a total of 25 administrative employees).

wealth tempting everybody such as food surplus, jewelry, livestock, while the hunter-gatherers could only store a few perishable and hardly transportable goods. In such a society where there are a little more resources than it is necessary for the immediate, daily consumption, it becomes possible to obtain more goods without working productively, by specializing in theft and extortion. Agrarian societies benefit from a new alternative to production that the pre-agricultural societies did not have: interhuman predation.

Moreover, all the factors at the origin of customary order lose their influence in the larger agrarian societies. Agricultural advances determine the growth of a population and its concentration in fertile areas. Because of large population numbers—several tens of thousands of people instead of a few dozens—the individuals only benefit from their contribution to maintaining order at a rate of 1/10,000 instead of 1/100. Thus, each of them more or less renounces to contribute to the production of social order.

Besides, in larger populations, people are dramatically less informed about the others' individual behaviors. Monitoring individuals becomes harder, especially as the hereditary factor favoring altruism is no longer at play. As anonymity increases, it encourages people to break ethical rules, just as it becomes much more unlikely to identify, arrest and condemn delinquents in large anonymous metropolises than in small towns in the countryside where everybody knows each other.[21] Nobody is encouraged anymore to contribute to the produc-

21. There are plenty of articles comparing criminality in big cities with criminality in small towns and villages in the countryside. Most of them are based on the observations made over the centuries and especially by Emile Durkheim, Georges Simmel, and Max Weber.

According to Edward L. Glaeser and Bruce Sacerdote who use the very complete statistical data of the *National Longitudinal Survey of Youth* for the United States, the size of the town explains 12 percent of the crimes. But for murder, the influence is much stronger. The probability of being the victim of a crime exceeds 21 percent in towns of over 1,000,000 inhabitants while it is lower than 10 percent in cities of 1,000 to 10,000 inhabitants. Higher pecuniary benefits for crime in larger cities can explain approximately 27 percent of the effect for overall crime, while the lower arrest prob-

tion of collective goods requiring more complicated negotiations between larger numbers of individuals. Collective action becomes more costly and thus harder to obtain. It follows that the number of offences increases and the compliance to ethical principles declines, since delinquents can act with almost complete impunity in this new urban environment. It becomes impractical to achieve decentralized order.

Maintaining peace and order requires a lot of efforts that can only be obtained through a total specialization of some individuals in these tasks. Arbitration and policing work become full-time jobs. Like all the other activities, it is more productive if it is regularly performed by a specialist than if it is performed occasionally by a common individual—each producer of goods and services protecting itself against all the other members of the society.

At the same time, as the risks and the values at risk grow with wealth and the concentration of population, the demand for security also surges. Producers ask for better protection of their goods and themselves. The market demand for security now has a positive price. Being more specialized and productive, farmers produce more than they need to survive and can sell the surplus to others. Thanks to higher income and higher risks, they are now able to hire professional order-maintaining forces.

To fight efficiently the other predators, the order-maintaining professionals must be specialists of violence. In other words, predators. In small traditional societies, amicable settlements of disputes between people who know each other and are under the authority of the same traditional chief make it unnecessary to use such specialists.

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abilities, and lower probability of recognition, explain at most 20 percent of the urban crime effect. The remaining 45–60 percent of the effect cannot be explained by these two variables but probably by the social influences and family structure ("Why Is There More Crime in Cities?" *NBER Working Paper*, January 1996).

Studying the L.A. riots of 1992, the same authors show that the rioters' opportunity costs of time and the potential costs of punishment influenced the incidence and intensity of the riots ("The L.A. Riots and the Economics of Urban Unrest," *NBER Working Paper*, February1996).

But when the society grows, there are more predators that become professionals because the resources available are large enough to let them specialize. Against them, the traditional chief's moral authority is not enough to maintain order. And he is powerless against external predators that are by no means related to his society. More of these full-time professionals are required to defend the producers. They are selected among those who have the physical capacity to exert pressure and this can lead them to also exercise moral authority, insofar as justice and police cannot be dissociated under a certain size of population and production and below a given number of conflicts.

This is why, although the benefits of law and order, deriving from a social pact or "social contract" are particularly important in large groups, no one has ever seen vast societies organize voluntarily according to such a fundamental social contract.

THE STATE AS A PREDATOR AND A PRODUCER

The role of the state has given rise to controversy between the dirigistes and socialists who consider it as the source of all morality and prosperity and the Liberals who view it only as a Leviathan exploiting the credulity and wealth of its citizens. This seemingly endless debate reminds one of the story of the Big-Endians and Little-Endians in Swift's *Gulliver's Travels*. While the former could only eat a boiled egg by the big end, the latter could not imagine eating it otherwise than by the small end. With the state, the debate is more a question of degree: to what extent should it be developed and does it have an optimal size? Our aforementioned analysis of organizational economics shows that there is no absolute ideal and timeless standard. A minimal state is not any more likely to have an optimal size than a "minimal company" would. And the same is true of both the maximal state of the Socialists, Communists and other totalitarians, and a giant private conglomerate that would produce all the goods and services that the consumers would long for.

This debate is Swiftian in the sense that the protagonists are intellectually too lazy to consider anything else other than their preferred solution, while both could be "right." This is due to the fact that the choice of market or hierarchy is, at the level of the individual, antagonistic: in a market, the relation between two people cannot be hierarchical, and conversely in a hierarchy. But when it comes to understanding and explaining the role of the state in all the contemporary societies, our limited individual experience can only cause misunderstanding.

It is true that the existence of the state is paradoxical, as its very nature seems ambiguous. Admittedly, as it guarantees security, its usefulness is universally acknowledged nowadays even if the most liberal, or libertarian, share the nineteenth-century analysis of Gustave de Molinari who advocated competition of private suppliers of security services in lieu of the state monopoly.[22] Here, however, the Buchanan remark that the monopoly of a "bad" (extortion) is superior to competition because monopoly typically undersupplies, applies. Nevertheless it is equally justified to consider that the state acts like a predator when it pumps tax revenues that are quite often not used to finance essential public goods. How can a producer of public goods pursue at the same time his personal interests given they can be very different from those of its principals? While some say that public productions are always in the interest of the public at large by definition, others believe that the citizens' means to control politically the state are pretty inefficient and biased. Both theories seem easy to criticize.

Starting implicitly with societies before the birth of a state, Mancur Olson solves the contradiction by presenting a convincing analysis of the origins of the state and its great superiority in the production of social order. Rather than making a precise and detailed historical

22. Gustave de Molinari, "De la production de la sécurité," *Journal des Economistes*, février 1849.

description, Olson has preferred to present a stylized economic analysis that summarizes the issue. According to him, it is the predators that are the key to the development of the structure of authority, guided by the invisible hand of their own interests, and that will involuntarily contribute to the well-being of the producers they rob by imposing a new social order aiming at their own advantage.

In a society of anarchical violence, the predators' victims lose not only what is destroyed and stolen but also all incentive to start producing again. Indeed, the fruit of their further work might be destroyed and robbed again by people stronger than them. And if they decide to fight against them, they will have to devote as much time and efforts to defending themselves as the predators spend attacking them, which will prevent them from focusing on their production of goods. There will thus be a few or no productions, except those required for survival. In the absence of law and order, the production falls back to the subsistence level, in a society where, according to Hobbes, life is "poor, solitary, nasty, brutish and short."

The establishment of law and order thus has a huge positive impact on the individuals' wealth and well-being. Those gains can, possibly, be shared between all the members of the society, so that each of them will benefit from them. But can such an order arise spontaneously or, more precisely, in a decentralized way?

It is likely in small groups but very unlikely (if not impossible) in large human groups. The rationale of collective action indeed shows that in a decentralized order each individual bears the full costs and makes all the necessary efforts to maintain order, while individually he would only obtain a fraction of the extra wealth production that the whole society enjoys. The larger the society, the smaller the part of total wealth thus created each individual will receive, and the more efforts he will have to do to help and maintain peace and order. All the individual incentives make us lose interest in the functioning of the whole society when it is large and this leads to anarchy. It can thus seem impossible to maintain social order.

But the answer lies in the self-interested behavior of the war chiefs and other armed looters that rob the farmers. Roving predators of that kind are extremely destructive since they rob the people as much as possible to leave nothing to the other bandits: they carry out the scorched-earth policy, which had the advantage of deterring and warding off potential rivals. On the contrary, a "stationary" bandit, settled and sedentary, having decided to permanently exploit a given population would be well advised to leave them at least enough seeds for the next crop if he wants to have something to eat next year. From a social point of view, the sedentary exploiter is thus preferable to the nomadic exploiter. He allows the development of farm production and leaves to the exploited farmers a few incentives to pursue their efforts. He then renames his extortion "tax" or "tribute" and claims that he collects it for the protection of the "general interest," which is not totally wrong.

The huge increase in production resulting from the law and order established by a sedentary bandit—and especially having the monopoly of violence—will benefit him very largely. This will encourage him to broaden as much as possible his "clientele" of "protégés" by extending his "offer" of violence to new populations and territories. The extortion specialists will thus extend their exclusive field of control to a population of farmers as large as they can deal with. This means suppressing any uprising of the "constituents" but also warding off all the other potential predators and rivals, whether internal or external.[23]

Thus, the formation of a well-established government within vast social groups will not result from a voluntary social contract concluded between the farmers following a consensual negotiation, but from the initiative of the individuals the most competent to use force who try to obtain the monopoly of extortion in imposing their own will on these vast groups.

23. Regarding the internal competitors, see Gordon Tullock's analyses of the calculations of the dictator who at first does not trust his civilian and military people, *Autocracy*, op. cit.

In that case, there is no social contract but rather a "social quasi-contract," which merely consists in accepting fiscal extraction in exchange for relative security. It is a quasi-contract, first because it is implicit, but above all because the exchange will not result solely in benefits for both parties in various proportions, but includes also violence and extortion. It will be less profitable to the farmers than to the sedentary bandits but their life will be much better than when they were victims of nomadic and competitive bandits.

Admittedly, farmers could decide to voluntarily hire violence specialists like in *The Magnificent Seven* but the transaction costs would be too high if the farmers were too many.[24] And the price to pay should be close to the amount already extorted by another sedentary looter.

As a result, it will be less expensive to accept willy-nilly the domination of the most efficient monopolist, the one who will beat all the others in the competition for domination and will be the most capable to defend his subjects against other predators afterwards. This is by the way how things happened in a few African tribes which only chose their leader after a fight to the death between the pretenders. And the same process took place in most Western states during the wars for succession, in Rome but also in most monarchies until the Renaissance.

The acceptance of a hierarchical and predatory state or the "consent of the governed" can be explained by the greater efficiency of the hierarchical solution over the decentralized anarchic situation[25] in which a great number of bilateral contracts—or quasi-contracts—are

24. That scenario was used in an endless number of westerns in which a population robbed by local predators willing to hire a tough sheriff or traveling mercenaries launches a competition. In fact, they are likely to be better off with sedentary predators than itinerant mercenaries.

25. According to Hirshleifer, op. cit., anarchy is defined as follows: "A structure of society in which participants can seize and defend lasting resources without regulation from above or from social pressure."

concluded between individuals whose relations are governed both by trade and violence.

The level of collective services provided by the single exploiter will be all the greater that he will possess wide-ranging interests covering all the society's production activities. This is exactly the same situation as when a business manager can use the wealth of the shareholders to serve his own interests (the "agency problem" analyzed in business and financial literature) but will be much less tempted to do so if he holds a significant part of the capital, that is when he is himself one of the firm's owners. Being a shareholder himself, he is better off defending the interests of all the shareholders. Thus, when a monarch appropriates all the land in his kingdom (or almost) and when he hopes to remain for long on the throne or to bequeath that land to his heirs, he is more willing to make the investment necessary to develop it and is more concerned about the well-being of the farmers, simply to maximize the tax revenues in the long run. Temporary exploiters are more dangerous than long-lasting ones. Their horizon is indeed shorter. They do not mind leaving the country in ruins behind them. With regards to this, the hereditary monarchy is a good political system and we understand better the traditional "Long Live the King" which was for that reason probably sincere.

As Olson wrote:

> History teaches us that it was the system where an autocrat takes most of the resources of a given population through taxes that enabled the development of the civilization. Indeed, from after the first agricultural innovations to say the French Revolution, most people were submitted to autocracy and tax exploitation. Until recently, history has mostly seen the civilization develop mostly and gradually under the rule of stationary bandits from time to time briefly interrupted by nomadic looters. From when Sargon created by conquest the empire of Akkad to the time of Louis XVI and Voltaire, the civilization developed significantly, and mostly under the reign of sedentary bandits.[26]

26. Mancur Olson, op. cit., p. 538.

That is why the debate opposing the view of a Leviathan state—an exploiter—to Rousseau's social contract remains caricatural and excessive, and allows no solution. First, it only considers the two extremes of the existing range of possibilities but, above all, it does not take into account the fact that an exploiter can also be useful to the people exploited. In reality, the state is always a producer and a predator but in varying proportions which depend on its rulers' personal goals—on the agency and control relation that links them to the subjects or citizens.

THE PARADOX OF VIOLENCE

The cause of the paradox is to be found in the nature of the service provided by the state and in the monopoly it appropriates. While the monopoly of a good thing is generally bad for the consumer, the monopoly of a bad thing can be something good.

Obviously, the predators who maintain order by means of force in an agricultural society have an interest in the monopoly of violence on the territory they exploit as it makes their task easier and their predation more profitable. Consequently, they forbid all the populations they control to resort to violence and above all to possess weapons. The other members of the society give up their right to use force, either voluntarily or by the coercion of the predator and its soldiers, and especially in trade. Thus, the free, non-forced, voluntary trade that develops involves the mutually advantageous market transaction which is analyzed in economics. Since both parties agree to do so, it must contribute to the enrichment of both, even if in unequal proportions. On the contrary, an exchange imposed by one of the parties can be absolutely unfavorable to the other.

But progress requires mutually advantageous transactions. Unlike predation, it is a filter for the socially productive operations, a guarantee of the net enrichment of the community. It also increases everybody's incentive to produce and thus stimulates collective wealth

creation. It is thus essential for the individuals to choose—if they can—to live and work in communities where violence is restrained and where collective wealth can thus increase.

Although this can also seem paradoxical, this is advantageous both to the extortion specialists and to those who have a comparative advantage in wealth creation. Indeed, extortion will be all the more lucrative for the predators that there are few of them and it will be easier and more worth it in terms of efforts agreed and risks taken if they do not have to put up with other predators likely to challenge, wound or even kill them, and who have already taken their share of the resources left to the producers.

The reduction in violence thus benefits all, whether producers or predators. That is why violence can be defined as a social "evil," the opposite of a "good." It reduces the utility and the living standards of all the individuals. On the contrary, peace and order are a good, a "filter" of human interactions which only lets through the wealth-creating operations and exchanges.

It is indeed remarkable that the conclusions of the classical analysis of monopoly are perfectly applicable to the monopoly of violence. Indeed, it shows that the main difference between this market structure and competition is that the quantities produced are voluntarily reduced. For instance, an oil cartel will diminish the quantities in circulation on the world market to maximize its profits. And the same is true of all the monopolies and cartels in the industry or the services.

But the process is exactly the same for the monopolies of "an evil" or "nuisance" as for the monopolies of "a good." The monopoly of violence will thus reduce the total amount of violence "produced" in a given society, which makes violence more profitable for the monopolist. That is why the public authorities and the police generally prefer to deal with organized crime—or cartelized crime—than with the unorganized crime, which is competitive crime. The latter maximizes violence in the society, as is the case in gang wars, and makes it closer to a situation of anarchy, while the former minimizes it.

While competition is better for the production of "good things," the monopoly is preferable for the production of "bad things."[27]

It is thus better for the legitimate authorities to hold a real monopoly of violence rather than take part in a cartel and this is why they try to remove as far as possible their rivals, such as the Mafia for instance, as this involves a situation of duopoly and thus of (partial) competition on the market of protection and extortion. The state and the Mafia are in that sense rivals.[28]

That paradox about the state's monopoly of legitimate violence explains the divergence between the political conceptions of a predatory state, the Leviathan whose only goal is to exploit the producers of goods and services and extort from them a maximum of resources, and that of the producer state, who defines and implements the social rules that make profitable private activities possible and thus increases the collective prosperity.[29]

It is true that the state is both a predator and a producer. But it is a producer because it is a predator. As Mancur Olson very clearly showed, the state is a self-interested predator but, by this very fact, it is also useful to all the members of the society. To obtain the greatest possible amount of resources from a given population, it is in its interest that each member of the community thrives. It must thus make sure that nothing slows the production and prevents individuals from growing richer by ensuring the safety of people and goods and supplying the public services necessary to the private productions.[30]

27. James Buchanan made this assumption in "A Defense of Organized Crime?" in Simon Rottenberg (ed.), *The Economics of Crime and Punishment*, American Enterprise Institute, 1973.

28. Hershel I. Grossman, "Rival Kleptocrats: The Mafia versus the State," in Gianluca Fiorentini and Sam Peltzman (eds.), *The Economics of Organized Crime*, Cambridge University Press, 1995.

29. A dual approach underlined by Douglass North in the introduction of the chapter "A Neoclassical Theory of the State," in *Structure and Change in Economic History*.

30. Mancur Olson, "Dictatorship, Democracy, and Development," *American Political Science Review*, September 1993.

Just like Adam Smith's butcher or grocer must serve his customers kindly to grow richer, the state must give the people it controls and taxes the means to improve their own prosperity to obtain abundant tax revenues. Rulers do not do that by pure altruism but rather in rationally pursuing their well-understood interest.

Adam Smith's invisible hand thus also works in politics, which is not surprising given we explained earlier that politics is only a sector of the economy. Thus, when Smith tells us that "it is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest,"[31] we can add similarly that "it is not from the benevolence and the good intents of those who govern us that we expect protection, safety, law and order but from their exclusive regard to their own interest."

Thus, there is a kind of invisible hand guiding the competition between the predators which works in the opposite way than the invisible hand guiding the competition between the producers: the competition between the producers is desirable because it increases the quantity of "goods" and the monopoly of the predators is desirable because it reduces the quantity of "bads."

As a result, there is an implicit exchange of mutual advantages between the state and the people it controls, even though the state uses coercion: the safety the population benefits from is paid by the taxes to which it is bound. That exchange, which includes both a mutual agreement and the use of force, has all the characteristics of a quasi-contract.

However, a universal monopoly of violence does not exist. The predatory states' areas of geographical control do not stretch over the whole planet as there is more than one state in the world. The constant competition between the predators and the producers of monopolistic order can lead to war and thus destroy most of the advantages provided by the state to the population it controls.

31. *The Wealth of Nations*, p. 14.

But war is not inevitable. It has determining factors that we will study below. When these factors favor the peaceful coexistence of states because the use of violence has been ruled out, competition regains its virtues just like on the other economic markets and becomes advantageous for the safety consumers, that is the residents and citizens. The peaceful competition between the states to control populations encourages them to offer greater safety and better public services at a lower tax cost. The international and domestic social order thus results from the ever-changing balance between the rulers' taxation capacity and the mobility on which depends the governeds' acceptance of the ruler's authority and taxation system.

That leads us to examine the conditions of the violent or nonviolent competition between the states and the balance that is reached between the security-providing predators in the world industry of nation-states. There is another, no less interesting, paradox: the predatory state which produces social order and encourages the development of a market within its area of control, finds itself in a situation of anarchy when faced with the other states in the world, that is, a situation where everyone can use violence to conquer resources, without having a higher-ranked authority or social pressure to prevent him from doing so.[32]

32. Jack Hirshleifer, "Anarchy and Its Breakdown," *Journal of Political Economy*, 1995.