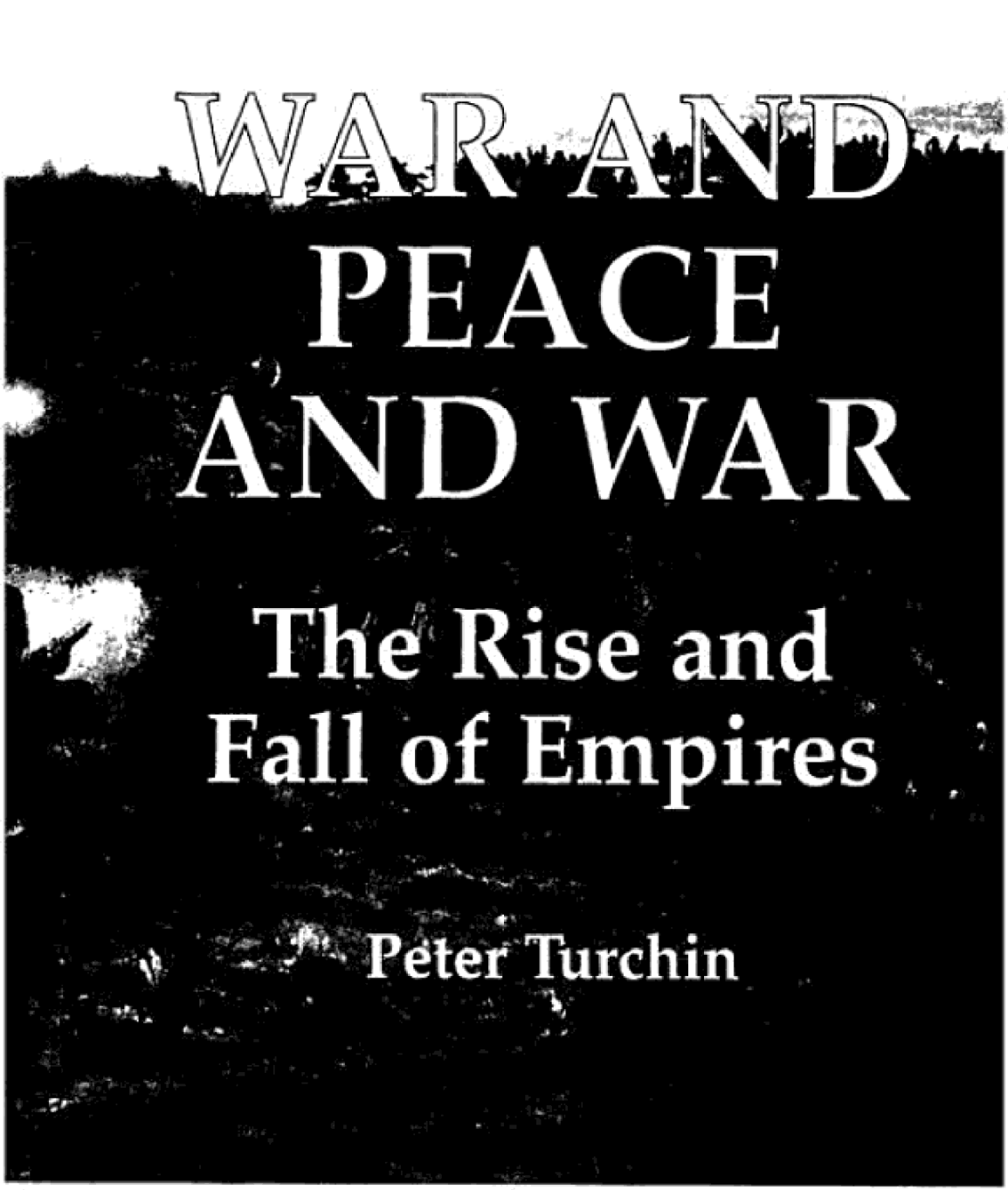

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Introduction

"So Peace Brings Warre and Warre Brings Peace"

The empire has unified all the civilizations at last. After generations of battles, the last enemies have been defeated. Citizens of the empire can, it seems, look forward to permanent peace and prosperity. But a maverick mathematician named Hari Seldon has disturbing news. His new science of psychohistory, built from equations that integrate the actions of myriads of individuals, predicts large-scale social trends. When the equations are run forward, they foretell the decay and eventual collapse of the central power, rebellions by regional barons and rogue generals, and finally a bitter civil war that will transform the capital of the empire from a teeming metropolis of hundreds of billions into a ghost town with a few thousand survivors eking out a miserable living among the ruins. The decline and fall of the empire over the ensuing centuries unfolds precisely as the humble mathematician said it would.

This scenario from the *Foundation* trilogy of Isaac Asimov occurs in the future on the planet Trantor, the capital of a mighty galactic empire. In Asimov's fantasy, human history can be understood and predicted in the same way that physicists understand and predict the trajectories of planets, or biologists the expression of the gene. The key to the prediction of human societies is psychohistory, the "branch of mathematics which deals with the reactions of human conglomerates to fixed social and economic stimuli." The ability of psychohistorians to make accurate forecasts, however, is not absolute. Psychohistory cannot accurately predict actions of a single individual. Furthermore, the knowledge of the prediction must be withheld from the people whose collective behavior is predicted. As Hari Seldon explains, "By knowledge, your freedom of action would be expanded and the number of additional variables introduced would become greater than our psychology could handle." Prediction of human societies might also prove impossible for another reason: Complex dynamic systems are inherently unpredictable in the long run because of "the butterfly effect." Small causes might produce large effects. For example, a butterfly fluttering its wings in Australia might cause a hurricane in the Atlantic. Or, as a children's rhyme has it, "For want of a nail... the kingdom was lost." Asimov, however, could not know about the butterfly

effect because he wrote the trilogy in the early 1950s, before the discovery of mathematical chaos.

Asimov's trilogy captured the imagination of millions of readers, among them quite a few scientists and historians. However, his vision flies in the face of the view held by most professional historians and scientists, a view generally accepted in our culture. For centuries, philosophers have mulled over the prospects of a scientific study of history. Despite some dissenting voices, the consensus has been that scientific study of human societies is impossible because they differ too much from physical and biological systems. They are too complex. They consist not of simple identical particles, such as atoms and molecules, but of human individuals, each unique, endowed with free will, and capable of purposeful action. The verdict has been that any sort of scientific history must remain science fiction rather than a real science. And some might believe that this is for the best.

A science of history sounds cold and hard—wouldn't it destroy our enjoyment of the wonderfully rich tapestry of the past? On a darker side, might not such a science enable some shadowy cabal to manipulate societies to a nefarious purpose? But have we ceased to enjoy the blue sky of a brilliant summer day, or the play of colors in a glorious sunset? After all, the physicists, beginning with Newton and ending with Einstein, worked out exactly how colors of the sky result from the interaction of sunlight with the atmosphere. As to the nefarious uses of a science of history, it is true that any knowledge can be turned to good or bad ends. But Asimov's notion of a Second Foundation—a group of psychohistorians pulling the strings from some secret center—was always the least credible part of his vision.

War and Peace and War addresses the question raised by Asimov (and many other people before him, including Marx and Tolstoy): Is a science of history possible? Can we design a theory for the collapse of mighty empires that would be no worse than, say, our understanding of why earthquakes happen? Seismologists have made great strides in understanding earthquakes. They can even make some limited predictions as to which areas of the earth are likely to be hit next by an earthquake. However, forecasting the precise timing and magnitude of an earthquake eludes them. Can a science of history, similarly, explain why states crumble, and perhaps predict which societies are in the danger of collapse?

THIS BOOK FOCUSES ON EMPIRES. Why did some—initially small and insignificant—nations go on to build mighty empires, whereas other nations failed to do so? And why do the successful empire builders invariably, given enough time, lose their empires? Can we understand how imperial powers rise

and why they fall?

An empire is a large, multiethnic territorial state with a complex power structure. The key variable is the size. When large enough, states invariably encompass ethnically diverse people; this makes them into multiethnic states. And given the difficulties of communication in pre-industrial times, large states had to come up with a variety of ad hoc ways to bind far-flung territories to the center. One of the typical expedients was to incorporate smaller neighbors as self-contained units, imposing tribute on them and taking over their foreign relations, but otherwise leaving their internal functioning alone. Such a process of piecemeal accumulation usually leads to complicated chains of command and the coexistence of heterogeneous territories within one state.

Empires are not the only objects of study for a science of history. Historians such as Arnold Toynbee wrote volumes on the rise and fall of whole civilizations. Others have been fascinated with the spread of world religions, evolution of art styles, progress in science and technology, or economic and demographic changes. All of these subjects are worthy. However, it is impossible to encompass them all in one book. The rise and fall of empires is a fine place to start.

Unlike such entities as civilizations, territorial states are easier to define and demarcate from each other, as well as from other comparable units (city states, tribal confederations, and so on). Historians continue to argue about how to distinguish one civilization from another. Different authorities place Achaemenid Persia as part of the Syriac, Iranian, or Mesopotamian civilization. In contrast to this multitude of contending notions, were you to consult any historical atlas, you would find the boundaries of the Achaemenid Empire drawn in pretty much the same places.

Although the doings of empires dominate the historical records, we should not conclude that they are the norm in human history. Prior to the nineteenth century most (and until six thousand years ago all) of the habitable space on Earth was divided among small-scale, stateless societies, not empires. Historical empires themselves, as often as not, were in the state of decline or even disintegration. A large stable empire, internally at peace, is a rarity in history. Looked at from this point of view, the most fundamental question requiring an explanation is not why empires decline and collapse, but how they manage to get going in the first place. How are empires possible?

The stories of empire are irresistible. Imagine the feelings of an eighteenth-century Englishman, on his world tour, standing among the fairly well-preserved 2,000-year-old ruins of ancient Rome (before the modern metropolis engulfed them). Today one can have a similar experience in Chichen Itza in Mexico. (Be sure to get there early in the day before the tourist buses arrive.)

Who were the people who built these magnificent temples and pyramids? Why aren't they around anymore? From Shelley's "Ozymandias" to Darth Vader, stories of empires fascinate us.

As A ROAD MAP TO WHAT follows, here is a very terse outline of the central theoretical argument of the book.

Many historical processes are dynamic—empires rise and fall, populations and economies boom and bust, world religions spread or wither. The field of historical dynamics investigates such dynamic processes in history. Most research has been done on agrarian societies, those in which the majority (and often more than 90 percent) of people are involved in producing food.

The theoretical framework I have been developing for several years focuses not on human individuals, but on social groups through time. Ultimately, the behavior of a group is determined by the actions of its individual members. However, social groups are not simple collections of identical particles, readily described by statistical physics; they have complex internal structures.

One important aspect of group structure is that different people have access to differing amounts of power and wealth. A small number of members of an agrarian society (typically around 1 or 2 percent) concentrates in its hands most of the power and wealth; this group consists of the elites or aristocracy. Commoners make up the rest of the population.

Another important aspect of social structure is ethnicity. Ethnicity is the group use of any aspect of culture to create internal cohesion and differentiation from other groups. An imaginary boundary separates the members of the ethnic group from the rest of humanity. For example, Greeks drew a boundary between themselves and barbarians, non-Greek speakers. The ethnic boundary can use a variety of *symbolic markers*— language and dialect, religion and ritualistic behaviors, race, clothing, behavioral mannerisms, hairstyles, ornaments, and tattoos. The important thing is not which markers are used, but the distinction between in-group and out-group members, between "us" and "them."

People usually have multiple ethnic identities nested within each other. An inhabitant of Dallas can be simultaneously a Texan, an American, and a participant in Western civilization. The broadest groupings of people that unite many nations are usually called civilizations, but I prefer to call such entities *metaethnic communities* (from the Greek *meta,* "beyond," and ethnos, "ethnic group" or "nation"). My definition includes not only the usual civilizations—the Western, Islamic, and Sinic—but also such broad cultural groupings as the Celts and Turco-Mongolian steppe nomads. Typically, cultural difference is greatest between people belonging to different metaethnic communities;

sometimes this gap is so extreme that people deny the very humanity of those who are on the other side of the metaethnic fault line.

Historical dynamics can be understood as a result of competition and conflict between groups, some of which dominate others. Domination, however, is made possible only because groups are integrated at the micro level by cooperation among their members. Within-group cooperation is the basis of inter-group conflict, including its extreme versions such as war and even genocide.

Different groups have different degrees of cooperation among their members, and therefore different degrees of cohesiveness and solidarity. Following the fourteenth-century Arab thinker Ibn Khaldun, I call this property of groups asabiya. Asabiya refers to the capacity of a social group for concerted collective action. Asabiya is a dynamic quantity; it can increase or decrease with time. Like many theoretical constructs, such as force in Newtonian physics, the capacity for collective action cannot be observed directly, but it can be measured from observable consequences.

Each empire has at its core an *imperial nation.* (Some empires had more than one imperial nation for a time, but this structure appears to be unstable.) The ability of an empire to expand territory and to defend itself against external and internal enemies is determined largely by the characteristics of its imperial nation, especially its asabiya. Because only groups possessing high levels of asabiya can construct large empires, the question is how do they gain it, and why do they eventually lose it?

Groups with high asabiya arise on metaethnic frontiers. A metaethnic frontier is an area where an imperial boundary coincides with a fault line between two metaethnic communities. metaethnic frontiers are places where between-group competition is very intense. Expansionist empires exert enormous military pressure on the peoples beyond their boundaries. However, the frontier populations are also attracted to the imperial wealth, which they attempt to obtain by trading or raiding. Both the external threat and the prospect of gain are powerful integrative forces that nurture asabiya. In the pressure cooker of a metaethnic frontier, poorly integrated groups crumble and disappear, whereas groups based on strong cooperation thrive and expand.

To match the power of the old empire, a frontier group with high asabiya—an incipient imperial nation—needs to expand by incorporating other groups. On a metaethnic frontier, integration of ethnically similar groups on the same side of the fault line is made easier by the presence of a very different "other"—the metaethnic community on the other side. The huge cultural gap across the frontier dwarfs the relatively minor differences between ethnic groups on the same side. Empirical evidence shows that large aggressive

empires do not arise in areas where political boundaries separate culturally similar peoples.

My main argument, therefore, is that people originating on fault-line frontiers become characterized by cooperation and a high capacity for collective action, which in turn enables them to build large and powerful territorial states. I develop this argument in Part I and illustrate it with examples of Russia and America (Chapters 1 and 2), the Germans and Arabs on the Roman frontier (Chapters 3 and 4), the origins of Rome (Chapter 6), and the rise of the European great powers (Chapter 7).

The critical assumption in my argument is that cooperation provides the basis for imperial power. This assumption is at odds with the fundamental postulates of the dominant theories in social and biological sciences: the rational choice in economics and the selfish gene in evolutionary biology. However, recent developments in the nascent fields of experimental economics and multilevel selection show that the standard model, based on the self-interest hypothesis, is deeply flawed. It cannot explain the puzzle of human ultrasociality—our ability to combine into cooperating groups consisting of millions of unrelated individuals. Moreover, it is refuted by behavioral experiments.

Two key adaptations enabled the evolution of ultrasociality. The first one was the *moralist* strategy: cooperate when enough members in the group are also cooperating and punish those who do not cooperate. A band that had enough moralists to tip its collective behavior to the cooperative equilibrium outcompeted, or even exterminated, bands that failed to cooperate. The second adaptation, the human ability to use symbolic markers to define cooperating groups, allowed evolution of sociality to break through the limits of face-to-face interaction. The scale of human societies increased in a series of leaps, from the village and clan to the tribe and tribal confederation, and then to the state, empire, and civilization. Chapter 5 examines this new science of cooperation.

WHEREAS PART I IS DEVOTED TO *IMPERIOGENESIS*—the factors that explain the rise of empires—Part II switches focus to *imperiopathosis*—why empires decline.

The very stability and internal peace that strong empires impose contain within them the seeds of future chaos. Stability and internal peace bring prosperity, and prosperity causes population increase. Demographic growth leads to overpopulation, overpopulation causes lower wages, higher land rents, and falling per capita incomes for the commoners. At first, low wages and high rents bring unparalleled wealth to the upper classes, but as their

numbers and appetites grow, they also begin to suffer from falling incomes. Declining standards of life breed discontent and strife. The elites turn to the state for employment and additional income, and drive up its expenditures at the same time that the tax revenues decline because of the growing misery of the population. When the state's finances collapse, it loses the control of the army and police. Freed from all restraints, strife among the elites escalates into civil war, while the discontent among the poor explodes into popular rebellions.

The collapse of order brings in its wake the four horsemen of the apocalypse —famine, war, pestilence, and death. Population declines and wages increase, while rents decrease. As incomes of commoners recover, the fortunes of the upper classes hit bottom. Economic distress of the elites and lack of effective government feed the continuing internecine wars. However, civil wars thin the ranks of the elites. Some die in factional fighting, others succumb to feuds with neighbors, and many simply stop trying to maintain their aristocratic status and quietly slip into the ranks of commoners. Intra-elite competition subsides, allowing the restoration of order. Stability and internal peace bring prosperity, and another cycle begins. As a sixteenth-century commentator put it, "So peace brings warre and warre brings peace."

The typical period of a complete cycle, which consists of a benign *integrative phase* and the troubled *disintegrative* phase, is around two or three centuries. I call these majestic oscillations in demographic, economic, and social structures of agrarian societies *secular cycles.* The demographic-structural theory that explains secular cycles is developed in Chapters 8 and 9, in which it is illustrated with French and English history during the medieval and early modern times.

The phase of a secular cycle affects a trend in economic and social inequality, which in turn affects the dynamics of asabiya. Incipient imperial nations are relatively egalitarian. Great differences in wealth among group members undermine cooperation, and such groups succumb to rivals with higher levels of asabiya. In addition, metaethnic frontiers tend to be underpopulated, so there is enough land (the main form of wealth in agrarian societies) for all who are willing to work it. The success of an imperial nation at territorial expansion, however, results in the movement of frontiers far away from its core, thus removing an important force holding up the growth of inequality Imposition of peace results in population growth, and overpopulation brings with it the impoverishment of peasant masses. As the poor grow poorer, the rich grow richer—this process is called the *Matthew principle.* The growing disparity between the rich and the poor puts the social consensus under strain. At the same time, the gap in the distribution of wealth grows not only between the aristocrats and commoners, but also within each social group. Intra-elite

competition for diminishing resources results in faction and undermines national solidarity. During the disintegrative phase of the secular cycle, regional and sectarian identities acquire greater saliency than the national or empire-wide identity, and the asabiya of the imperial nation is corroded. Thus, the Matthew principle plays an important role in imperiopathosis, the decline of empires.

Decline of asabiya is not linearly uniform. During the integrative phases of secular cycles when inequality is moderate, intra-elite competition and conflict between elites and commoners subside; the empire-wide identity regains its strength, for a time. As discussed further in Chapter 10, it takes the cumulative effect of several disintegrative phases to reduce asabiya of a great imperial nation to the point where it cannot hold together its empire.

A life cycle of a typical imperial nation extends over the course of two, three, or even four secular cycles. Every time the empire enters a disintegrative secular phase, the asabiya of its core nation is significantly degraded. Thus, several secular cycles are nested within the great cycle of the rise and decline of asabiya. However, disintegrative phases are also not uniformly grim. A civil war begins like a forest fire or an epidemic—violence leads to more violence in an escalating spiral of murder and revenge. Eventually, however, people become fed up with constant fighting, and a civil war "burns out." Both the survivors of the civil war and their children, who had direct experience of conflict, are reluctant to allow the hostilities to escalate again. They are, thus, "immunized" against internecine violence. The next generation, the grandchildren of the civil warriors who did not experience its horrors at first hand, is not immunized. If the social conditions leading to conflict (the main one being elite overproduction) are still operational, the grandchildren will fight another civil war. As a result, civil war tends to recur during the disintegrative phase with a period of 40 to 60 years. I call such dynamics the *fathers-and-sons cycles.* The fathers-and-sons cycles are nested within secular cycles, which in turn are nested within asabiya cycles. I illustrate these "wheels within wheels within wheels" dynamics with the decline of the Roman Empire in Chapter 11.

In this book, therefore, I discuss three central concepts: the metaethnic frontier theory, which explains asabiya cycles; the demographic-structural theory, which explains secular cycles; and the social-psychology theory, which explains the fathers-and-sons cycles. These theories comprise part of a new science of historical dynamics, or as I prefer to call it *cliodynamics* (from Clio, "muse of history," and *dynamics,* "the study of processes that change with time").

Cliodynamics borrows heavily from two disciplines in the natural sciences.

The focus on groups rather than individuals is akin to the approach of statistical mechanics, which integrates over motions of myriads of particles to predict such properties of the ensemble as temperature or pressure. However, the study and prediction of human groups is a much more challenging task because people vary (among other things, for example, in power and ethnic identity). Humans also possess free will. I discuss the implications of these complicating factors for the study of human societies in Chapter 12.

Cliodynamics owes an even greater debt to the discipline of nonlinear dynamics. Human societies and states can be modeled as dynamic systems, consisting of parts that interact with each other. Furthermore, states are part of an international system, which adds another level of complexity. The key concept here is *dynamic* feedback. A change in the state of one component of the system has an effect on another, but the change in the second might in turn affect—feedback on—the first. When a dynamic system contains within it such circular nonlinear feedback, it becomes highly susceptible to oscillation. Stated succinctly, "So peace brings warre and warre brings peace."

Cycles exhibited by historical societies and states, however, are not the same as highly periodic, repeatable phenomena in physics, such as planetary motions or pendulum oscillation. Social systems are much more complex. It is well known from the science of nonlinear dynamics that two or more perfectly cyclic behaviors superimposed on each other may combine to produce noncyclic dynamics—in other words, chaos. Interactions between the asabiya, secular, and fathers-and-sons cycles can lead to such complex, chaotic dynamics. In a chaotic system, a small action of one of its elements—a human being exercising his or her free will—can have huge consequences. External sources also play a role—for example, variations in climate leading to crop failure, random mutations giving rise to new frightful epidemics, and cataclysmic volcano eruptions. The dynamics of real human societies cannot be accurately predicted far in the future because of the nature of chaotic behavior, free will, and natural disasters. Hari Seldon was wrong.

Although prediction far in the future is impossible, given what we know about societies and nonlinear dynamics, it does not mean that improved understanding of how societies function is purely academic knowledge. An understanding of the processes that bring a society to the brink of civil war might suggest policies to avert such a war. Such social engineering, of course, is still far in the future. Our understanding of the dynamics of even agrarian societies is far from perfect, and highly complex modern industrial and postindustrial societies present an even greater challenge for sociologists. Many processes that played a determining role in the functioning of agrarian societies are of much less or even no importance in modern societies. For

example, famine has been largely eliminated in modern Western societies. On the other hand, human nature has not been completely changed by the Industrial Revolution. In the last two chapters of this book, I speculate on what lessons cliodynamics might have for us and our future times of war and peace and war.

Part I

IMPERIOGENESIS

The Rise of Empires

Chapter 1

A Band of Adventurers Defeats a Kingdom

Ermak's Conquering Cossacks

On October 22, 1581, the warrior Ermak Timofeev, an ataman leading several hundred Cossacks, decided to make camp on the banks of the Irtysh River. The Cossacks were deep in the hostile territory on the far side of the Urals, surrounded by savage hordes on every side. Night had already fallen, so they lit a ring of fires to guard themselves against stealthy attack and to keep warm their wounded comrades. After making camp, Ermak gathered together the unwounded and those not keeping watch to discuss what they must do next. They had few options, and none looked good.

The chain of events that brought these Russian warriors to the Irtysh began a couple of decades before in 1558, when Tsar Ivan IV granted to Jacob and Gregory Stroganov a huge territory in the wild Upper Kama region just west of the Ural Mountains. The Stroganovs were the Russian counterparts of the Dutch and English merchant-adventurers and empire builders who founded trading companies in the East and West Indies. Earlier in the sixteenth century, the Stroganov family had developed large-scale industries on the northeastern frontier of Russia—salt extraction, fur trade, and fisheries—and therefore they had the necessary experience and capital to develop new territories. The Stroganov brothers immediately started attracting colonists and establishing settlements and military garrisons. The land was sparsely inhabited by indigenous tribes of various Finno-Ugric peoples who, although resentful of the invasion, were unable to offer effective resistance. A more serious threat came from the Tatars inhabiting the steppe and forest-steppe regions beyond the Urals. The Tatars was the generic name used by the Russians for Turko-Mongolic steppe nomads. These particular nomads were ruled by Kuchum, a descendant of Chinggis (more familiarly, but inaccurately, spelled Genghis) Khan, who styled himself as the khan of Sibir (whence the name Siberia). When Kuchum Khan realized that Russians were in the process of establishing a firm grip on the Upper Kama region, he sent some Tatars and their native allies under his nephew Mahmet-Kul to raid the new settlements. The Tatars

massacred the Russians (and the native allies of the Russians), captured many of their women and children, and then retired with this booty across the mountains.

Map 1 *Russia and the Tatars in the sixteenth century*

The Stroganovs' response was that the best defense is offense. The first step was to obtain a formal permission from the tsar to extend their territory across the Urals. The tsar granted permission, but with a stipulation that the Stroganovs were strictly on their own—they could not count on the government for either funds or soldiers. Fortunately, they had an alternative source of recruits—the Cossacks. The Cossacks were rough-and-ready Russian

frontiersmen inhabiting the lawless steppe regions between the borders of the Russian state and the territories controlled by the Crimean, Kazan, and Astrakhan Tatars. Their precise origins are obscure, but by the sixteenth century their ranks consisted mainly of runaway peasants, impoverished noble servitors, and other fugitives from central Russia, as well as their descendants. Cossack relations with the Russian state were uneven. Being Christian Orthodox in religion, the Cossacks usually warred against the tsar's enemies, and often entered government service. However, the Cossacks valued freedom above all else, and were known to lead rebellions against the central government. Furthermore, opportunities for peaceful trade were quite limited on the steppe frontier, and many Cossack bands made their living by brigandage.

When the Stroganovs started casting about for recruits, they learned about one such band of outlaws based on the Volga, whose leaders included Ermak Timofeev and Ivan Koltso. Koltso ("the Ring") achieved international notoriety when he led a successful raid on the capital of the Nogay Horde. The Nogays were at the time allied with Russia, and when they complained to Ivan IV, he condemned Koltso to death in absentia. The Stroganovs sent a letter to the Cossacks, offering the company a chance to defend the eastern frontier of Christendom against the "heathens" and, at the same time, earn the tsar's pardon. The Cossacks accepted.

In 1579, Ermak's company arrived in the Stroganov territory, where they first served as the military garrison. In the summer of 1581, for example, they defeated a raiding foray by the 680 Voguls (a warlike Ugric tribe from across the Urals) and captured their leader. However, their main job was to take the war to the enemy. The contemporary *Stroganov Chronicle* relates how the subsequent events unfolded.

"On September 1, 1582, on the feast day of our Holy Father Simeon Stylite, Semen, Maxim, and Nikita Stroganov sent out the Volga *atamans* and Cossacks, Ermak Timofeev and his men, from their town, against the Siberian sultan [Kuchum Khan]. With these men, they sent 300 of their own troops mustered from the towns and *Litva* [these were some Lithuanian and German prisoners, who were promised freedom upon successful completion of the enterprise], Tatars and Russians, all bold and brave. They set forth as one, together with the Volga atamans and Cossacks. In all, the total was 840 bold and brave men. They sang prayers to the all-merciful God of the Holy Trinity and to the Virgin Mother and all the heavenly powers and saints." The Cossacks loaded boats with supplies and weapons, which included arquebuses and light cannon, and started rowing up the Chusovaya River toward the Ural Mountains. After traveling as far up the river as they could go,

they portaged across the Urals (the mountains being gentle in this region), and then floated down the tributaries of the Irtysh.

"On September 9 of the year 1582, of the feast day of the Holy Father Ioachim and of Anna, the intrepid warriors reached the land of Siberia and attacked many Tatar and native settlements down the Tura River. They valiantly made their way to the Tavda River and captured Tatar prisoners at its mouth. One of them, named Tauzak, was a member of the court of the tsar [here meaning Kuchum Khan, not the Russian tsar]; he told them all about the Siberian tsars and princes and horsemen and about Tsar Kuchum. When they learned everything from Tauzak, they set him free to inform Sultan Kuchum about their arrival and their strength and bravery....

"The evil Tsar Kuchum sent his son [actually, nephew] Mahmet-Kul with a great multitude of warriors and ordered them to stand bravely against the invading Russians. Kuchum ordered them to fell trees and build an abatis on the Irtysh River at Chuvash, and to reinforce it with earth, and fortify it with defense weapons. This was to be a substantial fortification.

"Mahmet-Kul and his multitudinous warriors reached the place called Babasan. The Russian warriors, atamans, and Cossacks were considerably alarmed to see such a great assemblage of the heathens, but they put their trust in God and set forth from their forts and fell upon the heathens. The heathens attacked the invading forces mercilessly from horseback and wounded the Cossacks with their lances and sharp arrows. The Russian warriors fired back [with their arquebuses and light cannon] and killed a vast multitude of the heathen. There was a fierce struggle with the Tatar warriors, and both sides suffered a great number of casualties. The heathens, seeing so many of their warriors fall before the Russians, took flight....

"When the Cossacks reached the domain of Karacha, a second battle took place against this councillor of Tsar [Kuchum]. They captured his domain and plundered his honey and other property and loaded it into their boats. The heathens, on horseback and foot, pursued them to the Irtysh River. The atamans and Cossacks advanced bravely against the heathens massed on the riverbank, and both sides lost many men killed in this great battle. Then the heathens, seeing so many of their men killed by the Russian warriors, took final flight. In that battle, Ermak's army lost only a few men, but almost everyone was wounded.

"When Tsar Kuchum saw his warriors overwhelmed, he retired with some survivors and camped on the top of a hill called Chuvash. His son Mahmet-Kul remained at the abatis with a large rearguard, while the Cossacks proceeded up the Irtysh River.

"When the Russian forces came upon a small settlement which belonged to

Atik-murza, they took it and set up their camp there, because night had already fallen and it was dark. The Cossacks saw an immense gathering of the heathen at their abatis and were in great consternation. They said to one another, 'How can we stand against such a multitude?' They pondered this, then formed a circle and took counsel together [this was the traditional way of reaching a decision in the Cossack democracy]. They debated. 'Should we retreat, or stand together as one?' Some brooded and were of the opinion, 'It would be best for us to retreat.' But others were firm and resolute and proclaimed, 'Oh, brother comrades in arms, how can we retreat? Autumn has already set in. Ice is freezing in the rivers. We cannot take to flight and bring reproach and disgrace on ourselves. Rather let us place our trust in God, for victory does not come from having a great mass of warriors, but from the help of God on high. It is possible that God will help even the helpless. Brothers, have we ourselves not heard what evil this godless and cursed heathen of the Siberian land, Sultan Kuchum, has brought on our Russian land of Perm, how he has laid waste the towns of our Sovereign [the Russian tsar], and murdered and enslaved Orthodox Christians? Do we not know of the number of the Stroganovs' forts he has destroyed? Almighty God will punish the cursed one for shedding Christian blood. Brothers, let us recall our oath, which we swore before God in the presence of honest men [the Stroganovs]. We gave our word and promised, kissing the cross, that if Almighty God helped us, we would not retreat, even though we might die to the last man. We cannot turn back. We cannot dishonor ourselves and break the oath we have sworn. If the Almighty Glorious God of the Trinity will help us, then even if we fall, our memory will not die in these lands, and our glory will be eternal!'

"Hearing this, the atamans and Cossacks were emboldened in spirit, and their courage was renewed. They all shouted an oath in one voice. 'We are ready to die for the holy church of God. We will suffer for the true Orthodox faith. We will serve the devout Sovereign Tsar and Grand Prince Ivan Vasilevich of all Russia [Ivan IV]. We will stand firm against the heathens to the last drop of our blood, unto death itself. Brothers, we will not violate oaths, we will stand as one, steadfast!' ...

"They set out from their camp to go to battle on October 23, the feast day of the Holy Apostle James, brother of our Lord. All together, in one voice, they gave tongue, shouting, 'God be with us! Lord, help us, your humble servants!'

"They advanced on the abatis bravely and fearlessly, and there was a fierce battle with the heathens. The heathens fired countless arrows from the top of the abatis and from embrasures. They wounded many of Ermak's brave men and killed others. And when they saw these brave men fall, the heathens rushed out in sorties through the abatis in three places, hoping to force the

Cossacks into flight. During these they fought ferociously, in hand-to-hand combat.

"The Cossacks advanced against the heathens as one man and proved their bravery and ferocity before the dishonored and godless heathen. At length, the heathens' strength weakened, and God gave the Cossacks victory over them. The Cossacks gained ground, overpowered the heathens, and killed a multitude. They forced them back from the abatis and placed their own battle standard on it. They wounded Mahmet-Kul, and his warriors carried him off in a small boat across the Irtysh River.

"Tsar Kuchum, who was encamped on the hill, saw the defeat of his Tatars and the wounding and flight of his son Mahmet-Kul. He ordered his mullahs to call out their wretched Muslim prayers. He called on his foul gods to aid him, but received not the slightest assistance. At the same time the Ostiak princes [the native allies of the Tatars] fell back with their men, however they could....

"The wretched tsar galloped off to his town of Sibir, taking a small part of his wealth, and then continued his flight, leaving the town of Sibir deserted. Brave Ermak and his men came to Sibir, later called Tobolsk, on October 26, the feast day of the Holy Martyr Demetrios of Salonika. They gave thanks to God for having given them victory over the godless and cursed heathens, and rejoiced mightily. They seized a great amount of gold and silver, cloth of gold, precious stones, sables, martens and valuable foxes, and divided these among themselves.

"This is splendid to relate, and truly it glorifies the Almighty God of the Trinity who had given the small but strong Russian warriors victory over the heathens, and defeat of the boastful Tsar Kuchum. Tsar Kuchum had assembled an army that outnumbered the Cossacks by 10 to 20 or even 30 to 1. The cursed one lamented the great number of his warriors who had fallen. Thus God brings down the haughty and favors the humble Christians."

THIS STORY OF ERMAK'S CONQUEST of Siberia, as told by the contemporary chronicler, is interesting not only because of the events that it relates, but also in *how* it is told. The ideological spin that the chronicler puts on the story provides a glimpse into how the Russians viewed their conflict with the Tatars, and what were the motivations of the people who advanced the Russian frontier. But let us first focus on the basic outline of the events. A band of a few hundred intrepid European adventurers defeats hordes of natives, conquers a kingdom, and captures an enormous booty. The parallel between Ermak's Cossacks and Cortés' or Pizarro's conquistadors in the New World is striking (although, to be sure, the amount of loot captured by Pizarro dwarves anything that Ermak could possibly have found in Sibir).

How did they do it? Jared Diamond recently explained the spectacular feats of Cortés and Pizarro by arguing that the Spaniards had guns, germs, and steel, whereas Native Americans, who had no communications with the continent of Eurasia before 1492, did not. This explanation makes sense for the Spanish conquest of America, but it does not help us to understand the Russian conquest of Siberia. We can immediately dismiss two thirds of Diamond's triad, because both sides had been exposed to the same germs and steel for centuries. As for guns, the Russians employed them with great effect against the bow-and-arrow-wielding nomads. But why were the Russians able to equip themselves with guns, and the Tatars not? Neither of these peoples was the inventor of firearms. (If anything, the Tatars were in a much better position than the Russians to get gunpowder directly from its inventors, the Chinese.) A racist explanation, stressing the difference between the Europeans and non-Europeans, is unsatisfactory because other Turkic people—the Ottomans and the Mughals—eagerly adopted firearms and used them with great effect to build huge empires. The Crimean Tatars a thousand miles to the southwest of their Siberian cousins started using siege and handheld guns around 1530. In any case, the role of firearms in the decisive battle of Sibir was quite minimal. The primitive matchlock arquebuses of the Cossacks were slow to fire, lacked accuracy, and could not be used in damp weather. The main impact of the gunpowder revolution in the fifteenth and sixteenth centuries, after all, was the ability of artillery to knock down medieval fortifications. Handheld guns started becoming truly effective only after the seventeenth century, with the invention of the flintlock musket.

The mystery deepens when we consider what happened in eastern Europe three centuries before Ermak. In 1236, a great army of steppe invaders led by Batu, one of Chinggis Khan's grandsons, gathered in the steppes west of the Irtysh, in the same area that three centuries later was to become the khanate of Sibir. Although we call them the Mongols, the ethnic Mongols comprised perhaps a tenth of the host's number; the rest were a tribal mixture dominated by various Turkic peoples: Keraits, Tatars (whose name was expanded by the Russians to cover all kinds of Turko-Mongolic steppe people), Uigurs, Khwarizmians, Turkomans, and so on. The Mongol subjugation of eastern Europe began with the destruction of the realm of the Volga Bulgars. Starting in 1237, and for the next three years, the Mongols systematically conquered practically all of Russia. (Only Novgorod in the northwest escaped direct attack, but nevertheless had to submit to Batu and agree to pay tribute.) One of the most remarkable aspects of this conquest was that although each principality fought bravely against the invaders, the Russians were unable to unite against the Mongol threat. This inability to work together is most

graphically illustrated by the tale of two brothers, Yurii and Roman, who ruled the Ryazan principality southeast of Moscow. When the Mongol army approached, Yurii shut himself up in the principality's capital, Ryazan, while Roman, instead of coming to the aid of his brother, stayed in a smaller town, Kolomna, some 50 miles to the northwest of Ryazan. The Mongols first took Ryzan, killed Yurii, and slaughtered the entire population. Then they went to Kolomna, defeated and killed Roman before the fortress, and captured Kolomna itself.

The same story repeated itself over and over again. Fragmentation of Russia into dozens of tiny principalities and the inability of the Russians to unite against the external threat were one of the main reasons (perhaps the main one) why the Mongols were able to conquer Russia in the thirteenth century. This shortcoming was obvious to the Russians themselves, as made very clear in the Ode on the Downfall of the Russian Land, written shortly after the Mongol conquest.

The Mongols, by contrast, excelled at teamwork. Historians generally agree that the ability of the Mongols to crush all their opponents was not due to any technical advantage in weaponry, nor to their numbers. (They often fought against and destroyed numerically superior enemies.) The explanation for the Mongol success must be sought elsewhere.

The Mongol army was a well-oiled social mechanism, capable of discipline and internal cohesion to the degree unknown in Europe since the Roman times. The Mongol armies deployed, advanced, and maneuvered in eerie silence. There were not even shouts of command because movements of the blocks of cavalry were governed by the flag signals from the standard bearers. At the right moment, the whole army suddenly charged, yelling and shrieking like demons. Such tactics were extremely unnerving to their adversaries.

One of the favorite tricks used by the Mongols was the fake retreat, luring the unwary enemy into ambush and annihilation. Performing such maneuvers with a host of 100,000 called for precision timing and frictionless cooperation. Another tactic, described by the papal envoy Piano Carpini, was as follows. "They meet the first cavalry onset with a front consisting of prisoners and foreign auxiliaries, while the bulk of their forces take up their positions on the wings in order to encompass the enemy. They do this so effectively that he fancies them far more numerous than they are. If the adversary defends himself stoutly, they open their ranks and allow him to escape, whereupon they dash in pursuit and slay as many of the fugitives as they can." The world historian William McNeill noted that "the Mongols were capable of moving in widely dispersed columns over all sorts of terrain, while maintaining communication between the separate columns so as to assure concentration

of all forces at the decisive time and place. Subotai, the general in charge of the invasion of Europe in 1241, thought nothing of coordinating columns operating in Poland with others pressing into Hungary, despite the Carpathian barrier between them. No comparable feats of coordination over such distances were achieved by European armies until the late nineteenth century."

The Mongol unity of purpose extended from the movements of large-scale military units all the way down to interpersonal relations. As the ambassador from the French court William of Rubruck reported, "In the whole world, there are no more obedient subjects than the Tatars, neither among lay people nor among the monks; they pay their lords more respect than any other people and would hardly dare lie to them. Rarely if ever do they revile each other, but if they should, the dispute never leads to blows. Wars, quarrels, the infliction of bodily harm, and manslaughter do not occur among them, and there are no large-scale thieves or robbers among them." It was this remarkable social cohesion that explains the spectacular successes of the Mongols against all other Eurasian armies from Korea to Hungary.

THE CHARACTERIZATION OF THE MONGOLS that stresses their ability to cooperate will probably sound strange to many readers. *Cooperation* is a "nice" word, and the Mongols of Chinggis Khan were most definitely not nice people. They slaughtered literally millions of men, women, and children, and enslaved millions of survivors. They turned dozens of wealthy and beautiful cities into ruins and piled pyramids of hundreds of thousands of skulls as grisly monuments to their achievements. They practiced cruel executions and unspeakable tortures on those unlucky to fall into their hands. And wasn't the empire of Chinggis Khan a typical "oriental despotism"? So how is it possible to speak about the spirit of cooperation in such a society?

This is a very important question because, as discussed in subsequent chapters, cooperation, or more generally the capacity for collective action, is a key factor in the rise of empires. It must be noted immediately that the concept of oriental despotism, if it means the absolute power of one individual over the whole society, is a sociological nonsense. A single person, no matter how physically impressive, cannot rule against the wishes of all of his subjects. As soon as he falls asleep, one of the people he has oppressed will end his tyranny by sticking a knife in him. In real life, tyrants could rule only because they had the support of a certain group of people—the palace guard, the aristocracy, perhaps the top bureaucrats. Only groups can oppress other groups and whole societies, and to do that the "oppressor" group must be internally cohesive. In other words, oppression can only be accomplished from

the basis of cooperation, paradoxical as it sounds.

The social matrix of Western societies (weaved from such things as education, mass media, and even cocktail-party chitchat) conditions us to think that the only legitimate source of social power is "we the people." As a corollary, we tend to assume that nondemocratic societies are held together by force alone. A recent illustration of this pervasive cultural bias is the implicit assumption by the American planners of the Iraq invasion in 2003 that as soon as Saddam Hussein was overthrown by American troops, the Iraqi people would work together with the occupation authorities in building a democratic society.

There is no question that the Ba'athist regime of Saddam Hussein used violence and intimidation to keep down dissident groups, and the many atrocities committed by Saddam's henchmen are well documented. However, this was not the whole story. In addition to force, the regime relied on cooperation from certain other groups: the core support came from Saddam's clan, with the wider power base provided by the Sunni Arabs of Iraq. In addition, a more diffuse group, originating from other ethnic segments of the Iraqi population (the Shiite Arabs and the Sunni Kurds and Turkmen), had come to think of themselves as "Iraqis" first and members of their ethnic group second. Although this group, let us loosely call them nationalists, did not actively support the Ba'athist regime, they *acquiesced* to its rule. Although perhaps not holding the legitimacy of Saddam's government terribly high, many of them consider the legitimacy of the occupying powers to be even lower.

We now know empirically that Saddam's regime was not based solely on force, because many members of the groups that supported him when he was in power are still willing to sacrifice their lives attacking his captors (even after Saddam himself has become powerless). An even greater number participates in demonstrations and other acts of nonviolent resistance, an activity that, although not as suicidal as direct attacks against the well-armed American troops, is by no means risk-free. Finally, the majority of Iraqis have just chosen to have as little to do with the American authorities as possible. During the first months of the occupation, various commentators attributed this aloofness to the residual fear that Saddam could yet return to power and punish those who cooperated with the Americans. However, the capture of Saddam in late 2003 did not change Iraqi attitudes in any significant way.

The case of Ba'athist Iraq, thus, serves as an excellent illustration of the idea that oppression and cooperation are not mutually exclusive—to oppress the dissidents, Saddam had to have cooperation within his social power base. To the Bush administration, Saddam was a murderous thug, a tin-pot dictator,

a failed and incompetent Hitler wannabe. But he can also be seen as a stern and wily tribal leader, who bestowed rich rewards on his people, while meting out harsh punishment to their enemies. The brutality of his secret service, of his sons, and of his very own actions can be seen as strength. Certainly this is how a significant minority of Iraqis saw him. And they were prepared to cooperate with him.

How WELL DID THE TATARS COOPERATE on the Eurasian steppes of the sixteenth century? Remember that the Tatars of the Sibir khanate were direct descendants of the Turco-Mongolian horde that was led by Batu to conquer eastern Europe three centuries before. Kuchum Khan, for example, was a Chinggisid, tracing his ancestry to Batu's brother Shayban. Yet these later day Tatars were a very different people from their ancestors. Although enjoying a great numeric superiority, they could not defeat Ermak's Cossacks.

Even more importantly, in the sixteenth century various Tatar principalities were unable to unite in their struggle against resurgent Russia. When the Mongol Empire was divided among the four branches of the Chinggisids, Batu and his descendants received the westernmost part and made their capital in Sarai on the Lower Volga. The Golden Horde, as Batu's realm became known to historians, maintained its unity for 200 years, except for a period of civil war during the late fourteenth century. In the middle of the fifteenth century, it fragmented into a number of independent principalities: the khanates of Kazan, Astrakhan, Crimea, and Sibir, and the Nogay Horde. These successor states of the Golden Horde were none too stable, and continued to be wracked by civil wars into the sixteenth century. Noble factions in Kazan went through one coup after another. One of the contending princes, Shah Ali, went through the process of first gaining the throne and then losing it three times! The khanate of Sibir also went through a series of its civil wars. The last civil war, of 1563-9, in which Kuchum Khan defeated and killed the previous khan of Sibir, concluded only 12 years before the Russian invasion. What we see here, then, is a complete reversal of the situation that pertained three centuries before. Now it was the turn of the Tatars to experience social dissolution in the face of the Russian monolith.

At the same time that the Golden Horde was fragmenting, the Russian lands were slowly but inexorably "gathered," as the Russian chronicles put it, under the leadership of Moscow. The process was largely completed in 1485 with the annexation by Moscow of the last independent Russian principality of Tver. The tendency toward disintegration, characteristic of the pre-Mongol conquest Russia, was completely reversed. When a piece of territory was added to the principality of Moscow, there it would stay. This centralizing, integrative trend

persisted even after the principality expanded beyond the core Russian lands with the conquest of Kazan and Astrakhan khanates (1552-56). The tenacity of territorial acquisition can be illustrated with the course of events that followed the battle of Sibir.

After wintering in Sibir, Ermak sent his lieutenant, Ivan Koltso, "the Ring," with the report of their great victory back across the Urals. The news that another kingdom was added to the Russian Empire was met with great popular jubilation. Koltso received a pardon for his crimes and rich gifts from the hands of the tsar himself, and left to Sibir accompanied by a company of government troops. Although the conquest of Sibir started as a private action, neither Ermak nor the Stroganovs considered establishing an independent princedom in Siberia for themselves. Whether their offering of Siberia to the tsar was born of loyalty or calculation, the subsequent course of events showed the wisdom of this course of action.

Although he lost the battle of Sibir, Kuchum Khan did not give up the struggle. The Tatars, however, were plagued by dissent. Several Tatar nobles and their following deserted Kuchum and went over to the son of the previous khan (whom Kuchum had killed in the civil war). Lacking strong forces to dislodge the Cossacks, Kuchum shifted to guerilla tactics. His nephew Mahmet-Kul succeeded in inflicting some casualties on the Russians, but was eventually captured and sent to Moscow. During the second winter, however, the Cossacks ran out of supplies and began suffering from scurvy and starvation. Then disaster struck in the summer of 1584: At night, the Tatars attacked the camp where Ermak and his comrades slept. Most of the Cossacks were killed, and Ermak himself drowned while attempting to swim to the boats in the river. News of Ermak's death was the final straw for the defenders of Sibir. Their numbers had been whittled down by constant Tatar attacks, and it was clear that they could not survive a third winter. The Russians were forced to retreat across the Urals to the Stroganov lands, and Kuchum reoccupied Sibir.

Unfortunately for the Tatars, their ultimate defeat was only postponed. Two years later, the Russians entered Siberia again. They proceeded in a systematic fashion, first building the fortified town of Tyumen (1586); then Tobolsk (1587), near the site of recaptured Sibir; Tara (1594); and, finally, Surgut, on the Ob River (also in 1594). Kuchum fought on for years, but was defeated in a final battle on the Ob in 1598. He took refuge with the Nogay, where he was assassinated in 1600.

THE OVERARCHING QUESTION OF THIS BOOK is why do large empires rise and fall? Therefore, it is only proper to start with the struggle between the

people who built the two largest territorial empires ever seen in world history. When we stand back and take a long view at the course of this struggle, we are struck by the complete reversal in the fortunes of these two nations. In the thirteenth century, Russia, fragmented into a multitude of bickering principalities, had no chance against the Mongol steamroller. In the sixteenth century, it was the turn of the Russian monolith to roll over the squabbling Tatar khanates. Why did the Tatars lose their social cohesion? How did the Russians acquire it?

Social cohesion, of course, is not the only factor we will need to explain the rise and fall of empires. History is too complex for single-factor explanations. It is clear, however, that social cohesion, or lack of it, played a large role in the stunning reversal of fortune in the centuries-long Russian-Tatar struggle. What made Russia evolve from a collection of bickering principalities to a highly centralized state?

Chapter 2

Life on the Edge

The Transformation of Russia—and America

One of the most important forces that has shaped Russian history is its location on the great steppe frontier of Europe. For many centuries, the line running from Kiev in the southwest to Kazan in the northeast separated two sharply different worlds. To the north and west of the line were the woodlands inhabited by the Slavic, Baltic, and Ugric peoples who practiced agriculture, supplemented by hunting and gathering. To the south and east lie the grasslands inhabited by the pastoralist nomads and their herds. The first pastoralists—the Cimmerians, Scythians, and Sarmatians—were speakers of Indo-European languages. Beginning in the third century, however, these Indo-European nomads were replaced by repeated waves of Turkic and Mongolian peoples originating in Central Asia.

The woodland farmers and the steppe nomads were divided by a deep cultural chasm. To the nomads, farmers were dirt-grubbers, doers of women's work, clumsy riders, and weak and cowardly opponents in battle. Farmers, however, possessed many things that the nomads coveted—grain, which the nomads could not grow themselves, wealth accumulated by their aristocrats and priests, and last, but not least, their very bodies, which could be sold at the Black Sea slave markets.

From the farmers' point of view, the nomads were the devil horsemen, uncivilized and unlettered barbarians, murderers, slavers, and despoilers. The antagonism between the farmer and the herder goes back to the very beginnings of human history, as exemplified by the biblical parable about the conflict between Cain with his fields and Abel with his flocks. (Because the early Hebrews were herders, naturally the evil guy in the story was Cain.) In eastern Europe, from the tenth century on, the cultural chasm was further deepened by the tendency of the settled cultivators to adopt Christianity opposed by the inclination of the nomads to Islam. The most frequent terms describing the steppe nomads in the Russian chronicles, such as the godless or the pagans, reflected this religious boundary. Incidentally, in the modern

Russian language, the word *pagan* has lost its original religious meaning and now just means “bad” or “evil.” As discussed in the preceding chapter, the religious aspect of the conflict between the Russians and the Tatars is evident in the language used by the *Stroganov Chronicle* in its description of battles between Ermak’s Cossacks and the Siberian Tatars.

The climatic and ecological boundary between the steppe and forest anchored a significant fault line between two very different civilizations. The interactions across the fault line were shaped by two basic facts of steppe life. First, the nomads had an abundance of animal products, but a scarcity of plant products. And man cannot live on meat alone. Second, their martial skills were strong. Riding and archery were highly developed due to daily practice while following the herds and protecting them against predators, and so the nomads enjoyed a substantial military advantage over the settled people. The need of the nomads for grain and their greater ability to take it by force could not help but create antagonistic relations between them and the farmers. This fact does not mean that herder-farmer interactions were uniformly bellicose. Under certain conditions, the nomads could get what they needed by peaceful trading (especially if the farmers were protected by a strong state). The dealings between the agrarian and nomadic civilizations took a variety of forms. Some intermarriage even occurred, usually at the aristocratic level.

On the fault line between the eastern Slavs and their steppe neighbors, however, the dominant factor was conflict. The intensity of the conflict fluctuated across the centuries, but periodically it reached the level of genocide. One of the relatively peaceful periods was the first half of the eleventh century, when the principality of Kiev was at the height of its power. The strong and unified state was able to reduce the threat from the steppe to a minimum. Unfortunately, toward the end of the eleventh century, the principality began fragmenting, a process that coincided with the arrival of a new wave of Turkic nomads in the Russian steppes, the Cumans. The Russian chronicles record 46 Cuman invasions into the principality between 1061 and 1200. During the twelfth century, as a result of internecine fighting and the Cuman raids, the population of Kiev and the surrounding territories collapsed. The Mongol sack in 1240 struck the deathblow. From that time until the seventeenth century, the core territory of the Kievan state was virtually a desert. Any Ukrainian peasant foolish enough to move in was immediately killed, and his family taken to the Crimean slave markets, by the first marauding Tatar band that would chance upon them.

The thirteenth century depopulation affected not only Kiev, but also the entire forest-steppe transition zone. As a result of increased pressure from the steppe, the cultural fault line was pushed a hundred miles or more to the

northwest. In the Russian principality of Ryazan (where the two brothers, Yurii and Roman, would not work together to repel the Mongols), the capital city of Ryazan was too close to the steppe and had to be abandoned. The princely seat was moved to Pereyaslavl-Ryazansky in the northwest corner of the principality.

Life settled down a bit under the Golden Horde, whose rulers were more interested in getting tribute than in murder and rapine. The population of northern Russia enjoyed a substantial recovery, despite the effects of a few punitive expeditions by the Tatars in response to urban uprisings against their tax collectors. As the Golden Horde began fragmenting during the fifteenth century, however, the ability of its rulers to restrain raiding by lower-level chieftains waned. When the Golden Horde experienced its ultimate collapse around 1500, Muscovite lands faced an increasing number of raids from the Tatar successor states. (*Muscovy* is what historians call Russia during the period after the independence from the Golden Horde, but before the reign of Peter the Great, which started the Imperial period.) The greatest danger came from the Kazan khanate, until it was conquered in 1552, and from the Crimean Tatars, who were to remain a thorn in Russia's side until the end of the eighteenth century.

The devastation caused by the Tatar attacks was huge. In 1521, the Crimean Khan Mohammad-Girey, with a 100,000-man army, broke through the Russian defenses along the Oka River and invaded the Muscovite heartland. He did not attempt to assault the fortified cities, but instead laid waste to the countryside. The worst damage resulted from the enormous number of people the Tatars carried away. According to one chronicle, captives numbered 300,000; the imperial envoy Sigismund von Herberstein reported that total losses numbered 800,000 people, some slain, others sold to the Turks in Caffa (in Crimea). Herberstein's report must be greatly exaggerated, but the loss of even 200,000 or 300,000 people was a very serious blow to a country whose total population at the time was only 7 million. In 1533, the Crimean Tatars failed to break through the Oka defenses and had to content themselves with devastating the Ryazan lands. Nevertheless, the Tatars again carried away a multitude of captives. In a letter to the tsar, the khan boasted that Russia lost no fewer than 100,000 of its people: Every Tatar noble acquired 15 to 20 captives; the common warriors each held 5 or 6 "heads."

These two invasions were not unique, only the more successful of many other raids. Few were the years during the first half of the sixteenth century when Muscovy was not assaulted by the Crimeans from the south and the Kazan Tatars from the east. Just during the 1530s, for example, no fewer than 13 Crimean and 20 Kazan raids occurred. Added to that were raids from the

Nogay Horde, and on the western frontier Muscovy was embroiled in a long and exhausting conflict with Lithuania.

Muscovy could resist the onslaught from the steppe only by a concerted effort of the whole people, from the mighty boyar to the lowest peasant. A characteristic example of how the external threat helped to unify the society was the construction of the fortified town of Lyubim on the frontier facing Kazan, in an area that did not have a stronghold where peasants could shelter during the Tatar raids. The central government had no resources to spare, and therefore gave permission to build using local resources. Everybody pitched in to help quarry the stone, raise the walls, dig the moat, and make the defensive stakes against the cavalry. Another sign of the willingness of people to sacrifice for the sake of the larger community was the periodic collections of money needed to buy out the Russian captives. Enormous sums of money were gathered in this way, and as a result many thousands of captives were able to return home.

The main role in organizing the defense, however, fell to the state. The government first fortified the southern frontier along the Oka, which faced the Crimean raids. Stone fortresses were constructed at key defensive points. All fords and other places where the Tatar cavalry could cross the river were blocked with wooden stockades manned by soldiers and artillery. Every summer, large bodies of armed men gathered at several designated places, from where they could be rushed to any threatened segment of the frontier. The Cossacks patrolled the lands beyond the Oka to give an early warning of the approaching raiders. By the mid-1520s, the system of defenses was in place and all of its elements well coordinated. In 1527, the campaign of the whole Crimean army in Russia failed completely because the Tatars were unable to penetrate the Oka barrier.

The eastern frontier enjoyed no natural defensive feature such as the Oka, and therefore the defenses against Kazan were ineffective. The Tatars just bypassed the fortresses and devastated the fields and villages, killing or carrying off those souls who were caught in the open. Many of the survivors migrated west to escape the constant danger. Tatar raiding was systematically depopulating the broad band of territory between Moscow and Kazan. It was clear that the only way to avoid the fate of Kiev three centuries before was to solve the problem at its source. Therefore, after the defenses of the southern frontier began functioning properly, the government directed all of its resources to the east. It took two decades of constant war, and a final lengthy siege, but Muscovy succeeded in annexing the khanate of Kazan in 1552.

Although the annexation of Kazan, followed by Astrakhan in 1556, resolved the issue of the eastern frontier, the Oka defense line provided only a

temporary solution in the south. The first problem was that the defensive line passed only 50 miles south of Moscow, so any breakthrough by the steppe raiders immediately exposed the heartland to pillaging and devastation. Second, two former principalities of the Kievan Russia, Ryazan and Novgorod-Severski, which were now part of Muscovy, remained beyond the defensive line and vulnerable to the Tatar raids. The third problem, a recurrent one, was that as soon as a secure defense line was established, Russian peasants started moving into the area just in front of it (even though the authorities attempted to prevent such spontaneous colonization because they could not effectively protect these pioneers). Such population movement beyond the defensive line created many challenges for the authorities without yielding a direct profit in terms of taxes (at least, initially). However, the efforts to stem colonization were ineffective. As the population beyond the defenses increased, it attracted raiding Tatar parties, and the cry went up to protect the "Christian souls." The government was forced to come up with resources to construct a new defensive line to the south that would protect the newly colonized territory. Upon securing the territory, government officials could count the population and assign each head of household his share of tax and service in the frontier defense forces, so ultimately the colonization movement worked to the government's advantage. However, then the process would start again as peasants began to trickle across the new line. The result was a curiously self-propelling dynamic, in which the common people and the state collaborated (without necessarily meaning to do so) in extending the Muscovite territory south into the steppe in a series of steps. The process ended only with the final conquest of Crimea, two and a half centuries later.

WHAT WAS LIFE LIKE ON THE STEPPE FRONTIER? Documentary sources provide a good glimpse, and those sources became progressively better during the sixteenth and seventeenth centuries. We are also lucky to have a book by Guillaume le Vasseur, Sieur de Beauplan, who spent the years 1630 to 1647 in the Ukrainian area of the frontier (which was at that time part of Poland-Lithuania). Beauplan left us with much valuable information about the adversary against whom the Russians and the Ukrainians carried out their grueling centuries-long struggle.

The khanate of Crimea enjoyed an advantageous geopolitical situation, which explains why the contest between it and Muscovy took three centuries to resolve. Its capital, Bakhchisarai, was located on the Crimean Peninsula, which could be attacked only after crossing an easily defended Isthmus of Perekop. Even more important was the control by the Crimeans of the huge steppe territory of southern Russia. These steppes created a buffer zone

hundreds of miles deep, a zone easily crossed by the Tatar cavalry, but extremely difficult to penetrate with a European-style army composed primarily of foot soldiers and burdened by heavy supply carts.

Although Bakhchisarai was the political capital of the Crimean khanate, the most economically important city in Crimea was Caffa. Caffa is associated with some of the darkest pages of European history. In 1346, when Caffa was in Genoese hands, the Mongols besieged it. When the besiegers started to die from a new disease recently arrived from Central Asia, they catapulted several of the diseased corpses into the town, and then departed. Within a year, the disease traveled from Caffa to all major Mediterranean ports. During the next three years, half of the European population died in the pandemic of the Bubonic Plague, also known as the Black Death.

The Ukrainians referred to Caffa as "the vampire that drinks the blood of Russia" because both under the Genoese and after its conquest by the Turks this port city was the main entrepôt for the slave trade on the Black Sea. Over the centuries, literally millions of eastern Slavs and other peoples inhabiting the forest region north of the steppe were sold in Caffa and shipped to a variety of destinations in the Mediterranean. Most male slaves sold in Caffa probably ended up rowing the galleys. At any given time during the seventeenth century, the city had 30,000 or more slaves. The supply of slaves was so plentiful that there were no free domestic servants in Caffa.

In the second half of the fifteenth century, the Genoese lost Caffa to the Ottoman Empire. The Turks governed Caffa directly, and also exercised an indirect control over the rest of the peninsula, because in 1475 the khan of Crimea became the vassal of the sultan. However, the Turkish-supplied artillery and janissaries became involved only in large-scale military operations against Russia and Poland-Lithuania, leaving the usual steppe raiding entirely in the hands of the Tatars. The Crimean army consisted of 40,000 to 50,000 horse warriors. When allies from other hordes and various other volunteer predators joined this army, its size could swell to 100,000 and more. However, a more typical raid was conducted with "only" 15,000 to 20,000 horsemen led by one of the khan's murzas (a Tatar princeling).

Beauplan records that each Tatar warrior had two spare horses; so, a force of 80,000 was accompanied by more than 200,000 horses. "Trees are no thicker in a forest than horses at such times on the plain, and, seen from afar, they resemble a cloud rising from the horizon, growing larger and larger as it rises, striking terror into the hearts of even the most daring, if they are not used to seeing such multitudes together." On the Ukrainian frontier of Poland-Lithuania, which lacked the systematic defenses constructed by the Muscovites, the typical tactic of the Tatar army was first to rapidly penetrate

deep into the settled territory. After reaching 60 or 80 leagues (1 league equals 3 miles) in the interior, the army turned around, extended the flanks 8 to 12 leagues to the right and to the left, and began a systematic sweep of the territory for booty. All those who resisted were killed; everybody else was captured and taken away (including the livestock, except for pigs).

After a successful operation, when the Tatars were far enough in the steppes from the frontier not to worry about pursuit, they stopped to rest and reorganize. “During the interval of this week-long stop, they bring together all their booty, consisting of slaves and livestock, and divide the entire quantity among themselves. The most inhuman of hearts would be touched to see the separation of a husband from his wife, of a mother from her daughter, there being no hope of their ever seeing each other again. They are to become wretched slaves of Mohammedan pagans, who abuse them atrociously. The brutality [of these Tatars] causes them to commit an infinite number of filthy acts, such as ravaging young girls, raping women in the presences of their fathers and husbands, and even circumcising children before their parents’ very eyes, so that they may be offered to Mohammed.”

When the Tatar host encountered the Polish forces, they avoided fighting, because “these brigands (and so the Tatars should be named) never raid [Ukraine] for the purpose of fighting, but rather to pillage and steal by surprise.” The great advantages enjoyed by the steppe horsemen were stealth, mobility, and surprise. It was extremely hard to defend against their depredations and, in fact, the Ukrainians and the Poles, unlike the Russians, were unable to make headway against the Crimeans. When the Tatar pressure intensified in the late sixteenth century, the Ukrainians even lost some ground. For example, one third of all villages in the province of Podolia (situated between the Dniester and Dnieper rivers) were devastated or abandoned between 1578 and 1583.

The key feature of the Muscovite frontier strategy was the construction of fortified defensive lines that extended across hundreds of miles of the steppe. I have already discussed the first defensive line along the Oka River. The need to protect Ryazan and Novgorod-Severski, as well as territories newly colonized by peasants moving from the north, was addressed by the construction of the second defensive line in the 1560s and 1570s. The line ran through a chain of fortified towns, whose function was not economic, but purely defensive. In forested areas between the fortresses, obstacles were constructed by felling trees. Trees were cut at two yards above the ground, and placed with their crowns pointing south. Interweaved trunks and branches, backed up by two-yard tree stumps, presented an impenetrable barrier to mounted men. Dismantling this barrier would take hours, giving the Cossacks

and soldiers more time to organize a proper "reception" for the unwanted guests. The main purpose of such *abatis* was not to prevent entry, but to negate the raiders' advantage in mobility. The obstacles also impeded rapid retreat of the Tatars laden with loot, cattle, and captives. Slowing their flight even by a few hours could allow the pursuit to catch up, spelling the difference between freedom and slavery for the unfortunates who were caught out in the open during the raid.

In areas without forests, the Russians pounded logs into the ground to construct palisades. Wherever possible, rivers were utilized to serve as obstacles. (Unfortunately, no convenient large river ran from west to east, such as the Oka, on which the old defensive line was based.) The forests growing along the defensive lines were strictly protected against cutting. All measures, no matter how petty, were taken to impede the raiders. For example, the grass south of the line was burned after the frost in late fall to deny fodder to the Tatar horses.

The length of the second defensive line was more than 600 miles, a Russian equivalent of the Great Wall of China, fulfilling the same function albeit with very different construction methods. The investment of labor was enormous. Tens of thousands of people, mostly drawn from the frontier population, worked on the construction. The frontiersmen expended a remarkable effort, but it could not have happened without the full backing of the central government, which founded fortified towns on the steppe, recruited the garrisons from the central areas of Muscovy, and provided overall organization. The key role of the central government is highlighted by the occasions when the defenses failed, which always happened either when the authorities were preoccupied with the war on the western frontier or during the Time of Troubles (when the central government collapsed). In 1571, the Tatars broke through the defenses and succeeded in burning Moscow. The last time the Tatars managed to reach Moscow and burn its suburbs was in 1592. Successful raids reached the Muscovite heartland in the first half of the seventeenth century, but after the 1650s the Tatar raids were no longer able to penetrate the defense lines, which by that time had moved even farther south.

The organization of the frontier service was perfected during the sixteenth century. The first line of defenses consisted of Cossack patrols deep into the steppe. In one typical technique, a pair of sentries stationed themselves near a tall tree in the steppe. One Cossack climbed the tree to kept watch, while the other remained ready to ride back immediately upon sight of the enemy. The watchman, after climbing down, followed the Tatars to determine the direction of their movement. This work was very dangerous, because the Tatars hunted the sentries, both to prevent them from raising the alarm and to gain

information about the current state of defenses. A surviving letter to the garrison commander at Novgorod-Seversky tells about the misadventures of one such lookout, Yakush, a Cossack from Putivl. In the fall of 1523, Yakush was ordered to guide a company of gentry servitors pursuing some Tatars escaping with loot and captives after a raid. The Russian detachment caught up with the Tatars and succeeded in freeing the captives. Yakush then guided everybody back to the frontier, after which he returned to his lookout station on the steppe. Unfortunately, the Tatars, annoyed at having to return empty-handed, decided to go back and search the area where the Cossacks kept watch. They caught Yakush and carried him away to the khan in Crimea. The subsequent fate of Yakush is unknown, but this little bit of recorded history gives us a glimpse of the everyday life on the edge, with its constant threat of the Tatar raids, the "posses" organized to pursue the robbers, and the precarious existence of the Cossacks serving as the frontier lookouts and guides.

IN CHAPTER 1 I ASKED, HOW did a nation, Russia, transform itself from victim to empire? The outlines of an answer begin to emerge. The whole Russian people from the Cossacks patrolling the steppes to the farmers on the frontier and then on to the boyars in Moscow instinctively knew that they must cooperate against the threat posed by the nomads. This was not a rational calculation, but the result of a slow, centuries-long cultural change resulting from the life on the line where civilizations clashed. After all, the same calculation could have been made back in 1237 in the face of the imminent Mongol threat. The Kiev-period Russians had already had direct experience with Mongol warfare in 1223, when an expeditionary corps under two of Chinggis Khan's generals, Jebe and Subotai, annihilated the joint Russian-Cuman army in the battle of the Kalka. The destruction of the Volga Bulgars in 1236 made it abundantly clear that the Mongols planned a systematic conquest; however, the Russians did not unite. Paradoxically, every principality, when taken individually, behaved in a completely rational manner. Each prince waited for others to unite and defeat the Mongols. Because each prince controlled only a small army, his contribution was not crucial to the common success. His potential costs, on the other hand, could be enormous. (For example, he could be killed.) Unfortunately, the same logic governed the actions of all his peers, with the result that no collective effort attempted to defend against Batu's army. Such an individually rational, but collectively foolish, response is well known to sociologists and economists; it has been dubbed the "tragedy of the commons."

The long exposure to the frontier conditions resulted in a profound change in

the Russian culture. The general social mechanism responsible for this change is discussed later; for now, I only want to establish the reality of the cultural shift. Unlike their predecessors, the Moscow-period Russians behaved in a collectively astute way, even though acting so caused individual hardship or worse. As mentioned previously, the sense of solidarity and willingness to sacrifice for the common good were not based on a rational calculation; they had much deeper foundations. The frontier logic of "us versus them" molded the view that divided the world into the opposing camps of good and evil. On one side sat the Christian community that represented all that was decent in the world. On the other side sat the devil horsemen who worshiped their foul gods and committed unspeakable atrocities on the Christians. This black-and-white view of the conflict is wonderfully captured in the long quotation from the Stroganov Chronicle excerpted in Chapter 1 and in the painting "Ermak Conquers Siberia" by the nineteenth-century Russian artist Vasily Surikov. (Note that I have related in some detail how the Russians perceived the situation; the Tatars naturally had their own distinct view.)

Religion was the glue that held the Muscovite society together. Certain norms, such as the willingness "to suffer for the faith"—that is, to sacrifice one's comfort and even life itself, to endure hardship for the sake of doing the right thing—were deeply ingrained in the people. Although acts inspired by faith did not have the ostensible function of community survival, indirectly they always contributed to it. Let's turn again to the *Stroganov Chronicle,* which describes how before the critical battle the atamans exhorted the Cossacks to "suffer for the true Orthodox faith." Laying down one's life in the fight against the heathen was an act of piety. The Muscovites cooperated not because it was the rational thing to do, but because it was the right thing to do.

Selfless cooperation was not the only motive urging Ermak's Cossacks to battle the Tatars. Rather, they had a variety of motivations, among which the hope for the loot was clearly neither last nor least. In general, people's actions are influenced by a combination of self-interest, the fear of punishment, and *norms*—socially determined rules of behavior. Much of the time people behave in a self-serving manner, but sometimes they do things not to gain a material reward or to avoid punishment, but simply because it is right. The rewards for doing the right thing are nonmaterial—for example, internal satisfaction and perhaps social approval.

Now think of two armies of the same size. The soldiers in both armies are paid the same amount, and are subject to the same system of punishments for dereliction of duty. In the first army, however, soldiers are motivated only by these material inducements, whereas in the second army they believe that fighting the enemy is the right thing to do. For example, they might fight for

their faith and country, or they might believe that their goal in life is extermination of the evil enemy. What will happen when these two armies clash in a battle? Unless a miracle occurs, the first one will fall apart and will be trounced by the second. Generally, in a struggle between two groups of people, the group with stronger norms promoting cooperation and the most people following such norms has a greater chance of winning.

To come back to the Muscovite frontier, I am not suggesting at all that its defenders were motivated solely by nonmaterial rewards. On the contrary, the servitors on the Russian frontier received cash, grain, and land in return for their service. Those who failed to serve were punished. For example, if anybody left his watch post, and there was no Tatar breakthrough as a result, he was whipped. If the Tatars got through the defenses during this abrogation of duty, the derelict watchman was executed. Although reward and punishment stimuli were certainly present, the motivations of the Russian frontiersmen cannot be reduced to these purely material incentives. They were also inspired to fight for the tsar and the Motherland, and above all for the Faith.

As ALL COMPLEX AGRARIAN CIVILIZATIONS, Muscovite society was organized as a hierarchy. From the point of view of the state, two main categories of people existed: those who paid taxes (peasants and townspeople) and those who rendered military service. The service category included the hereditary landed gentry who supplied the cavalry for the Muscovite army, and the nonhereditary service class of musketeers, artillery personnel, and Cossacks. During the sixteenth and seventeenth centuries, the core regions of Muscovy developed a substantial degree of socioeconomic inequality. Large landowners occupied the top of society, slaves and landless peasants peopled the bottom.

The frontier, by contrast, had a much flatter social hierarchy, because it lacked both the top of the pyramid and its bottom. Large estates were present only in the northern areas of the frontier, and were greatly outnumbered by petty servicemen living closer to the defensive lines. The frontier areas suffered from a chronic lack of population, so land was plentiful. There were no landless peasants, and anybody could cultivate as much land as needed. Sparse population also meant that military commanders had great difficulties in finding enough men for the garrisons guarding the frontier. The need for troops was so desperate that they were willing to enroll persons from any social background. Over time, there was a transfer of manpower from the category of taxpaying peasants to the category of hereditary servicemen. Most of the servicemen cultivated their land themselves ; few of them had any significant number of peasants. The central government did not like that there were so

few peasants on the frontier and so many servicemen because it meant receiving less in taxes, but the necessity of maintaining the defenses against the Tatars was paramount. During the 1640s, the authorities confiscated the magnate-owned land within the frontier, freed the peasants, and enlisted them in dragoon regiments for garrison service. The new servicemen supported themselves on the land confiscated from the previous owners. At the same time, the government also invited all impoverished servicemen from the central regions to move south, where they were given land and enlisted in the frontier defense forces.

The unusual social composition, dominated by small landowners liable to military service, was another significant factor promoting a cooperative spirit in the frontier territories. Great differences in rank and wealth are divisive. It is much easier for equals to achieve the unity of purpose and to develop a common course of action. Egalitarianism enables cooperation.

ONCE AGAIN, SOME READERS, ESPECIALLY THOSE who have read books on Russian history, might ask whether I am painting too rosy a picture of the Russian frontier society. Don't the history books tell us that Muscovy was an "oriental despotism"? That peasants were harshly oppressed? That even nobles had no rights, and could be whipped with the knout ("leather whip") or even executed at the tsar's slightest whim? Is it really possible to speak about cooperation, and especially egalitarianism, in such a society?

Perceptions of historical processes are often affected by our cultural and ideological biases, and Russian history is one illustration of this. Much of what we know about early modern Russia came to us transmitted through the eyes of western Europeans, such as the envoy from the Austrian Empire, Sigismund von Herberstein, mentioned previously. These individuals were not trained anthropologists, and when we read their descriptions we must consider their various cultural preconceptions. For example, western European visitors made disapproving comments about the weird habit of the Russians to wash every week, on Sunday, even in winter. (Everybody knows that bathing is bad for your health!) Westerners also complained that Russians were not gentlemen. When insulted, instead of challenging to a duel, they sue in court! (This, unfortunately changed with time, and the dueling epidemic of the nineteenth century was to claim thousands of Russian noblemen's lives, among them two of the language's best poets, Pushkin and Lermontov.)

Russian history continued to suffer from observer biases even during the twentieth century. During the Cold War era, American writers often invoked the inherent predisposition of the Russians to autocratic rule to explain Stalin-era totalitarianism. Surprisingly, the Soviet historians concurred, although for a

the eastern Slavic lands than such nonviolent measures as dynastic inheritance, purchase, and even the patent from the khan of the Golden Horde. Of particular interest are the occasions when rulers of various principalities voluntarily entered the Moscow service. For example, in 1500, the princes of Novgorod-Severski, Chernigov, and Starodub deserted Lithuania and joined their lands to Muscovy. It is noteworthy that all of these principalities lie to the southwest of Moscow, right along the steppe frontier. By contrast, the strongest resistance to the expanding Muscovite power came from the principality of Tver and the free city of Novgorod the Great, which lie to Moscow's northwest and were not as exposed to the Tatar raids. Both Novgorod and Tver were subdued by Moscow only after a long armed struggle.

History repeated itself in 1654 with the defection of Ukraine from Poland-Lithuania to Russia. When Poland and Lithuania merged in 1569, its aristocracy rapidly assimilated to the Polish language and Catholic religion, causing unrest among the Orthodox peasantry inhabiting the formerly Lithuanian lands (what is now Ukraine and Belarus). Resistance against the Polish authorities was spearheaded by the Dnieper Cossacks. These Ukrainian Cossacks established their headquarters, called the Sech, on an island below the Dnieper cataracts. They made a living very much like their Russian counterparts, alternating between service to the Polish state and raids against the Crimean Tatars and Turkey. The Sech Cossacks organized themselves as a military democracy, in which officials were elected, and all the important decisions were made at a gathering of all the Cossacks. This is yet another example of the tendency to egalitarianism on the frontier.

In the early seventeenth century, the pressure to convert to Catholicism intensified, while the Polish landlords imposed harsh economic oppression on Ukrainian peasants. Beginning in 1624, a series of peasant rebellions led by the Cossacks swept Ukraine. The Poles kept putting these revolts down, but with great difficulty. Finally, in 1653, the Ukrainians sent representatives to Moscow to ask to be taken under the tsar's protection. The Muscovite government at first hesitated, because accepting this proposal would entail a war with Poland, for which Russia was not ready, but eventually the decision was made. The final step for the union was taken at a rada, or "general assembly," in Pereiaslavl in 1654. The delegates to the rada debated at length their course of action. Previous struggle against Poland made clear to the Ukrainians that they were not strong enough to establish an independent state, so their only options were to submit to Poland or to transfer allegiance to either Turkey or Russia. The decisive factor in the final decision was the religious compatibility, and the Ukrainian assembly voted to submit to the Orthodox tsar.

TO AN AMERICAN, THE WORDS *FRONTIER* and frontiersman immediately conjure the visions of the Wild West, the Indians, the cowboys ... But are there any parallels between the American and Russian frontiers? What was the impact of the frontier on the European settlers who made their little homes on the American prairie?

The first European settlers to America arrived in Jamestown, Virginia, in 1607, followed shortly by the Dutch on Manhattan Island and the Pilgrims at Cape Cod. The frontier was a true fault line, on which two very different civilizations came in contact, soon to become conflict. On one side were the European farmers originating from urbanized literate societies with a monotheistic religion (mostly, assorted Protestant sects of Christianity). The various Indian societies, on the other side of the fault line, were almost a perfect opposite, except some Indians also practiced farming. Given such deep cultural differences, it was inevitable that the two groups of people would come into conflict. Indeed, the first war between the settlers and the Indians broke out in 1622, and the cross-fault line hostilities went on with few interruptions until the western frontier was officially declared closed in 1890. The conflict, therefore, was almost three centuries in duration.

Modern histories do not emphasize this aspect of the conflict, but it was very intense, at times genocidal. The history of the massacres that the U.S. Army inflicted on the Indians during the last 30 years of the conflict was powerfully told in 1970 by Dee Brown in *Bury My Heart at Wounded Knee.* However, both the Indians and Europeans committed genocide and atrocities. The Indians were more inventive in coming up with horrible tortures, but the settlers were ultimately more successful at exterminating the Indians.

We also tend to forget that the Indian Wars inflicted higher casualties in proportional terms than any other wars in American history. On the very first day of the first Indian War, between the Virginian settlers and the Powhattan Confederacy in 1622, the Indians massacred 347 men, women, and children out of the population of only 1,200. This is a casualty rate of 30 percent! By contrast, the American losses in the World Wars I and II were only 0.1 and 0.3 percent of the total U.S. population, respectively. In the Second Powhattan War, the Indians killed 500 out of 8,000 settlers. In the King Philip's War of 1675-76, about 800 Puritans were killed out of the total population of 52,000. More than half of New England's 90 towns suffered from Indian attacks. As Nathaniel Saltonstall wrote in 1676, "in Narranganset not one House [was] left standing. At Warwick, but one. At Providence, not above three." It took years for the area to recover.

The violent acts committed by the Indians on the Whites were not limited to

indiscriminant killing and property damage. During the King Philip's War, the Indian atrocities included "the raping and scalping of women, the cutting off of fingers and feet of men, the skinning of White captives, the ripping open the bellies of pregnant women, the cutting off of penises of the males," and so on. In 1675, the Wampanoag Indians raided the town of Lancaster, Massachusetts, where they killed 12 and captured 24 of its inhabitants. One of the captives, Mary Rowlandson, was the wife of a minister and later wrote a book about her experiences. During the raid, the Indians set her house on fire, forcing its occupants to leave even this inadequate shelter: "No sooner were we out of the house, but my brother-in-law (being before wounded, in defending the house, in or near the throat) fell down dead; whereat the Indians scornfully shouted, halloed, and were presently upon him, stripping his clothes. The bullets flying thick, one went through my side, and the same (as would seem) through the bowels and hand of my dear child in my arms. One of my elder sister's children, named William, had then his leg broken, which the Indians perceiving, they knocked him on the head [that is, killed him]. Thus were we butchered by those merciless heathens, standing amazed, with the blood running down to our heels." During the raid, Rowlandson's baby, sister, brother-in-law, and nephew were killed, and another child died during the forced march after the attack. She was sold by her captors into slavery to another Indian, but eventually was ransomed out, after spending three months in captivity. Her book, published in 1682, became a bestseller.

One characteristic of the Indian warfare that was particularly repellent to the Whites was the torture of captives. Here's one account of Shawnee torture published by Benjamin Franklin in the Pennsylvania Gazette in 1729: "They made the Prisoner Sing and Dance for some Time, while six Gun Barrels were heating red hot in the Fire; after which they began to burn the Soals of the poor Wretches Feet until the Bones appeared, and they continued burning him by slow Degrees up to his Privites, where they took much Pains ... This Barbarity they continued about six Hours, and then, notwithstanding his Feet were in such a Condition, they drove him to a Stake ... and stuck Splinters of Pine all over his Body, and put fire to them ... In the next Place they scalp'd him and threw hot Embers on his Head ... At last they ran two Gun Barrels, one after the other, red hot up his Fundament, upon which [he] expired."

The settlers themselves were certainly no shrinking violets, and often conducted themselves in a manner as merciless as that shown by their adversaries. During the Powhattan War, Governor Wyatt invited several hundred Indians to a peace conference, where he attempted to poison them all. About 200 became violently ill and were slaughtered by the Virginians, the rest (including the Indian leader) escaped. During King Philip's War, the

Puritans conducted wholesale massacres of noncombatants. When they captured the wife and nine-year old son of King Philip (the leader of the Indian forces), they sold them and hundreds of other captives into slavery. The Dutch also perpetrated their share of atrocities. In 1643, the Dutch soldiers attacked a village of Wappinger Indians, situated near the site of present-day Albany. The village had already endured a raid of the Mohawks, who killed and enslaved many males but spared the women and children. The Dutch slaughtered all remaining inhabitants, including women and children. They returned to New Amsterdam with the severed heads of 80 Indians, to be used in a grisly game of football on the streets of the town. In addition, 30 prisoners were tortured to death for public amusement.

These are just a few of the stories out of many illustrating the extraordinary intensity of the Indian-settler conflict in North America. A recent compilation counted more than 16,000 recorded atrocities committed by the Whites on the Indians, the Indians on the Whites, and the Indians on other Indians during the 268 years of conflict. This works out to an average of more than one atrocity a week! Actually, there were many more, because not every incident left a historical record. The impact of these incidents on the settler community when they were reported in newspapers (such as the torture story described in Benjamin Franklin's newspaper) and books (such as Mary Rowlandson's bestseller) was much greater than it would be in a preliterate society. It is hard for us to envisage the psychological impact that the continuing barrage of such reports would have on the collective psyche of the settler population. Imagine hearing on CNN that yesterday yet another American town was wiped out by the "Reds." (Let's leave the precise identity of the enemy unspecified.) All men were killed, women raped and then also slain, and those children who were not slaughtered immediately were instead carried away to be sold on the organ black market. Or that the Reds again tortured a U.S. serviceman to death, videotaped it, and showed it repeatedly on the Al Reddiyyah channel. Or perhaps an interview with a ransomed captive about her horrible experiences at the hands of the Reds. You would hear a story of this kind once a week throughout your life; and the same state of affairs was in place when your parents and grandparents grew up. Without doubt, any society subjected to such pressures for generations would be transformed.

One consequence of the life on the North American fault line was the famous American melting pot. Indeed, when confronted with such obvious aliens as painted, bloodthirsty, heathen redskins, two European settlers, even if they came from different countries, could not help but feel that they were kin. Thus, in the old Europe, although the Irish hated the English, and the French fought against the Germans, in the New World all these people cooperated

with each other and fought together against the Indians. As a result of the shared feeling that they belonged together, they and their descendants rapidly assimilated to a common American culture and language. Note also the limits of the melting pot. Because the fault line was defined in racial terms, immigrants belonging to non-White races, such as the Negroes and the Chinese, were not accepted as the "Americans." (This pattern began to change in the twentieth century.)

Another characteristic of the Americans, which was commented upon at length by that astute Frenchman Alexis de Tocqueville, was their exceptional ability to form voluntary associations. "Americans of all ages, all stations in life, and all types of disposition are forever forming associations. There are not only commercial and industrial associations in which all take part, but others of a thousand different types—religious, moral, serious, futile, very general and very limited, immensely large and very minute." As a result of this proclivity to associate, the Americans could rapidly and effectively organize concerted collective action. "If some obstacle blocks the public road halting the circulation of traffic, the neighbors at once form a deliberative body; this improvised assembly produces an executive authority which remedies the trouble ... Public security, trade and industry, and morals and religion all provide the aims for associations in the United States. There is no end which the human will despairs of attaining by the free action of the collective power of individuals." Or: "As soon as several Americans have conceived a sentiment or an idea that they want to produce before the world, they seek each other out, and when found, they unite. Thenceforth they are no longer isolated individuals, but a power conspicuous from the distance whose actions serve as an example; when it speaks, men listen."

FROM THE MONGOLS IN THE THIRTEENTH CENTURY, to the Muscovites in the sixteenth and seventeenth centuries, and then on to the Americans in the seventeenth through nineteenth centuries, we have romped through time and space. It is surprising how many things these societies have in common. The first and most obvious one is that they all were empire builders. It would not be an exaggeration to say that they built the three most powerful empires in world history. Less obviously, each of these three societies, although in its own culturally unique way, had a high capacity for concerted collective action. In fact, such a capacity seems to be a necessary condition for successful empire building. The society-level capacity for concerted action was, in turn, based on the ability of individuals to cooperate. Finally, all three peoples originated from intense and prolonged fault-line frontiers. (I have not yet presented the frontier origins of the Mongols, so for now you will have to take

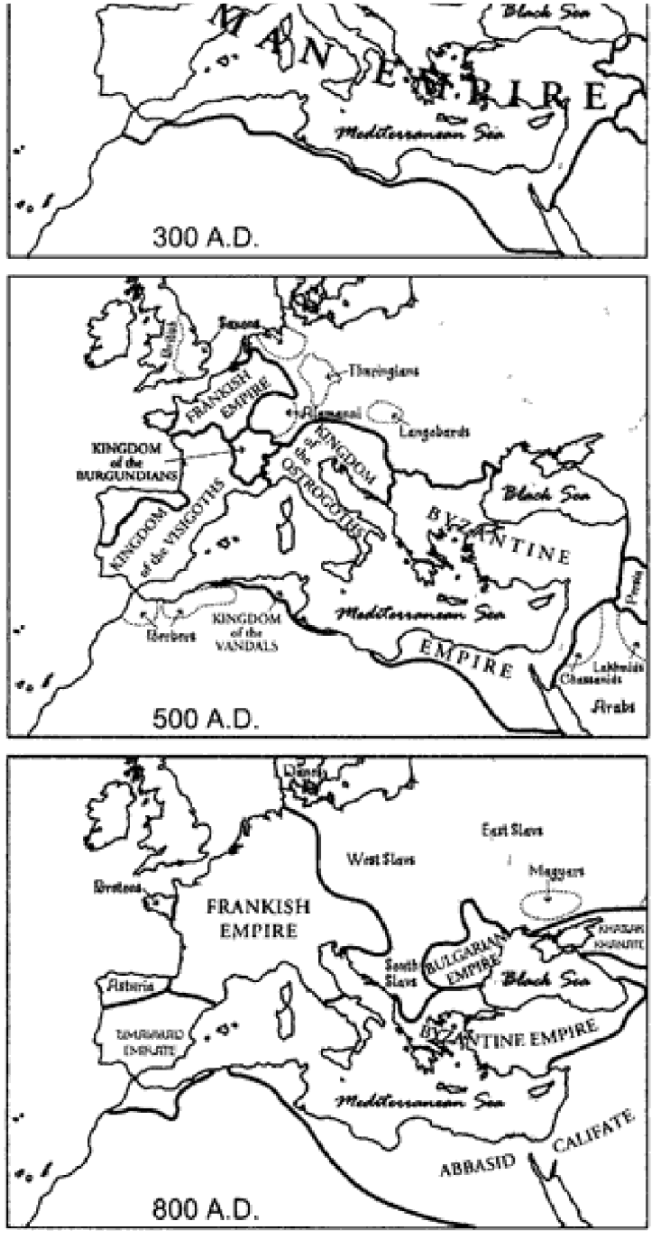
Chapter 3

Slaughter in the Forest

At the Limites of the Roman Empire

Europe and the Mediterranean during the first millennium A.D. is a good place to begin testing the frontier theory, because at the start of the period this part of the world was completely dominated by a single large state: the Roman Empire (see Map 2). Therefore, we have only one set of relatively stationary imperial frontiers to consider, which simplifies the task of tracing their influence on the subsequent development of successor states during the latter half of the millennium. If the generalization proposed in the previous chapters proves correct, all large states inhabiting the post-Roman landscape should have been established by peoples originating from the Roman frontier. We predict that neither the inhabitants of the core area of the old empire nor those living in the non-imperial "hinterland" far away from the frontiers should succeed in founding large states.

The various frontier peoples with whom the Roman Empire had to deal can be roughly categorized as follows. First, there were the inhabitants of the northern European forests, mainly the Germans and (later) the Slavs. Second, the southern frontiers were threatened by inhabitants of the African and Arabian deserts (the Berbers and the Arabs). A third category was the nomadic invaders from Eurasian steppes (the Huns, the Avars, and so on). Fourth, there was a civilized state on the Roman eastern frontier—the Parthian Empire (later replaced by the Sassanian Persia).



Map 2

The Roman Empire and its successors: (a) A.D. 300, (b) A.D. 500, and (C)

A.D. 800

After the Roman Empire collapsed (traditionally in A.D. 476, with the deposition of the last Roman emperor in the West, Romulus Augustus), it was replaced in Europe by a number of states. We are interested in large territorial states, so I only list those Roman successors that had more than roughly 100,000 square miles (0.3 million square kilometers) of territory at their peak. To put this threshold in perspective, this is equivalent to the territory of middle-sized modern European countries such as Italy or Poland.

Between 476 and 1000, Europe had seven large states: the empire of the Franks (reached the maximum area in A.D. 800 under the emperor Charlemagne), the kingdoms of the Ostrogoths (peak in 500) and the Visigoths (600), the khanates of the Avars (600) and the Bulgars (1000), the kingdom of Hungary (1000), and the Byzantine Empire (1000). In addition to the seven European states, two large states arose in the desert belt of North Africa and the Arabian Peninsula: the caliphate of the Arabs (750), and the Fatimid caliphate (960). Finally, three other states deserve mention: the kingdoms of Burgundians (600) and Langobards (600), whose size was smaller than the cut-off point of 100,000 square miles (and which were eventually annexed by the Frankish Empire), and the huge but very short-lived empire of the Huns (peak in 440), which collapsed soon after the death of its founder, Attila. In all of these cases, even the three borderline ones, frontier peoples established the empires: the Germans (Franks, Ostrogoths, Visigoths, Burgundians, and Langobards), the desert nomads (the Arabs and the Berbers), and the steppe nomads (Huns, Avars, Bulgars, and Magyars). In other words, the macrohistorical generalization proposed in Chapter 2 is splendidly confirmed. The only apparent exception is the Byzantines, but as we discuss later in this chapter, the Byzantine Empire in actuality fits the predictions of the theory quite well.

Let us now take a closer look at the ethnic groups that lived on the Roman frontier, and trace their fortunes after the Roman Empire collapsed. It is not enough to know that a strong correlation exists between location on the frontier and the rise of imperial nations; we also need to examine the specific techniques that these nations used in building empires, and what role (if any) cooperation played in this process. This chapter focuses on the northern frontier, running along the Rhine and Danube rivers; Chapter 4 covers the developments on the southern—desert—frontier.

THE ROMANS CALLED THEIR FRONTIERS *limites* (singular, *limes).* The Latin word *limes,* from which the English word “limit” is derived, originally meant a path between the fields, not a wall or an edge, as might be imagined. During the early empire, the frontiers were just that—frontier roads that made

the movements of troops easy. With time, legionary encampments turned into defensive forts, and some segments of the frontier acquired walls. (The most famous example is the Wall of Hadrian in northern Britain.) However, the roads remained and played an important integrative role for movements of peoples, goods, and ideas along the frontiers. The European frontier of the Roman Empire, furthermore, ran most of its length along two rivers, the Rhine and the Danube, which further facilitated communications.

The Roman frontier along the Rhine began to take shape during the first century B.C., after the Roman legions led by Julius Caesar conquered Gaul in a series of annual campaigns starting in 58 B.C. With the suppression of the Gallic rebellion led by Vercingetorix in 51 B.C., the Romans acquired a firm control of the whole territory west and south of the Rhine. At first, the Romans probably did not intend to create a permanent frontier along the Rhine. Caesar himself used the river as a forward defense line, and he made two incursions into the lands beyond, which were inhabited by the Germanic tribes. Toward the end of the first century B.C., the Roman legions again campaigned against the German tribes, and it is likely that the emperor Augustus planned to move the border east to the Elbe. These plans came to an abrupt end in A.D. 9, when the Germans led by a chieftain named Arminius ambushed and annihilated a Roman army of 20,000 under the legate Publius Quinctilius Varus. After this disaster—called the battle of the Teutoburg Forest—Augustus decided to construct a series of permanent defensive forts along the Rhine, thus establishing the Rhine frontier. It was to remain largely stationary (with minor fluctuations back and forth) during the next four centuries.

The Romans used the collective name *the Germans* for all nonstate peoples living east of the Rhine, but the Germans themselves did not think of themselves as a single people. Their ethnic identity instead centered on smaller tribal units, such as the Cherusci, the Chatti, the Bructeri, the Sugambri, and so on. A tribe united many villages and farms. Larger tribes could field armies consisting of a few thousand warriors. Each tribe was governed by an assembly of free adult men, called the “Thing,” which met regularly to make decisions for the tribe. The German society, however, was not egalitarian—individuals belonging to noble lineages had more power and wealth than the commoners. As the Roman historian Cornelius Tacitus wrote in his treatise on the Germans, “The leading men take counsel over minor issues, the major ones involve them all; yet even these decisions that lie with the commons are considered in advance by the elite.” At times of war, the tribal council designated a war leader, usually a member of one of the noble lineages, who had distinguished himself in previous battles and shown leadership qualities. The war leader had considerable authority in wartime, but

relinquished political power after the war was over. Another kind of leader, called the *thiudans,* served largely a religious role. The thiudans was associated with the god Tiwaz, the head of the German pantheon (before the rise of Odin, as discussed later in this chapter). Tiwaz was a typical Indo-European Skyfather (equivalent to Zeus in the Greek mythology), the god of creation, order, justice, and the natural cycles of the world. He was also the god of the Thing, and in addition to their other religious duties, the thiudans presided at assemblies.

The Romans used the same term rex ("king") for both military and religious leaders of the Germans. However, neither type had the permanent and extensive powers of the monarchs we find among them a few centuries later. Tacitus noted that "the king or a leading man is given a hearing, more through his influence in persuasion than his power in command."

The events associated with the battle of the Teutoburg Forest provide a good illustration of the German political organization, and how it was beginning to be affected by their clash with the Roman Empire. The Greek historian Cassius Dio relates the basic outline of the events. When Varus became *legate* ("governor") of the Rhineland, "besides issuing orders to them [the Germans] as if they were actually slaves of the Romans, he exacted money as he would from subject nations. To this they were in no mood to submit, for their leaders longed for their former ascendancy, and the masses preferred their accustomed condition to foreign domination. Now they did not openly revolt, since they saw that there were many Roman troops near the Rhine and many within their own borders; instead, they received Varus, pretending that they would do all he demanded of them, and thus they drew him far away from the Rhine into the land of the Cherusci, toward the Weser, and there by behaving in a most peaceful and friendly manner led him to believe that they would live submissively without the presence of soldiers....

"Among those deepest in the conspiracy and leaders of the plot were Arminius and Segimerus, who were his constant companions and often shared his mess. He accordingly became confident, and, expecting no harm, not only refused to believe all those who suspected what was going on and advised him to be on his guard, but actually rebuked them for being needlessly excited and slandering his friends. Then there came an uprising, first on the part of those who lived at a distance from him, deliberately so arranged, in order that Varus should march against them and so be more easily overpowered while proceeding through what was supposed to be friendly country, instead of putting himself on his guard as he would do in case all became hostile to him at once. And it came to pass. They escorted him as he set out, and then begged to be excused from further attendance, in order, as they claimed, to

The Suebi led by Maroboduus was specifically a name for a tribal confederation rather than a tribe. Tacitus wrote that "the Suebi, unlike the Chatti or Tencteri, do not constitute an individual tribe: They occupy the greater part of Germania, divided among the nations with names of their own, although all are called Suebi in common. It is characteristic of the tribe to dress their hair on the side and bind it up tight in a knot. This distinguishes the Suebi from the other Germani, and their free-born from their slaves." The distinctive hairstyle of the Suebi is found in numerous Roman representations (for example, on Trajan's column in Rome). It is also present on some of the bodies found by archaeologists in bogs. The best preserved is the head of a Germanic warrior found at Osterby in Schleswig-Holstein. The hair knot is a wonderful example of how people use appearance to declare the symbolic boundary between "us" and "them." In fact, the very name *Suebi* basically means "us" ("those belonging to our group"). Incidentally, the names of such modern nations as the Swedes and the Swiss have precisely the same origin. The name of the later Alamanni also expressed the same idea, but with a different means. *Alamanni* means "the (true, real) people," clearly a variation on the "us" versus "them" theme. The origin of the name the *Goths* is more obscure, but some authorities think it simply meant "people." The name for the other great confederation, the *Franks,* however, had a different logic: it means "the fierce," "the brave."

A tribal confederation, such as the Suebi, was still a fragile form of political organization during the time of Maroboduus and Arminius. The individual tribes could easily switch their allegiance from one leader to another. For example, the Langobards (who later played such an important role in Italian history) were initially part of Maroboduus's confederation. After the battle of the Teutoburg Forest, however, with Arminius's reputation at its height, they switched their allegiance to him. Furthermore, the institution of kingship was not yet rooted in the culture of the Germans. Individual tribesmen were suspicious of the royal pretensions of their war leaders, and wary of giving them too much power, which they might use to oppress the commons. Tacitus describes the process by which the tribal confederations fell apart and their leaders perished as follows.

"Now that the Romans had gone and there was no external threat, national custom and rivalry had turned the Germans against one another. The two nations [the Cherusci with allies led by Arminius and the Suebi led by Maroboduus] were well matched in strength, and their leaders equally capable. But the Suebi did not like the royal title of their leader Maroboduus, whereas Arminius was popular as champion of freedom. So in addition to his old soldiers—the Cherusci and their allies—two Suebian tribes from the kingdom

of Maroboduus also entered the war on Arminius's side [these were the Semnones and Langobards]. These additions looked like turning the scale. However, Inguiomerus and a group of his followers deserted to the Suebi, merely because the old man was too proud to serve under his young nephew.

"Each army had high hopes as it drew up for battle. The old German unsystematic battle-order and chaotic charges were things of the past. Their long wars against Rome taught them to follow the standards, keep troops in reserve, and obey commands." Tacitus then describes the speeches that Arminius and Maroboduus gave to inspire their troops for the fight.

"Besides these speeches, the armies had motives of their own to excite them. The Cherusci had the glorious past to fight for, and their new allies [the Langobards] their freshly acquired freedom from the Suebi. Their enemy's aim was expansion. Never had a result been so unpredictable. Both right wings were routed. However, instead of renewing the battle, as was expected, Maroboduus transferred his camp to the hills. This showed that he was beaten. Then, weakened by a series of desertions, he retreated...."

A year or two later, Maroboduus, deserted by all, crossed the Danube and requested asylum from his old enemies. The Romans kept him in Ravenna, "and whenever the Suebi became disorderly they were threatened with his restoration. But for 18 years he never left Italy, growing old, his reputation dimmed by excessive fondness for life."

Arminius's triumph was short-lived. "The Roman evacuation of Germany and the fall of Maroboduus had induced Arminius to aim at kingship. But his freedom-loving compatriots forcibly resisted. The fortunes of the fight fluctuated, but finally Arminius succumbed to treachery from his own relations."

These passages from Tacitus are extremely telling (not to mention the poetry of "his reputation dimmed by excessive fondness for life"). As long as a powerful external force threatened the Germans, the tribes were capable of uniting and inflicting defeats on it. When the immediate threat went, however, so did the unity. Individual tribes (such as the Langobards) or even parts of tribes (such as Inguiomerus and his Cherusci followers) shifted from one leader to another. Individual tribesmen were wary of enormous power gathered by the leader, and when war was over, desired to limit this power or even to get rid of the leader himself.

THE BATTLE OF THE TEUTOBURG FOREST was, without question, a spectacular success for the Germans. One historian even called it "the battle that stopped Rome." Yet, the Romans lost many battles in their long and illustrious career as imperialists, while always prevailing in the end. (That is, before they went into decline starting in the third century.) It is hard to avoid the feeling that, were the Romans really interested in annexing Germania, they

would have been able to do so despite the German resistance. After all, the Romans had just won their "Four Hundred Years' War" against the Gauls (discussed in Chapter 6), whose individual military prowess and social organization were very similar to that of the Germans. Beginning in A.D. 14, the Roman general Germanicus, with eight legions, conducted a series of campaigns into the lands east of the Rhine that culminated in a battle where Arminius and the Cherusci were soundly defeated. In A.D. 74, when the emperor Vespasian decided to optimize the frontier defenses, he annexed the territory east of the Rhine and south of the Main without any significant resistance from its inhabitants. The Romans, consciously or unconsciously, decided that northern Europe was not worth the trouble of conquering it. Children of the sunny Mediterranean, they heartily disliked the cold and humid climate of northern Europe. They could never be comfortable in a land of bogs and impenetrable forests in which "the trees grew close together and very high." (This aversion comes through very clear in Cassius Dio's description of the landscape through which Varus's doomed legions struggled.) Very little profit could be extracted from this land, inhabited by backward and tumultuous people. The main thing the Romans wanted from it was security, and they gradually realized that it was easier to obtain it by means of a forward frontier policy rather than by outright annexation. Accordingly, the Romans began to "domesticate" the Germanic tribes. Their decision to pension off Maroboduus was just one element of this policy. As a result, the Rhine frontier became stationary.

Ironically, the decision to establish a stationary frontier was disastrous in the long run. During the next three or four centuries, the frontier transformed the social and political organization of the Germans. Small-scale tribes of the first century B.C., such as the Cherusci and the Chatti, gave way to powerful tribal confederations of the third and fourth centuries, such as the Franks, Alamanni, and Goths, who began expanding at the expense of the aging Roman Empire. Eventually one of these confederations, the Franks, evolved into the only state in European history that managed to unify most of western Europe—the Carolingian Empire.

The forces that the Roman frontier exerted on the incipient German nations were of several different kinds. The first, and most obvious, was the military pressure, which was particularly strong during the early centuries of the frontier's existence. When Caesar led his forces into the territory of the Sugambri in 55 B.C., the Romans burned the villages and destroyed the crops in the territory they passed through. The inhabitants saved themselves by fleeing before the advancing Roman troops. The Chatti were less lucky when they were attacked by Germanicus in A.D. 15. "Germanicus completely

surprised the Chatti. Helpless women, children, and old people were at once slaughtered or captured. The younger men swam across the river Eder ....” As Germanicus advanced into their territory, the tribesmen “evacuated their towns and villages, dispersed and took to the woods. Germanicus burnt their capital, and, ravaging the open country, started back for the Rhine.” The atrocities committed by the Romans were reciprocated. For example, after the battle of the Teutoburg Forest, the Germans selected 500 prisoners to be sacrificed to the gods. According to a reconstruction by Peter Wells, these unfortunates were killed in a variety of ways: Some were hanged from oak trees; others had their heads cut off and nailed to tree trunks. Yet others were taken to the marshes, their throats cut in such a way that their blood poured into the water. Their lifeless bodies were then flung into the pool.

The wealthy and civilized society on the Roman side of the frontier produced many things that were coveted by the “barbarians”: bronze, silver, and gold ornaments and vessels; fine weapons and cloths; coins; pottery; and wine and olive oil. These items were prized not only for their intrinsic value, but also for the prestige they bestowed on the owner. Thus, drinking wine was not only pleasurable because wine tastes good—it was also an act of “conspicuous consumption” that demonstrated the high status of the wine drinker. A beautiful golden wine cup reinforced the message. Anthropologists postulate that prestige goods played an extremely important role in state formation. Of course, a chieftain aiming to become king could reward his loyal retinue with, say, cattle. Taking care of a cow, however, is a pain in the neck for a professional warrior (and not a particularly prestigious occupation), whereas a golden arm-ring of the same value is portable, maintenance-free, and a visible symbol of status.

Whereas military pressure is a “push” factor, obliterating the weak and further strengthening the strong, a source of prestige goods is a “pull” factor. Its effect, however, is the same: to increase the selective pressure for increased military strength. The Germans could obtain prestige goods from the Roman Empire by raiding, trading, or subsidies (rewards for good behavior). Raiding was an increasingly feasible option beginning in the third century, as the Roman Empire started declining. Even then, only very large tribal confederations had any chance at securing a significant amount of booty. Trading was a peaceful way to obtain goods, but it also led to increased conflict. Tribes that controlled the cross-frontier trade (because they were better situated on the frontier, or perhaps secured a trading agreement with the Romans) were resented by those who were cut off from directly dealing with the Roman traders. The obvious remedy was to defeat and displace the lucky intermediaries. Imperial subsidies caused conflict by the same logic. As a