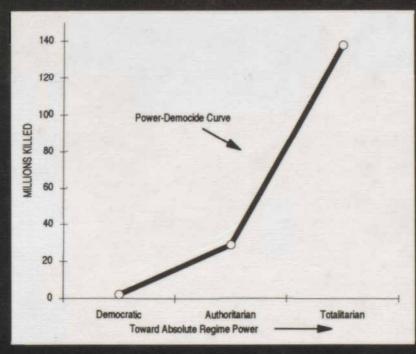
# Statistics of Democide

Rudolph J. Rummel



Genocide and Mass Murder since 1900

LIT

## Statistics of Democide

# Macht und Gesellschaft

Band 1

Rudolph J. Rummel 'DEMOZID' – der befohlene Tod Massenmorde im 20. Jahrhundert (Übersetzung aus dem Amerikanischen) Mit einem Vorwort von Yehuda Bauer

Band 2

Rudolph J. Rummel Statistics of Democide Genocide and Mass Murder since 1900 (Materialien zu: 'DEMOZID' – der befohlene Tod. Massenmorde im 20. Jahrhundert)

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Rudolph J. Rummel

LIT

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#### Foreword

Between 1985 and 1991, it was my great honor to serve as the first Chairman of the Board of the United States Institute of Peace, which was established by Congress to promote scholarship and education about the causes of war and serious approaches to international peace. One of the Institute's statutory functions is to make grants to institutions and individuals, and one of the great joys of serving on the Board was being able to review some of the impressive proposals for which funding was being sought.

It was through this process that I first met Professor Rudy Rummel; and in my opinion, had the Peace Institute done nothing else, it would have fully justified its existence by the role it played in furthering the scholarly pursuits of Professor Rummel and some of his colleagues engaged in what we today know as the theory of the Democratic Peace. For, in my view, this important work has produced a paradigm shift in serious academic thinking about the true causes of international conflict. Professor Rummel's nomination in 1996 for the Nobel Peace Prize was a logical consequence of his tremendous contributions in this field.

As I have been privileged to get to know Professor Rummel better during the past decade and have read his books and reviewed new manuscripts, I have continually been impressed with his expertise, with the precision with which he researches his subject, and with the thoroughness and clarity with which he presents his findings. Over the past three decades, Professor Rummel has researched, written, and published a dozen volumes, including: Understanding Conflict and War (Vol. 1-5, 1975-1981), Lethal Politics: Soviet Genocide and Mass Murder Since 1917 (1990); China's Bloody Century: Genocide and Mass Murder Since 1917 (1990); China's Bloody Century: Genocide and Mass Murder Since 1900 (1991); The Conflict Helix: Principles and Practices of Interpersonal, Social, and International Conflict and Cooperation (1991); Democide: Nazi Genocide and Mass Murder (1992); Death By Government (1994); The Miracle That Is Freedom: The Solution to War, Violence, Genocide, and Poverty (1996); and Power Kills: Democracy as a Method of Nonviolence (1997), which have assured him enduring stature as a seminal thinker on such important and interrelated issues as democide (genocide and government mass murder) and the Democratic Peace.

The Center for National Security Law takes great pride in making available to scholars the fifth and final volume of Professor Rummel's series on democide. *Statistics of Democide: Genocide and Mass Murder Since 1900*, constitutes the most comprehensive collection of scholarly data on democide currently available, and provides the detailed statistical foundation upon which Professor Rummel's other works have been based. With this volume, scholars will be able not only to examine Professor Rummel's work and ultimately contribute even further to our understanding of these issues.

John Norton Moore Walter L. Brown Professor of Law and Director, Center for National Security Law

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## Preface

In the associated volume, *Death by Government*,<sup>1</sup> I described fourteen cases in which since 1900 a regime murdered or is suspected of murdering over 1,000,000 subjects and foreigners. Four of these regimes, the Soviet Union, communist China, Nationalist China, and Nazi Germany, each killed 10,000,000 or more unarmed and helpless men, women, and children.

I also gave some descriptive statistics on these and all 204 other cases of *democide* (genocide, politicide, massacres, extrajudicial executions, and other forms of mass murder) by state and quasi-state regimes, and non-state groups. These revealed democide's incredible magnitude in this century and well showed the close relationship between the extent of a regime's totalitarian power, or Power in short, and democide. My conclusion was that Power kills, absolute Power kills absolutely.

In 1986 I began this work on democide in order to complete tests of democracy as inherently a structure of non-violence and positive peace. I had shown in previous work that democracies do not make war on each other, and that the more liberally democratic—the more freedom people have—the less their foreign and domestic collective violence.<sup>2</sup> Democracies as a sphere of peace has by now been well established in the literature,<sup>3</sup> as has the negative correlation between democracy and domestic violence, such as riots, coup d'états, revolutions, and guerrilla warfare.<sup>4</sup> The one controversial finding is that democracy is inversely related to foreign violence. As a side product of this work on democide I will present findings in chapter 21 to further substantiate this relationship.<sup>5</sup>

As of 1986 what remained to be tested was an often asserted negative relationship between democracy and murderous government violence

<sup>&</sup>lt;sup>1</sup>Rummel (1994).

<sup>&</sup>lt;sup>2</sup>See Rummel (1975-1981, Vol. 4; 1983; 1984; and 1985).

<sup>&</sup>lt;sup>3</sup>See, for example, Ray (1995), Rummel (1996), Russett (1993), and Weart (1994, 1996).

<sup>&</sup>lt;sup>4</sup>For collations of these results, see Rummel (1985, 1996).

<sup>&</sup>lt;sup>5</sup>I have given a detailed consideration of this question in Rummel (1995, 1996) and find empirical analyses generally support the proposition that democracies are less warlike than other types of regimes.

against citizens or foreigners. Moreover, it also made good theoretical sense that the less liberally democratic and more totalitarian a regime, the more people it murders. Unfortunately, good comparative data on democide for testing this did not then exist.

Accordingly, after a preliminary pilot study,<sup>6</sup> I applied for a grant from the United States Institute of Peace to pursue the data collection and testing of the relationship between democide and democracy. This I was granted for two years, subsequently renewed for another three.

Collecting data on democide was an horrendous task. I soon was overwhelmed by the unbelievable repetitiveness of regime after regime, ruler after ruler, murdering people under their control or rule by shooting, burial alive, burning, hanging, knifing, starvation, flaying, beating, torture, and so on and on. Year after year. Not hundreds, not thousands, not tens of thousands of these people, but millions and millions. Almost 170,000,000 of them, and this is only what appears a reasonable middle estimate. The awful toll may even reach above 300,000,000, the equivalent in dead of a nuclear war stretched out over decades.

I found that so much of this killing was unknown or ignored by so many that I decided to publish part of the data and case studies of the worst of the megamurderers as separate volumes. Thus I wrote *Lethal Politics* on the Soviet Union, *China's Bloody Century* on Nationalist and communist China, and *Democide* on Nazi Germany.<sup>7</sup> In *Death by Government* I focused case studies on the lesser megamurderers, such as the Cambodian Khmer Rouge, the Pakistan military in what is now Bangladesh, Japan's military fascists in World War II, and Turkey's Young Turks in World War I. However, space was not available in that book to also present all the estimates, sources, and calculations that underlie the case studies and their democide totals.

That is in part the purpose of this book. Here I do two things. First I list all the relevant estimates, sources, and calculations for each of the case studies in *Death by Government*, and all additional cases of lesser democide for which I have collected data. This is a total tabulation, with the result that some of the tables are over fifty pages long. The value of this is the listing of each source, its estimate, and comments qualifying the estimate. From these others can check and evaluate my totals, refine and correct them, and build

<sup>&</sup>lt;sup>6</sup>Rummel (1987).

<sup>&</sup>lt;sup>7</sup>Rummel (1990, 1991, 1992).

on this comprehensive set of data. These data are presented and annotated in Chapter 2 for pre-20th century democide, in Part 1 for the megamurderers, and in Part 3 for the United States and lesser murderers. All data sources referenced in the democide tables are listed in the references beginning on page 473.

The methodological underpinnings for this collection have been given in previous books<sup>8</sup> and I will not repeat them here. I will simply note that I recognize how error full, approximate, and politically biased so many of these estimates may be. I have tried to approach the best overall estimate of democide for a regime, therefore, by determining its best upper and lower bounds, which are given for all estimates tabulated here. The estimates themselves are what appear to me to be the most reasonable or probable within these low-high bounds. Thus my estimate for the Filipinos murdered by the Marcos regime of the Philippines, 1972-1986, is 15,000, which is bounded by a possible low democide of 10,000 and high of 25,000. That is, Marcos is responsible for the murder of 10,000 to 25,000 Filipinos, most likely 15,000.<sup>9</sup>

Second, having finished collecting all these data and completing the major case studies, I finally could systematically test the assumed inverse relationship between democracy and democide. That is the substance of this book. I detail the tests in Part 3 and summarize them in the introductory chapter. My conclusion is that the diverse tests are positive and robust, that the less liberal democracy and the more totalitarian a regime, the more likely it will commit democide. The closer to absolute power, the more a regime's disposition to murder one's subjects or foreigners multiplies. As far as this work is concerned, *it is empirically true that Power kills, absolute Power kills absolutely*.

<sup>8</sup>See Rummel (1990). <sup>9</sup>See table 15.1, lines 2687-2747.

## Acknowledgments

As I acknowledged in *Death By Government*, many colleagues, students, and readers of previous chapter drafts contributed to this effort through their ideas, comments and suggestions, recommendation of sources, estimates, or material they passed on to me. I wish to acknowledge their help here also, for they not only contributed to the case studies but in many ways also to the democide estimates. In particular I want to thank Rouben Adalian, Belinda Aquino, Dean Babst, Yehuda Bauer, Douglas Bond, Israel Charny, William Eckhardt, Wayne Elliott, Helen Fein, Irving Louis Horowitz, Hua Shiping, B. R. Immerzeel, Benedict Kerkvliet, Milton Leitenberg, Guenter Lewy, Heath Lowry, J. C. Ramaer, Rhee Sang-Woo, Max Singer, Robert F. Turner, Spencer Weart, Christine White, and J. A. Willinge. I remain particularly indebted to my colleagues Manfred Henningsen and George Kent for their help and support throughout this and the previous work. I absolve them all, however, of any guilt by association with this and the previous volume.

I also am indebted to the United States Institute of Peace for a grant to my project on comparative genocide, of which this book is a part. The views expressed here are mine and do not necessarily reflect those of the Institute or its officers.

And I am especially grateful to Robert F. Turner and John Norton Moore for their support and encouragement and for the publication of this work by John Norton Moore's Center for National Security Law at the University of Virginia.

Finally, as helpmate, friend, critic, my wife Grace is always there. I cannot adequately express my indebtedness to her. Again, thanks sweetheart.

1

## Summary and Conclusions

The heart of this book is the quantitative analysis of all the state regimes, 141 of them, that committed democide—genocide and mass murder—in this century and seventy-three regimes that did not. My overall aim was to test the theoretical hypothesis that the more democratic a regime, the less democide; the less democratic and more totalitarian a regime, the more democide.

I had already found this hypothesis consistent with the case studies of all megamurderers that I reported in my *Death By Government*<sup>1</sup> and with the limited statistical analyses I reported there. As a result of that work I restated the hypothesis as a social principle: Power kills, absolute Power kills absolutely. The diverse analyses I give here consistently and solidly further confirm this.

In sum, among a variety of socio-economic, cultural, social diversity, geographic, and other indicators, the best way of accounting for and predicting democide is by the degree to which a regime is totalitarian. That is, the extent to which a regime controls absolutely all social, economic, and cultural groups and institutions, the degree to which its elite can rule arbitrarily, largely accounts for the magnitude and intensity of genocide and mass murder. The best assurance against this democide is the democratic openness, political competition, regularly scheduled elections, and limited government of a free people.

That Power kills is the primary and for domestic democide singular general explanation of democide. This is true even when we consider how regimes differ in their underlying ethnic, religious, and racial diversity. It is true when we consider whether they are Christian or Moslem, or the cultural region they are from. It is true when taking into account their different levels of education or economic development. It is true for their differences in sheer size. And it also is true even for the trend of overall democide through time.

However, the tendency of regimes to fight severe domestic rebellions or foreign wars also predicts democide. But for both rebellions and wars Power is also a causal agent. The more totalitarian a regime's power, the

<sup>&</sup>lt;sup>1</sup> Rummel (1994)

more total its wars or rebellions are likely to be; and the more totalitarian power and bloody its wars and rebellions, the more it probably will commit democide.

I can best sum up the conclusions of this book by three charts reproduced from later chapters. The first, figure 1.1, shows the mean domestic democide (logged) at different levels of totalitarian power.

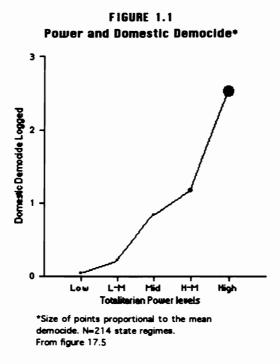
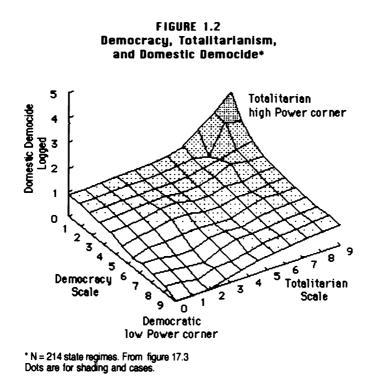


Figure 1.2 displays how the democratic and totalitarian scales making up totalitarian power act together to sharply increase democide the more closely a regime is to absolute Power. Finally, figure 1.3 shows the yearly trend over this century of democide, democide by totalitarian regimes, and that by democratic ones. These figures speak for themselves.

For the rest of this summary I will briefly sketch the questions and considerations, techniques and methods used, and results of the statistical chapters. My purpose is to communicate an understanding of the enterprise that may get lost among the diverse statistical considerations involved in each chapter. I applied a variety of analyses, including analysis of variance, multiple linear and curvilinear regression, component (factor) analysis, canonical analysis, and discriminant analysis. And I used plots extensively to uncover or display relationships. The paramount question throughout was whether the principle that Power kills holds up under a variety of methods, under diverse ways of partialing the data on democide and politics, and different conditions.

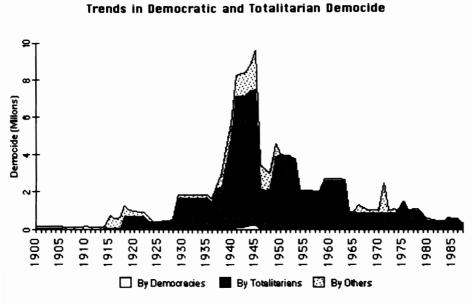


The theoretical framework within which I carried out these analyses was social field theory.<sup>2</sup> This theory not only emphasized Power and explained why it should account for democide and other social violence, but it provided a perspective on social reality within which I could select methods, techniques, and variables and interpret the empirical results. At its

<sup>&</sup>lt;sup>2</sup> In Rummel (1996, Part 2) I develop the theoretical argument for the inverse relationship of democracy to collective violence and democide.

core is the idea that society is a field of *interrelated* social phenomena; that their manifestations are carved into social concepts through trail and error, learning and response; and that underlying these social manifestations are forces, causes, and conditions that are fundamentally unknowable, but that can be bracketed in various ways. Thus throughout the analyses I have emphasized the social space of many and diverse variables, their empirical patterns and trends, defining indicators of these patterns, and looking at all these interrelationships through different analytical lens. This approach differs significantly from, for example, simply selecting a dependent variable and some dozen independent variables, carrying out a step-wise multiple regression, and interpreting the results as final.





<sup>\*</sup>For all democide for each year. From figure 23.4

With all this as background, the first empirical problem was to define the empirical patterns of democide and their best indicators. To this end I subjected fourteen different kinds of democide, including deaths from genocide, concentration camps, forced labor, terror, massacres, and the like, to various component analyses. This is a powerful and robust method for defining independent empirical patterns in data and partialing out the influences of third, fourth, and other variables. The democide patterns thus uncovered were five, one centrally involving domestic democide and another foreign democide. A third pattern had at its center the domestic democide annual rate; a fourth the democidal bombing dead. Genocide stood out by itself as a singular pattern. The five patterns are statistically independent, which means that in general domestic and foreign democide and the other patterns have quite different specific causes and conditions, although Power may still be a general cause.

With the empirical patterns of democide in the social field thus defined, the next problem was to test for the stated relationship between a democracy versus totalitarianism dimension—Power—and these empirical patterns. The theoretical expectation was that Power would be most related to domestic democide, genocide, and the annual rate of democide, while the islands of Power created even within democratic regimes in time of war would obfuscate the relationship between Power and foreign democide.

To test this demanded quantifying Power beyond the simple threepoint scale of democracy, authoritarianism, and totalitarianism used in *Death By Government*. The logic of the Power principle also demanded including in the analysis state regimes that had not committed any democide. Accordingly, I added an additional seventy-three such regimes with no democide to the 141 with. I selected these to reflect the major variation among political characteristics, as well as the major cultures and geographic regions. The resulting sample of 214 state regimes was the basic sample in all subsequent analyses and comprised about half of all state regimes that existed sometime during 1900 to 1987.

To then best quantify Power, I created or selected from the literature seventeen measures of a regime's political characteristics, such as whether it had an elected legislature, was communist, the extent of its political power, the power of the traditional elite, the degree of political competition, and so on. I then applied component analysis to these measures and delineated five statistically independent political patterns. By far, the most dominant pattern was that of *totalitarian power* (or Power for short—this now empirically defines what I meant by Power in *Death by Government* and previous pages), best indicated by an inverse combination of democratic and totalitarian scales (those used in figure 1.2) that I labeled Total-Power. This became the basic indicator of Power for all subsequent analyses. The other political patterns comprised political power, traditional elite power, monarchy, and authoritarianism versus totalitarianism.

With these patterns so defined, I could carry out the tests of Power's relationship to democide. I did this first by determining how the patterns of democide and politics were interrelated. I should find that TotalPower would be most related to the democide, genocide, and annual rate patterns, and this is what resulted from component analysis. Indeed, the three demo-

cide patterns combined into one interrelated cluster, at the center of which was TotalPower. Secondly, I did an interactive regression analysis of the different democide patterns on all the political characteristics and selected interaction terms (e.g., TotalPower squared). I found, as I should have, that for the three democide patterns, TotalPower was the best and only significant predictor. For domestic democide and the annual rate, this was TotalPower squared, which means that as regimes approach absolute Power the effect of Power on democide multiplies.

This effect was verified through the three-dimensional surface plot reproduced above as figure 1.2. Moreover, a triangular plot of democratic, totalitarian, and authoritarian scales further showed the sheer dominance of the totalitarian end, that is of absolute Power, in accounting for the domestic democide pattern. A plot of the mean domestic democide for different levels of TotalPower, reproduced above as figure 1.1, and the contingency analysis of different domestic democide magnitudes against different levels of TotalPower, further confirmed and displayed this fundamental connection.

This should not end the tests, however. The observed relationships were within a social field in which many underlying forces and conditions could produce misleading empirical results, even creating high correlations that disappear when other measures are taken into account. So I did several additional analyses to test what I had so far found.

One popular explanation for the linkage between Power and democide is the existence of significant racial, ethnic, religious, national, and other such minorities. Indeed, this social pluralism may be the underlying cause of democide and the Power correlation only epiphenomena. To determine if this were so, I first had to quantify social diversity. I did this by selecting from the literature eight measures of social diversity, including those of ethnic divisions, religious divisions, overall diversity, and national disunity. As for the previous analyses, I reduced these measures through component analysis to their basic patterns, which are two. One is a very strong general pattern defined by a general diversity index, and the second a single variable pattern comprising a percent measure of the minorities at risk under a regime.

I then did a component analysis of the two indicators of social diversity together with the indicators of the democide patterns. In contradiction to what the literature would predict, there was absolutely no relationship between diversity and democide patterns or indicators. This was further confirmed through a scatter plot. These results alone say much, for they show that in spite of the obvious relationship between race or ethnicity in such cases as the Holocaust and Turkey's genocide of its Armenians, in general diversity and democide, including genocide, are statistically uncorrelated.

But this finding is a preliminary to further tests of the relationship between democide and Power. To do this I next included all democide, political, and diversity indicators together in a component analysis. The relationship between Power and democide was unaffected, showing that diversity is not a situational explanation or condition for this relationship. This also is true even when I did the analysis within high and low diversity groups alone.

However, it may be instead that culture is responsible for the Powerdemocide linkage. Following the same procedures as above, I quantified the culture of a nation through fourteen measures, including the percent Christians a regime governed, the percent Moslems, whether anti-women or not in terms of pro-women legislation, clan basis, and six regional dichotomous measures locating regimes in one of the major cultural areas, such as Europe, Central and South America, and South Asia. I did the usual component analyses to isolate the cultural patterns and select their indicator. The major cultural patterns among all 214 regimes are African, Moslem, Latin American, Asian, and those with an English influence. When I did a component analysis of their indicators along with the five for the democide patterns, as I had done for diversity, I could uncover no relationship between culture and democide.

The more significant component analysis came next, for then I included with the cultural and democide indicators, those for politics and social diversity. Again, there was no effect on the positive relationship between Power and domestic democide. Nor did the inclusion of culture alter the lack of relationship between diversity and democide.

This is the general finding for all 214 regimes. It may be, however, that when the analyses are carried out within a cultural pattern or region, interrelationships may change. And they do for some regions. For non-Moslem, European, or Asian regimes there is no significant change in the Power-democide connection. For Christian regimes the relationship is less strong. For Central/South American regimes a relationship between Power and democide is still there but made more complex; only for African and Moslem regimes is the connection eliminated altogether. These results warn against assuming without further analysis that within all cultural regions Power and democide go together in a straightforward way.

Still, for most cultural regions and in general the principle that Power kills holds simply and solidly. But if social diversity and culture generally do not affect the relationship, perhaps the education of a regime's people, or their socio-economic development and modernization may inhibit democide or change the Power-democide equation. Perhaps the critical context is whether a nation is large or small, or has many or few people. Relying particularly on the accumulated results of published cross-national component and factor analyses, I selected twenty-one indicators of the major independent, empirical socio-economic and geographic cross-national patterns. Among these the dominant one I tried to index is wealth, a comprehensive pattern among nations that includes measures of economic development, the quality of health, the transportation system, educational attainment, and the like. The second pattern involves political variables, essentially reflecting the dimension of Power already measured. The third is national power, the natural and demographic resources available to a regime, and for obvious reasons I was particularly interested in seeing it well represented in the analysis. Measures of other patterns, such as that of population density, were also included.

As I did for the political, social diversity, and cultural measures, I first component analyzed these twenty-one socio-economic and geographic measures to find their empirical patterns for the 214 regimes. There was no surprise. Among the 214 regimes the same patterns found in cross-national data emerged, primarily wealth, national power, and density. I then included the indicators of these and the other socio-economic patterns in an overall component analysis of all the democide, political, diversity, and cultural indicators, twenty-four in all. This was now a near comprehensive analysis of the social field and the context within which democide occurs (only leaving out measures of war and rebellion soon to be discussed). What happened? No change. Power remained tied in with domestic democide, and no other measure besides political power had any even moderate relationship to domestic democide.

It may be, as with cultural regions, that there is a difference here between rich and poor regimes. I thus redid the analysis within each of these groups. Although there were some shifts among patterns and correlations, the relationship between domestic democide and Power remained.

Finally, I filled out the context of democide by including in the analysis the number of war and rebellion-dead for each regime. These are especially important. Unlike the other contextual measures that I included (either because they were favored in the literature as causes or conditions of democide or they filled out the social field) I had a theoretical reason to expect these measures of non-democidal violence to be highly correlated with democide. They manifest or themselves bring about a breakdown in the structure of expectations and supporting balance of powers within a society and its regime. Thus war and rebellion catalyze democide, promote it (as in democidal urban bombing), or provide an excuse and cover for it to be committed. Moreover, one would expect that the more warlike a regime the more likely it would commit democide. And this comes out quite clearly when both war-dead and rebelliondead are component analyzed along with the democide patterns. The number killed in rebellions during the life of a regime is highly related to its domestic democide; its war-dead to foreign democide. These then are tough tests for Power. Will Power remain related to democide when I include these measures of rebellion and war with them in a component analysis? The answer is a straightforward yes. There is no change in the Power-domestic democide nexus.

Even when I put all the indicators of democide, politics, diversity, culture, etc., together and component analyze them, the relationship between domestic democide and Power remains largely the same. And the characteristic severity of rebellion is correlated with the domestic democide pattern; the characteristic severity of war with foreign democide.

The causal linkages for the Power-democide-war-rebellion connections are theoretically clear. Power not only causes democide, but also the bloodshed in a regime's wars and the rebellions against it. And a regime's characteristic involvement in such violence is also related to its democide. *Power thus directly causes democide, while also indirectly causing it through its influence on the occurrence and characteristic severity of rebellion and war.* Several plots were made to test for this relationship of Power to war and rebellion, which with the exception of the war-dead of the democracies in World War II—a war unleashed by totalitarian power—were consistent with the theory.

Up to this point I have shown that for all 214 regimes, including all 141 with democide of some sort, an indicator of an empirical pattern of Power among a variety of political characteristics of regimes is most highly correlated with a pattern of domestic democide (which also involves genocide and the annual democide rate), as expected by theory. Second, I have shown that a variety of contextual measures spanning the social field of regimes have virtually no effect on this relationship in general. Indeed, the correlation of Power with domestic democide is second to none and almost unique except for political power and the characteristic intensity of rebellions against a regime.

But this has been a social field type of analysis, relying on component analysis as the main vehicle for uncovering interrelationships and partialing out contextual and situational influences. What would happen with straightforward regression analysis? Now regression analysis is a useful way of assessing how well the variation in a variable can be accounted for (the favored term is "predicted") by some other variables. I have already used regression analysis to verify the dominant role of Power among political patterns alone in predicting domestic democide. Now I will use it to successively regress the overall democide itself and then the different democide patterns on all the political, diversity, cultural, etc., indicators together, and some theoretically specified interaction terms, such as Total-Power squared, war-dead squared, and an indicator of national power times war-dead; twenty-four independent variables in total.

As a result, the best predicted (accounted for, explained) was overall democide (which includes both domestic and foreign democide, of course), with six indicators predicting over 70 percent of the variation in domestic democide across 214 regimes. And the best predictor was TotalPower squared. As in the previous regression with Power, its causal influence is magnified the nearer to absolute Power (see figure 1.2, for example). The lesser but significant predictors involved rebellion-dead, war-dead, and national power or their interaction terms. I then did a contingency table analysis of the actual versus predicted domestic democide resulting from this regression and found that Power and the other five significant indicators or interaction terms were able to well predict regimes committing no or little democide, *as well as the megamurderers*.

However, a difficulty with regression is that only one dependent variable can be analyzed at a time. Consequently, I also used canonical analyses, which enabled me to take the democide space of the fourteen types of democide—the raw democide data I began with—and fit it to the space of all twenty-three independent indicators, including interaction terms. Canonical analysis is like component analysis, except that rather than delineating independent patterns among all the variables, one is finding the independent patterns among one set of variables that best fit another set. The result of applying this method was a pattern of social indicators that accounted for 85 percent of the variation in a pattern of democide across all 214 regimes. The best indicators of this were Power, national power, and war and rebellion-dead or their interaction terms.

I also did a discriminant analysis. This is a form of canonical analysis, except the dependent variables comprise categorical groups. In my case, the groups were those with no or little democide, with democide between 1,000 to 9,999 killed, between 10,000 and 99,999, and so on for up to the group of deka-megamurderers. I found essentially the same small set of predictors that came out of the regression and canonical analysis. As clear from a contingency analysis of the results, these indicators and interaction terms, centrally involving Power, war, and rebellion, were well able to predict whether regimes had democide and at what level.

Finally, I looked at total democide by year for all the regimes. I found, as figure 1.2 shows, that democide peaked during World War II, that it is related through time to the severity of war and rebellion, and especially that by far the larger part of the overall democide trend is due to that committed by totalitarian power—that is, Power.

2

## Pre-Twentieth Century Democide

The mass murder of their own citizens or those under their protection or control by emperors, kings, sultans, khans, presidents, governors, generals, and other such rulers is very much part of our history. In ancient times captured cities or towns would be pillaged and their inhabitants massacred; whole lands would be turned into regions of ruins and skeletons. Such genocide, massacre, and human slaughter, pillage, rape, and torture have been more common than war and revolution.

Even close to our time people have been murdered in the millions, as in the Teiping Rebellion in China in the mid-18th century. Of all pretwentieth century killing—massacres, infanticide, executions, genocides, sacrifices, burnings, deaths by mistreatment, and the like—that for which corpses have been counted or estimated, surely but a fraction, add up to a range of near 89,000,000 to slightly over 260,000,000 million men, women, and children dead. An appropriate mid-range democide estimate might be around 133,000,000 killed.

Table 2.1 lists the estimates, sources, and calculations for this pre-20th century democide. I will not go into detail on these estimates and calculations as I will do subsequently for the 20th century tables. This is not a comprehensive or exhaustive collection, nor is it even thorough for many of the cases covered, such as the Mongol massacres. It mainly consists of estimates that I have come across while doing research on 20th century democide, or those for democides that I was particularly interested in because of their infamy or mortality, such as the inquisition (lines 13 to 37 in table 2.1), slavery (lines 39 to 92), witch hunts (lines 119 to 125), murder of Indians (lines 137 to 212), and Mongol mass killing (lines 441 to 535). Even for these cases, the estimates are only exemplary. Moreover, the estimates are clearly biased toward the later centuries. Estimates for democide by ancient empires and civilizations are not easily available, although historians insist that the Assyrians, among others, wiped out whole peoples.

In some cases I have dared to make my own estimates, almost always a democide minimum. Such was the case for those natives who died from forced labor by the colonial powers (line 4). I estimate this toll to be at least 10,000,000 dead. While this may seem high at first, it would amount to only slightly over 4,700 natives dying or killed per year in forced labor for each of seven European colonial powers, or an annual death rate of almost 5 percent per 100,000 forced laborers. This estimate is surely too low for the 17th to 19th centuries, given the lethal conditions for much of this labor and an annual death rate that in some cases may have exceeded 20 percent. Indeed, even in the early years of our century, for example, the death rate of forced laborers on some plantations in the German African colonies may have been as high as 25 percent.<sup>1</sup>

There is also a strong bias toward events that historians consider important or significant. The democide estimates are usually episodic, therefore. But most killing really takes place in an everyday manner, such as by a human sacrifice every Friday, commoners killed at the desire of nobles or kings, an unwanted infant legally strangled, the assassination of a royal opponent, or the death of slaves or prisoners from mistreatment or overwork. Yet across empires and nations and centuries such everyday killing must have accumulated to much more than the total here. Simply consider this. If from the rule of the first of the Roman Emperors (Augustus Octavian) in 27 B.C to the last (Romulus Augustulus) who ruled until 476 A.D., only 100 galley slaves died annually from overwork and mistreatment, then this alone would add up to a democide of 50,300 people. Now say that on the average for the whole empire the Romans killed a not unreasonable annual total of 10,000 infants, slaves, prisoners, Christians, inhabitants of defeated tribes and nations, and dissidents and opponents. Then for the reign of Roman emperors this would add up to a democide of over 5,000,000 people-just for this one empire. Therefore, the 89,158,000 to 260,424,000 range of total people killed I get in table 2.1 (line 747) for all pre-20th century democide of all civilizations, empires, nations, and tribes, should be viewed as but a small part of the real total.

But how small? To get some sense of this, see table 2.2. Based on the range of 20th century democide determined in table 16A.1 and the estimated world population for each century since the 30th century B.C. (near in time to the development of Egyptian hieroglyphics and the unification of Egypt under Menes), I calculated the hypothetical democide for each century. Alternatively, I started the democide calculations for the century having the earliest estimates of mass murder in table 2.1, which is the 5th century B.C. (the time of Socrates, Pericles, and the Peloponnesian Wars).

The results of adding up these century-by-century calculations are shown in table 2.2 (lines 50 and 51). For both alternative calculations the

<sup>&</sup>lt;sup>1</sup> German African Possessions (Late) (1969, No. 114, p. 23).

high is over a billion people killed; the lows are near a third of a billion people; and the mid-values near two-thirds or a half of a billion. For comparison I also repeat (line 52) the sum of the estimates and calculations in table 2.1. Focusing on the mid-values the actual total (line 52) is about one-fifth of the tallied murders since the age of hieroglyphics; about one-fourth since the age of Pericles.

For a final comparison I took the actual amount of democide determined for the 20th century (table 16A.1) and extrapolated it for the full century, with the result shown in table 2.2 (line 53). Note that the full 20th century mid-value democide is comparatively high—over a third of the calculated democide during twenty-four centuries, 5 B.C. through 19 A.D. (line 51). Since the actual 20th century democide rate was used to calculate the previous per-century democide, the surprising closeness of the 20th century to the total pre-20th century toll is due to the sharp drop-off of world population as one moves back towards the most ancient centuries. For example, it took thirty-six centuries—from 30 B.C. until 6 A.D. for the global population to reach just 200 million people. It did not achieve a billion until 1850.<sup>2</sup> It should not be missed that the mid-value of the full 20th century democide is *more than the total world population at the time of Christ*; the actual democide from 1900 to 1987 is greater than the estimated world population at the time of Plato, Aristotle, and Confucius.

Comparisons to the deadliness of international wars can also be made. Now the war-related deaths tabulated per century in table 2.2 no doubt include war-related democide (as tabulations of the civilian toll during World War II usually do). Even with this swelling of the war dead totals, the accumulated pre-20 century war related deaths (lines 50 and 51) are only about 6 to 7 percent of the mid-value democide. For just those historical democide estimates I have been able to find or make here, pre-20th century democide has been around 16 to 17 times more lethal than war.

<sup>&</sup>lt;sup>2</sup> The World Almanac and Book of Facts (1992, p. 503).

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atterson, 82,164	minimum enslavement dead regarding import into the New World.