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Domestic Ethnic Conflict and Ethnic Nepotism: A Comparative Analysis

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Ethnic conflict seems to be common in all countries of the world where people are divided into separate ethnic groups, that may have a racial, national, linguistic, tribal, religious or caste basis. In this article it is proposed that a significant part of the universality of ethnic conflict can be explained by our evolved predisposition to ethnic nepotism, which can be regarded as an extended form of nepotism. Evolutionary theories of inclusive fitness and kin selection explain the origin and universality of nepotism. The members of an ethnic group tend to favour their group members over non-members because they are more related to their group members than to outsiders. This disposition to favour kin over non-kin becomes important in social life and politics when people and groups of people have to compete for scarce resources. Two hypotheses on political consequences of ethnic nepotism are presented: (1) significant ethnic division tends to lead to ethnic interest conflict in all societies and (2) the more a society is ethnically divided, the more political and other interest conflict tend to become channelled into ethnic lines. These two hypotheses are tested by empirical evidence for 183 contemporary states. The hypothetical concepts 'ethnic division' and 'ethnic conflict' are operationalized into empirical variables. The results support the two hypotheses. Deviating cases underline the importance of other relevant factors behind ethnic conflict and violence.

Introduction

The purpose of this article is to summarize the major results of my current comparative study of ethnic conflict. The study covers 183 contemporary states over the period 1990–96. The idea of this study is to formulate a theoretical explanation for the universality of ethnic conflict and to test it by empirical evidence. This theoretical explanation assumes that all human populations share the same evolved behavioural predisposition to ethnic nepotism.

Social scientists have studied intensively different aspects of ethnicity and ethnic conflict, especially since the 1970s, but they have not yet found or agreed on any satisfactory theoretical explanation. Different terms are used to describe ethnicity and ethnic conflict, with the terms ethnic, national, primordial, cultural, tribal, racial, linguistic, caste and communal being used to describe conflicting groups. Some researchers speak of ethnicity and ethnic conflict; others speak of nations, nationalism, ethno-centrism. ethno-nationalism, minorities, ethno-political conflict, communal conflict, or they use other terms. Definitions of ethnic groups and ethnic conflict vary greatly. Previous attempts to explain ethnic conflict theoretically provide a solid foundation for contin-

^{*} The data for the variables used in this article are given and documented in my forthcoming book (Jai Press) on ethnic conflicts and ethnic nepotism and can be obtained from www.prio.no1\jpr\main.htm. I would like to thank the Editor and the *JPR* referees for their very useful comments on earlier drafts of this article and for editing suggestions.

uing this research tradition. However, my intention is not to review the history of ethnic studies, or to discuss the merits of various hypotheses and theoretical explanations in this article.¹

One important disagreement among researchers concerns the question about the causes of ethnic conflict. Is there some common factor or do the causes vary from case to case? Many researchers seem to think that ethnic conflict is principally cultural conflict and, consequently, that there cannot be any common explanation. According to this interpretation, each conflict needs a separate cultural explanation based on local circumstances. Other researchers attempted to invent more general explanations for ethnic conflict. Different explanatory approaches do not always contradict each other because they may be relevant at different levels of analysis. There is a crucial difference between proximate and ultimate explanations.² Most social scientists have been interested in short-term environmental and cultural factors affecting behaviour (proximate explanation), whereas I am concerned with an evolutionary genetic explanation of ethnic conflict (ultimate explanation). My argument is that there may be a common theoretical explanation for the universality of ethnic conflict and that this explanation can be derived from our evolved disposition to nepotism.

Ethnic Nepotism

Pierre L. van den Berghe (1981/1987) introduced the concept of 'ethnic nepotism'. He investigated various forms of ethnicity on the basis of the idea of kin selection and argued that ethnicity is defined in the last analysis by common descent. According to his argument, 'ethnic and racial sentiments extension of kinship sentiments. Ethnocentrism and racism are thus extended forms of nepotism – the propensity to favor kin over nonkin'. He went on to say that there is a general behavioural predisposition 'to react favorably toward other organisms to the extent that these organisms are biologically related to the actor. The closer the relationship is, the stronger the preferential behavior'. He uses the term 'ethnic nepotism' in the connection of these mutual aid networks (van den Berghe, 1981/1987: 15-27, 217, 222).

Van den Berghe's 'ethnic nepotism' refers to a sociobiological theory of inclusive fitness, which was originally formulated by Hamilton (1964). Hamilton looked at evolution from the gene's point of view and realized that natural selection tends to maximize inclusive fitness: the survival of one's own genes through one's own offspring and through relatives who have the same genes (i.e. genes identical by common descent). This means that the logic of evolution presupposes individual selfishness together with favouritism toward relatives. John Maynard Smith used (originally in 1964) the term 'kin selection' to describe the same behavioural process.³

These ideas provide the theoretical background for my interpretation of ethnic con-

For previous studies, see Bangura (1994), van den Berghe (1981), Brown (1993), Carment (1994), Carment & James (1997), Connor (1994), Esman (1994), Flohr (1994), Forbes (1997), Gellner (1983), Giddens (1995: 251–283), Glickman (1995), Gurr (1993, 1997), Gurr & Harff (1994), Hegre et al. (1997), Horowitz (1985), Hutchinson & Smith (1996), Lindholm (1993), McGarry & O'Leary (1994), Rabushka & Shepsle (1972), Rupesinghe (1988), Rushton (1995), Smith (1987), Stavenhagen (1996), Tullberg & Tullberg (1997).

² 'Ultimate' and 'proximate' explanations refer to long-term genetic and short-term environmental factors affecting behaviour. As Barash (1982: 28–29) says, proximate analysis 'explains' the hormonal and stimulus-specific factors operating within an animal to produce a particular behaviour, whereas ultimate analysis explains why these proximate mechanisms occur in the first place and why animals respond to them as they do. See also Lopreato (1984): 47, Wilson (1975): 23, 593, 597.

³ Maynard Smith, 1975: 180–182. See also Alexander (1980): 45–56, Dawkins (1976/1979), Trivers (1971/1978), Wilson (1975): 117–118.

flict. I have argued (Vanhanen, 1991, 1992) that it is possible to deduce a cross-culturally valid ultimate explanation for ethnic conflict from a Darwinian interpretation of politics and from the sociobiological theory of kin selection. According to my Darwinian interpretation of politics, the struggle for scarce resources comprises the central theme. This central and universal theme of politics can be derived from the Darwinian theory of evolution by natural selection. It claims that all organisms have to struggle for survival because we live in a world of scarcity in which all species are able to produce and in fact produce much more progeny than can be supported by the available resources. The permanent discrepancy between the number of individuals and the means of existence makes the struggle for survival inevitable and omnipresent.4 Politics is one of the forums of this struggle. The evolutionary roots of politics lie in the necessity to solve conflicts for scarce resources by some means. Competition and struggle in human societies are inevitable consequences of living in a world of scarcity where we are programmed to further our own survival. The Darwinian theory explains why it must be so. Thus it provides an ultimate evolutionary explanation for the necessity and universality of conflicts in all human societies (Vanhanen, 1992; 24-27).

Why do so many conflicts take place along ethnic lines? My answer derives from the idea of ethnic nepotism. If all human populations share the same evolved predisposition to ethnic nepotism, people will align themselves along ethnic lines in political interest conflicts. Pierre L. van den Berghe (1981/1987: 7) argues that 'whenever cooperation increases individual fitness, organisms are genetically selected to be nepotistic, in the sense of favoring kin

over non-kin, and close kin over distant kin'

Ethnic groups can be perceived as extended kin groups. The members of an ethnic group tend to favour their group members over non-members because they are more related to their group members than to the remainder of the population. The members of the same ethnic group tend to support each other in conflict situations. Our tendency to favour kin over non-kin has extended to include large linguistic. national, racial, religious and other ethnic The term 'ethnic nepotism' groups. describes this kind of nepotism at the level of extended kin groups (Vanhanen, 1991: 11-12).

From the perspective of ethnic nepotism. it does not matter what kind of kin groups are in question. The crucial characteristic of an ethnic group is that its members are genetically more closely related to each other than to the members of other groups. Therefore, in this study 'ethnic group' refers not only to racial, tribal and national groups. but also to linguistic groups, castes and old religious communities (cf. Horowitz, 1985: 41-54; Riggs, 1995). A problem with this definition is that people are related to each other at many levels. We are related from the level of nuclear family to the level of *Homo* sapiens. Consequently, ethnic groups are never absolutely distinct and exclusive. Any level can provide a basis for ethnic nepotism. The situation determines what level of ethnic group becomes politically relevant. This means that ethnic groups are always, to some extent, socially constructed. They are predetermined and unchanging. not However, it is crucial from the perspective of this study that ethnic groups are always established on the basis of real or assumed kinship relationships.

This argument led me to formulate two hypotheses on the political consequences of ethnic nepotism:

⁴ For evolutionary theory, see Darwin (1859/1981): 114-172; Dobzhansky et al. (1977): 96-99; Mayr (1982): 479-480.

- (1) Significant ethnic divisions tend to lead to ethnic interest conflicts in all societies.
- (2) The more a society is ethnically divided, the more political and other interest conflict tends to become channelled into ethnic lines.

These hypotheses are testable. The first hypothesis claims that because ethnic nepotism is shared by all human populations, ethnic tension and conflict can be expected in all ethnically divided societies. It would be possible to falsify this hypothesis by empirical evidence indicating that there is no systematic relationship between the extent of ethnic division and the emergence of ethnic conflict. The second hypothesis complements the first by claiming that the degree of ethnic conflict depends on the degree of ethnic division. In other words, the more ethnic groups differ from each other genetically, the higher the probability and intensity of conflict between them. It is possible to falsify this hypothesis by empirical evidence which shows that there is no clear relationship between the degree of ethnic division and the degree of ethnic conflict

Of course, we cannot expect a complete relationship between the levels of ethnic heterogeneity and of ethnic conflict because many intervening factors may intensify or dampen the intensity of ethnic conflict. There are many types of possible intervening factors, including differences in governmental and other political and social institutions, cultural traditions, differences in the level of intergroup contacts and communication, external interventions and various more or less accidental factors. I do not try to deny the existence of other relevant factors, but my attention in this study is focused on the question: to what extent is it possible to explain the universality of ethnic conflict by our assumed predisposition to ethnic nepotism?

Research Design

It is possible to test the two hypotheses on the political consequences of ethnic nepotism by empirical evidence by operationalizing the hypothetical concepts 'ethnic division' and 'ethnic conflict' into empirical variables. The operationalization of these concepts is a difficult task because of the diversity of ethnic groups and ethnic conflict. In the research literature, the definitions of ethnic groups vary from primordialist to cultural ones, and ethnic conflict has also been defined and classified in many different ways.

Measuring of Ethnic Division

Cultural differences usually characterize ethnic groups, but in this study they are regarded firstly as extended kin groups. Consequently, I try to focus on ethnic groups that can be assumed to differ from each other not only culturally, but also genetically, at least to some extent, in the sense that the members of an ethnic group are more closely related to each other on average, than to the members of other groups. However, I try to take into account only the most important and conspicuous ethnic divisions, not all possible ethnic differences and groups. As an approximate measure of genetic distance, we could use the period of time that the two or more compared groups have been separated from each other, in the sense that intergroup marriages have been rare. The longer the period of endogamous separation, the more the groups have had time to differentiate from each other genetically. If each endogamous population occupies its own territory, they are also geographically separated from each other. However, geographical barriers have not always been needed to maintain endogamous populations.

From the perspective of genetic distance, we can separate different degrees of ethnic

cleavage (for an explanation of genetic distance, see Cavalli-Sforza et al., 1997). The greatest genetic distances are between the main geographical populations or racial groups (Negroid, Caucasoid and Mongoloid) whose core members have been genetically separated from each other for tens of thousands of years. Linguistic, national and tribal differences divide large racial groups into many smaller ethnic groups. It is often difficult to separate these three types of ethnic groups from each other because linguistic and national as well as linguistic and tribal identities usually overlap. Genetic distances between these groups vary, but distances are often thousands or at least several hundreds of years. Old religious cleavages have also produced ethnic groups because religious communities are usually endogamous. The oldest religious groups may be two or three thousand years old, but most of them are less than one thousand years old. Sometimes religious cleavage coincides with linguistic or national division, but it may also divide a national or linguistic group. Many contemporary religious groups are only two or three generations old, or they are just now emerging. For this reason, it is not justified to take into account all religious cleavages. I leave out recent religious division and groups because they have not yet had enough time to become clearly separate ethnic groups. I have also tried to exclude religious groups that are not endogamous or that are no longer endogamous.

The measurement of ethnic division therefore is based on three types of ethnic groups: (1) ethnic groups based on racial differences, (2) ethnic groups based on linguistic, national or tribal differences, and (3) ethnic groups based on stabilized old religious communities. Thus we have three operationally defined indicators to measure three dimensions of ethnic division. In each dimension, the level of ethnic division will be measured by the percentage of the largest

ethnic group of the country's total population. Together the three percentages measure the relative degree of ethnic homogeneity, and the inverse percentages measure the degree of ethnic heterogeneity. The three inverse percentages of ethnic heterogeneity are combined into an Index of Ethnic Heterogeneity (EH) by summing the three percentages. This index is used as the principal operational substitute for the hypothetical concept 'ethnic division'.

Is it justified to combine the three dimensions of ethnic heterogeneity into an index in this way or do the dimensions differ too greatly from each other? My argument is that different forms of ethnic division strengthen each other and that, it is justified to sum the percentages. For example, if the population of a country is divided into separate ethnic groups not only by language or nationality, but also by clear racial or religious division, the degree of ethnic heterogeneity is higher than in a country in which the population is divided into separate groups only by language or religion. Besides. I am not especially interested in the affects of any particular ethnic division, I am interested in the total level of ethnic heterogeneity.

Empirical data on the (EH) are given in Appendix 1. These data are derived from many different sources and I have attempted to select the most reliable data, or I have used an average if the data given in different sources vary from each other significantly. The most frequently used global or regional sources include *Europa World Year Book* (1996); Minority Rights Group International, *World Directory of Minorities* (1997); Kurian (1987); Morrison et al. (1989); *Philip's Encyclopedic World Atlas* (1993); Central Intelligence Agency (1992);

 $^{^5}$ In the case of India, caste division was also taken into account in the calculation of the value of EH. For that reason, the EH value for India is 128, although the sum of the three percentages given in Appendix 1 is not more than 90

Third World Guide 93/94 (1993); World Almanac and Book of Facts 1996 (1995); Cambridge Encyclopedia of Latin America and the Caribbean (1992), and Banks et al. (1997), in addition to various monographs and studies concerning particular regions or countries. More detailed data are given elsewhere (Vanhanen, 1999).

Measurement of Ethnic Conflict

It is easier to obtain general knowledge of ethnic conflict than to measure their relative significance by reliable empirical data. The measurement of ethnic conflict is difficult because the nature of such conflict varies greatly. Horowitz (1985: 3-6) refers to many types of violent ethnic conflict in all parts of the world, but he also points out that there are many less dramatic manifestations of ethnic conflict. Political parties and trade unions are organized ethnically in country after country, there are movements expropriate ethnically differentiated traders and expel long-resident workers of foreign origin, and armed forces are frequently fractionalized along ethnic lines. There are separatist ethnic movements in many countries and ethnically-based underground resistance movements. Horowitz' extensive analysis discloses that the scope of ethnic conflict extends from relatively peaceful political and economic conflict to separatist ethnic movements, military and guerrilla organizations, sporadic violent conflict and civil war.

Ted Gurr is one of the few social scientists who has attempted to measure ethnic conflict. He constructed scales for coding his three forms of communal political action (nonviolent protest, violent protest and rebellion). His scales are intended to take into account the numbers of people involved and the intensity or destructiveness of their actions (Gurr, 1993: 93–99; 1997).

Following Gurr's ideas to some extent, I

try to measure the extent and intensity of ethnic conflict quantitatively, although it is not possible to find as exact quantitative indicators as for ethnic division. The extent and intensity of ethnic conflict varies from relatively peaceful institutionalized ethnic interest conflict to violent struggle, civil war and ethnic cleansing. It is certainly not possible to take into account all aspects of ethnic conflict and to measure their relative significance, but it may be possible to make an approximately correct estimate on the relative extent and significance of ethnic conflict in different countries. In estimating, I take into account two principal dimensions of ethnic conflict: (1) institutionalized ethnic conflict and (2) conflict in which participants resort to various forms of coercion (violent ethnic conflict).

I use the relative significance of ethnic parties and organizations, significant ethnic inequalities in governmental institutions and customary ethnic discrimination to measure the institutional dimension of ethnic conflict. The scale of institutionalized ethnic conflict presented in Table I provides the criteria which have been used in the estimation. The scale extends from 0 to 100 scores. Each country gets an estimated score that is intended to indicate the relative significance of institutionalized ethnic conflicts during the period 1990–96. The higher the score is, the higher the estimated degree of institutionalized ethnic conflict.

The different types of criteria given for each level of the scale are intended to complement each other, but they can also be used alternatively. Consequently, the scores of some countries may be principally based on the significance of ethnic parties, whereas the scores of some other countries are based on the significance of other types of ethnic organizations or on the significance of institutionalized ethnic inequality and discrimination. The electoral data on the share of ethnic parties of the votes cast in elections

Table I. The Scale of Institutionalized Ethnic Conflict

- 0 = No significant ethnic organizations: no significant ethnic inequality in political representation
- 5 = The share of ethnic parties comprises less than 10% of the votes cast in parliamentary or presidential elections; some other ethnic organizations; minor ethnic inequalities in political representation; some small ethnic groups are discriminated
- 10 = The share of ethnic parties 10–14%; some prominent ethnic organizations; clear ethnic inequalities in political institutions; ethnic discrimination
- 20 = The share of ethnic parties 15–29%; significant ethnic organization; significant ethnic inequality in political institutions; serious forms of ethnic discrimination
- 40 = The share of ethnic parties 30–49%; ethnic organizations cover a significant part of the population; ethnic interest conflicts characterize social life; conspicuous ethnic inequality in governmental institutions; large ethnic groups are discriminated
- 60 = The share of ethnic parties 50-69%; most interest organizations are ethnic ones; ethnic interest conflict more important than other types of interest conflict; striking ethnic inequality in governmental institutions
- 80 = The share of ethnic parties 70–89%; nearly all interest organizations are ethnically based; ethnic interest conflict or inequality in governmental institutions dominate national politics
- 100 = The share of ethnic parties 90–100%; all significant interest organizations are ethnic by nature; practically all interest conflict between groups takes place along ethnic lines

can be used to indicate the significance of ethnic organizations in many democracies, whereas other kinds of information are needed to estimate the relative significance of ethnic organizations in non-democracies and also in many democracies in which institutionalized ethnic conflict takes place outside party politics too. Ethnically-based military, guerrilla or underground organizations are important in many non-democracies. In these criteria, 'ethnic interest conflict' refers to the existence of permanent ethnic tension, to the repeated incidents of ethnic discrimination and to other possible forms of nonviolent ethnic conflict. The relative size of groups is also taken into account in the estimation.

I have not found any direct indicator to measure the relative significance of violent ethnic conflict. The extent and relative significance of such conflict has to be estimated on the grounds of available information. The scope of ethnic conflict characterized by the use of coercion extends from demonstrations, riots, strikes, destruction of property and sabotage to attacks on persons, violent clashes between groups, arrests, killing of

people, rebellions, terrorism, forceful deportation of people, ethnic guerrilla war, separatist war, ethnic civil war, ethnic cleansing and genocide. The problem is how to estimate and compare the significance of different types of coercive ethnic conflict. My estimates for the significance of violent ethnic conflict is based on a scale whose scores vary between 0 and 100. Estimates on the extent and significance of coercive or violent ethnic conflict are based on the scale of violent ethnic conflict given in Table II.

My attention is limited to *domestic* ethnic conflict and excludes interstate ethnic violence and war. In many cases, however, it is difficult to separate domestic and interstate violent ethnic conflict from each other because external actors are often involved in domestic ethnic conflict. Furthermore, the degree of violent ethnic conflict is not assumed to have remained constant in the period 1990–96. In many countries, the extent and intensity of violent ethnic conflict varied considerably during this period. My calculations are usually based on the highest peak of violent ethnic conflict in the period 1990–96.

Table II The Scale of Violent Ethnic Conflict

- 0 = No information on ethnic demonstrations, riots or violence, although there may be some tension between ethnic groups
- 5 = Occasional ethnic demonstrations or riots; attacks on single persons; destruction of property
- 10 = Sporadic ethnic demonstrations, riots or violence involving single persons or small groups; destruction of property in ethnic riots; some people are killed
- 20 = Serious ethnic clashes involving organized ethnic groups or ethnic groups and state organizations; attacks on persons, demonstrations and riots in which people are killed; local ethnic guerrilla movements: occasional ethnic terrorist acts
- 40 = Repeated violent conflict between ethnic groups or between ethnic groups and government forces; suppression of particular ethnic groups; ethnic rebellion; significant ethnic terrorism; ethnic refugees
- 60 = Violent ethnic conflict dominates politics; separatist ethnic wars in some parts of the country; forced deportation of people; many ethnic refugees
- 80 = Prolonged violent ethnic conflict covering significant parts of the country; ethnic civil wars or separatist wars; forced deportation of people; ethnic cleansing; large numbers of refugees
- 100 = Ethnic war dominates politics completely; genocidal ethnic violence

Weiner (1992) has described the many ways by which internal ethnic conflicts become internationalized Several researchers have explored and discussed international aspects of ethnic conflict and the role of international actors (see, for example, Carment, 1994: Carment & James 1997. 1998: Gurr & Harff, 1994: Stavenhagen, 1996: 203-226). Havard Hegre et al. (1997) emphasize that civil war, including ethnic civil war, has become the most common form of war after World War II. They note that democratic peace theory promises an end to international war through democratization, but does democratization produce civil peace too (see also Ellingsen, 1996)? Their research question is clearly related to the theme of my study. According to the theory of ethnic nepotism, some kind of ethnic conflict is regarded as inevitable in all ethnically divided societies, but such conflicts do not need to be violent. Ethnic conflict may become institutionalized. Therefore it is quite reasonable to assume that democratization helps to institutionalize ethnic conflict.

Information on institutional and violent ethnic conflict was gathered from many sources, including books and articles on single countries and international compilations of data. Keesing's Record of World Events (1990–97) was the most significant single source, although the number of references to ethnic conflict varies greatly from country to country. It is reasonable to assume that the frequency of references is an indication of the extent and relative significance of ethnic conflicts in various countries. Other frequently used sources include Africa Research Bulletin (1960–97), Europa World Year Book (especially 1996), the Minority Rights Group publication, World Directory of Minorities (1990, 1997) and several other publications of the Minority Rights Group, and Third World Guide 93/94 (1993).

Because the two scales of institutionalized and violent ethnic conflict are intended to measure the same phenomenon from two different perspectives, it is reasonable to combine the scores of the two dimensions into a combined Index of Ethnic Conflict (EC). It is done simply by adding the scores. This means that the value of EC can vary between 0 and 200. This index is used as the principal empirical indicator of ethnic conflict in this study. The EC scores for single countries are given in Appendix 1. All data and estimates on the variables used in this

study are presented and documented elsewhere (Vanhanen, 1999).

It is not self-evident that interval-level measurement is appropriate for the concepts of ethnic division and ethnic conflict which I have wanted to operationalize. It could be argued that I have attempted to quantify phenomena which cannot be quantified, or that the scores of the two indices (EH and EC) represent nominal-level measurement rather than interval-level measurement. It may also be claimed that the level of measurement does not justify combining the three dimensions of ethnic division into an index (EH) by summing up the three percentages or combining the two aspects of ethnic conflict into an index (EC) by summing up the scores of the two scales. My indicators are approximate, but I defend their use in interval-level measurement on the grounds that the measured phenomena are, in principle, quantifiable. Human beings in Norway, Sri Lanka and Rwanda are not 'apples and pears'. The meaning of sorrow, suffering, humiliation and death caused by ethnic conflict is the same for them. Therefore, it is justified to use the same criteria in the measurement of ethnic division in these and other countries and to attempt to measure the relative significance of ethnic conflict by applying the same scales to all countries. Certainly there are quantitative differences both in the degree of ethnic division and in the level of ethnic conflict between countries. My EH and EC values, estimated on the basis of available information, are intended to indicate these differences. There may be significant estimation error in these and other index values, but

the phenomenon is measureable. The three components of EH and the two components of EC can be used separately, but their combinations (EH and EC) measure differences in the relative significance of ethnic division and ethnic conflict in national politics and social life more realistically than any of those components alone.

Research Hypotheses

The original hypotheses on the relationship between ethnic nepotism and ethnic conflict can now be reformulated into research hypotheses by replacing the original hypothetical concepts by operationally defined variables. The first hypothesis can be tested by separating the countries with and without significant ethnic division and the countries with and without significant ethnic interest conflict. It is not self-evident what the threshold values for EH and EC should be. I have tentatively used the threshold value of 10 index points for each index.

Empirical Analysis

First Hypothesis

The first research hypothesis claims that significant ethnic division tends to lead to ethnic conflict in all societies. It does not exclude the possibility of ethnic conflict at lower levels of EH, but it presupposes that ethnic conflict emerges in all countries with EH higher than 10 index points. The hypothesis was tested by cross-tabulating the 183 countries by the significance levels of ethnic heterogeneity and of ethnic conflict. The results are given in Table III which sup-

Table III. Ethnic Heterogeneity and Ethnic Conflict, 1990–96 (absolute numbers)

Ethnic conflict scores	EH 10 or less	EH higher than 10	Total
EC 10 or less EC higher than 10	38 3	12 130	50 133
No. of countries	41	142	183

EC, index of ethnic conflict; EH, index of ethnic heterogeneity. Yule's Q=0.986.

ports this hypothesis very strongly. There are no more than 12 contradicting countries (6.6%), and as we can see from Appendix 1, nearly all deviations are very small or completely insignificant. There is hardly any ethnically divided country in the world without some kind of ethnic conflict.

Second Hypothesis

Though ethnic conflict is universal in ethnically divided societies, the extent and intensity varies from country to country. Is this variation accidental or is it related to some common factor? The second hypothesis tries to explain the variation in the extent and intensity of ethnic conflict by ethnic nepotism. It is assumed that the more a society is ethnically divided, the more political and other interest conflicts become channelled along ethnic lines. The correlations between EH and its three components and EC and its two components are given in Table IV.

All correlations between EH and EC and their components are positive as hypothesized. The strongest correlation is between EH and institutionalized ethnic conflict (0.862). This reflects the fact that ethnic conflicts are common in all ethnically divided countries and that institutionalized conflict is considerably more frequent and stabilized than violent conflict. The correlation between EH and violent conflict is

much weaker (0.468). The correlation between EH and EC is 0.740. The empirical results strongly support the second hypothesis

Of course, a correlation coefficient does not in itself prove that the relationship between variables is causal. I assume, on the basis of the theory of ethnic nepotism, that the degree of ethnic heterogeneity is the causal factor in this relationship. According to this theory, our evolved disposition to nepotism makes it easy and natural for people to organize themselves along ethnic lines in conflict situations. Besides, this disposition to ethnic nepotism seems to be the only common explanatory factor in all ethnic conflict. Since, by definition, cultural factors vary from place to place, it is difficult to see how any such factor could explain the universality of ethnic conflict in all ethnically divided societies, although they can increase or decrease the intensity of ethnic conflict in particular countries.

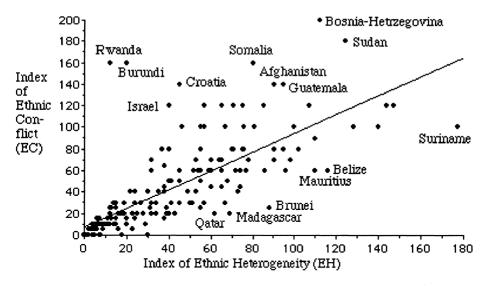
My argument is that ethnic nepotism measured by ethnic division is the common causal factor behind ethnic conflict. There are also other relevant factors which account for about half of the variance, but in this study I focus on ethnic nepotism. The results of the regression analysis at the level of single countries are given in Figure 1, which shows that most countries are relatively near the regression line.

Table IV. Intercorrelations of Ethnic Heterogeneity and its Three Components, and EC and its Two Components, 1990–96

Variable	National/ linguistic	Religious division	ЕН	Institutionalized	Violent conflict	EC
Racial division	0.089	0.165	0.489	0.385	0.117	0.277
National/linguistic/tribal		0.371	0.822	0.738	0.457	0.666
Religious division			0.709	0.607	0.328	0.520
EH				0.862	0.468	0.740
Institutionalized conflict					0.584	0.882
Violent conflict						0.897
EC						

EC, index of ethnic conflict; EH, index of ethnic heterogeneity. N = 183.

Figure 1. Regression Analysis of Ethnic Heterogeneity (EH) and Ethnic Conflict (EC), 1990–96



Y = .874x + 8.017, R squared: .548, n = 183

The detailed results of the regression analysis for all 183 countries show that countries with small residuals do not contradict the second research hypothesis, whereas the countries with large residuals do. One standard error of estimate, or 28.5 EC index points, provides an approximate criterion to separate large residuals from small. I use 30 EC index points to single out the large deviations. This group includes 33 countries. There is one common characteristic for all of the 21 countries with large positive residuals - all of them have experienced ethnic civil war or serious violent rebellion. This observation leads me to assume that the political leadership failed in these countries more than on average. It is also possible that political institutions, including governmental structures, have not been sufficiently adapted to the ethnic diversity of the population, but there is not enough information to test this assumption. It might be possible to mitigate ethnic conflict by adapting institutional structures to ethnic division on the basis of balanced reciprocity because we may have an evolved predisposition to reciprocity.⁶

The 12 countries with an unexpected low level of ethnic conflict constitute a more heterogeneous group. If institutional failure increases the intensity of ethnic conflict in the countries with large positive residuals, it would be reasonable to assume that political and social institutions are exceptionally well adapted to ethnic division in the countries with large negative residuals. This may be true in the case of Mauritius, and perhaps also in Belize and Suriname, but this assumption does not seem to apply to the other countries of this group. The strong hegemonic control may explain the lack of violent ethnic conflict in Brunei. Qatar and the United Arab Emirates, whereas it is dif-

⁶ 'Balanced reciprocity' refers to a mutual relationship in which participants are equal in the sense that the value of exchanged services is approximately the same. In the case of political institutions, balanced reciprocity presupposes that institutions are not designed to favour some ethnic groups and to discriminate some others. For reciprocity, see Alexander (1980): 48–58, Barash (1982): 115–120, 134–140, Trivers (1978, 1985): 47–49, 361–94 and Wilson (1975): 120–121.

ficult to find any common factor which could explain the low level of ethnic conflict in the other six countries

Alternative Explanatory Factors

The hypothesized relationship between ethnic conflict (i.e. EC) and ethnic nepotism (i.e. EH) is strong, but perhaps we could find some equally good or better explanations? Some scholars have argued that ethnic conflict is more probable in non-democratic than in democratic countries, or that ethnic conflict disappears at higher levels of socio-economic development

My Index of Democratization (see Vanhanen, 1997) can be used to measure the variation in the degree of democracy. Real GDP per capita (purchasing power parities. USD PPP) and the Human Development Index (HDI) (see Human Development Report, 1997) can be used to measure some aspects of socioeconomic and human development. The correlations Index between (EC) and the Democratization (ID-93), Real GDP in 1994 and HDI in 1994 are -0.281. -0.294 and -0.411 respectively. All correlations are negative as hypothesized. Thus the results of empirical analysis support these alternative hypotheses, but the explained part of variation is relatively small (8, 9 and 17% respectively) compared to the explained part of variation in the case of EH $(54\%)^{7}$

To what extent might it be possible to increase the explained part of variation in EC by using ID, Real GDP and HDI together with EH to explain the variation in EC? Multiple regression analysis discloses

that the explained part of the variance rises by four percentage points from 54% to 58% when the four explanatory variables (ID, Real GDP, HDI and EH) are used together. Thus, the level of democratization and the level of socio-economic development are only weakly correlated with the degree of ethnic conflict, and their explanatory power, independent from the degree of ethnic heterogeneity, is negligible.

Conclusion

My evolutionary explanation for the universality of ethnic conflict in ethnically divided societies is based on the assumption that ethnic nepotism is a part of human nature. We have evolved to favour our relatives in the struggle for existence because it has been an adaptive behaviour pattern. Of course. there are good proximate explanations for every ethnic conflict, but the fact that ethnic cleavage seems to lead to some kind of ethnic conflict in all societies implies the existence of a common causal factor. According to my interpretation, our shared disposition to ethnic nepotism is the common factor behind all ethnic conflicts. Empirical evidence indicates that ethnic conflict has emerged in practically all ethnically divided countries and, statistically, that ethnic division explains approximately half of the variance in the level of ethnic conflict in this group of 183 contemporary states. Thus, it does not seem possible to avoid the emergence of ethnic conflict in ethnically divided societies, whereas it may be possible to mitigate conflict by inventing social and political institutions that help to accommodate the of different ethnic interests Leadership and institutions certainly matter, but it would be too early to make any definitive institutional recommendations on the basis of this study.

It would be interesting to see whether the relationship between ethnic heterogeneity

 $^{^7}$ The expected negative correlation between ID-93 (Vanhanen, 1997) and the degree of violent ethnic conflict is only -0.264 and with the degree of institutionalized ethnic conflicts, -0.236. In other words, democratization seems to decrease the level of ethnic conflict only slightly.

and ethnic conflict has remained the same over time. Longitudinal empirical evidence would be needed for a more complete test of this theory. However, we do not need to assume that the extent of ethnic conflict has remained constant over time. It is quite possible that ethnic conflicts were less frequent say 100 years ago than they are now. Previously, when contact between ethnic groups was much more limited, there were not as many opportunities for ethnic conflict. Furthermore, the ethnic diversity of the population has increased in many countries as a consequence of long-distance migration movements. Because the development of communications and the emergence of global markets increase contacts between different ethnic groups and because longdistance migration movement increases the ethnic diversity of the population in many countries, we can expect that the number and intensity of ethnic conflict will increase rather than decrease in the future. In addition, the continuing growth of the world population intensifies competition for scarce resources. It is reasonable to expect that ethnic nepotism frequently disposes people to organize themselves along ethnic lines in this struggle. Biological mixing on a large scale would be the most effective way to dampen ethnic conflict caused by our disposition to ethnic nepotism.

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Appendix

Appendix I. Regression Analysis of Ethnic Heterogeneity and Ethnic Conflict for 183 Single Countries, 1990–96

		Division				Conflict					
State		Racial division	National/ language	Religious division	Ethnic heter.	Institutional conflict	Violent conflict	Ethnic conflict	Residual ethnic conflict	Predicted ethnic conflict	
Euro	оре										
1	Albania	0	10	30	40	10	10	20	-23.0	43.0	
2	Armenia	0	6	6	12	5	20	25	6.5	18.5	
3	Austria	0	6	0	6	10	5	15	1.7	13.3	
4	Azerbaijan	0	17	15	32	10	60	70	34.0	36.0	
5	Belarus	0	22	1	23	5	0	5	-23.1	28.1	
6	Belgium	0	50	3	53	60	10	70	15.6	54.4	
7	Bosnia &										
	Herzegovina	0	56	56	112	100	100	200	94.0	106.0	
8	Bulgaria	0	14	13	27	10	20	30	-1.6	31.6	
	Croatia	0	22	23	45	40	100	140	92.6	47.4	
10	Czech Republic	0	7	0	7	5	10	15	0.9	14.1	
11	Denmark	1	3	1	5	5	5	10	-2.4	12.4	
12	Estonia	0	38	40	78	60	10	70	-6.2	76.2	
13	Finland	0	7	0	7	5	5	10	-4.1	14.1	
14	France	1	10	3	14	10	20	30	9.7	20.3	
15	Georgia	0	30	10	40	20	60	80	37.0	43.0	
16	Germany	1	8	3	12	10	10	20	1.5	18.5	
17	Greece	0	8	3	11	5	10	15	-2.6	17.6	
18	Hungary	0	8	0	8	5	5	10	-5.0	15.0	
19	Iceland	0	4	0	4	0	0	0	-11.5	11.5	
20	Ireland	0	0	4	4	5	0	5	-6.5	11.5	
21	Italy	1	6	1	8	5	5	10	-5.0	15.0	
22	Latvia	0	48	42	90	60	10	70	16.7	86.7	

Appendix I. continued

State			D	ivision				Conflict		
24 Luxembourg 0 30 0 30 0 0 0 0 -34.2 34 25 Macedonia 0 34 30 64 40 30 70 6.0 64 26 Malta 0 5 0 5 0 5 0 0 0 0 -12.4 12 27 Moldova 0 36 1 37 40 40 80 39.6 44 28 Netherlands 3 6 4 13 10 5 15 -4.4 19 29 Norway 1 5 1 7 5 5 10 -4.1 14 30 Poland 0 4 0 4 5 0 5 -6.5 11 31 Portugal 1 1 0 0 2 0 5 5 -6.5 11 31 Portugal 1 1 1 0 2 0 5 5 -6.5 11 32 Romania 0 15 10 25 10 20 30 -9.9 29 33 Rusia 2 18 12 32 20 40 60 24.0 38 34 Slovakia 0 18 0 18 10 10 20 30 -9.9 29 35 Slovenia 0 8 1 9 5 5 10 0 -5.9 15 36 Spain 0 30 0 30 20 20 40 5.7 34 38 Switzerland 1 35 2 38 40 5 15 -4.4 19 39 Ukraine 0 27 0 27 20 10 30 -1.6 31 40 United Kingdom 2 18 4 24 10 20 30 -1.6 31 41 Yugoslavia 0 37 20 57 60 40 100 42.1 57 **Western Hemisphere** 42 Antigua & 2 0 0 0 2 0 0 0 -9.8 9 **Barbuda 4 37 4 45 40 10 50 5 -6.5 11 46 Belize 56 60 0 11 6 6 5 0 5 -6.5 11 47 Bolivia 35 40 0 75 60 20 80 64 73 48 Brazil 50 1 1 5 2 2 40 0 0 0 6 6.5 5 51 0 6.5 10 51 0 6.0 44 9 60 60 60 60 60 60 60 65 52 0 0 0 0 0 0 -9.8 9 **Barbuda 4 37 4 45 40 10 20 80 66 47 51 Clolmbia 15 3 1 19 10 10 20 60 6.5 60 51 Clolmbia 15 3 1 19 10 10 20 60 6.5 5 51 0 6.5 10 6.5 10 6.5 60 52 0 5 6 60 0 11 6 60 0 60 60 69.5 10 53 Clolmbia 15 3 1 19 10 10 20 60 6.5 5 54 Dominican 20 7 0 27 20 10 30 -1.6 31 55 Dominican 20 7 0 27 20 10 30 -1.6 31 56 Ecuador 35 25 0 60 40 20 80 60 6.5 5 57 El Salvador 10 10 0 20 5 5 5 10 -12.5 11 56 Dominican 4 0 0 4 0 5 5 5 10 -15.5 5 58 Grenada 5 0 0 5 5 5 0 5 5 -7.4 12 59 Guatemal 45 5 0 0 5 5 5 0 5 5 -7.4 12 59 Guatemal 45 5 0 0 5 5 5 0 5 5 -7.4 12 59 Guatemal 45 5 0 0 5 5 5 0 5 5 -7.4 12 50 Guatemal 45 5 0 0 5 5 5 0 5 5 -7.4 12 51 Bolminican 8 5 0 0 5 5 5 0 5 5 -7.4 12 52 Costa Rica 3 2 0 5 5 5 0 5 0 5 5 -7.4 12 53 Cloba 34 0 0 34 20 0 0 0 0 0 -12.4 12 59 Guatemal 45 5 0 0 5 5 5 0 5 5 -7.4 12 50 Guatemal 45 5 0 0 5 5 5 0 5 5 7.4 12 51 Bolminican 8 5 0 0 5 5 5 0 5 5 7.4 12 52 Gota Rica 3 2 0 5 5 5 0 5 0 5 5 7.4 12 53 Cloba 34 0 0 34 20 0 0 5 5 5 10 -15.5 12 54 Dominican 8 5 0 0 5 5 5 0 5 5 7.4 12 55 Gernada 5 1 0 0 5 5 5 5 0 5 5 7.4 12 56 Gernada 6 5 0 0 5 5	State								ethnic	Predicted ethnic conflict
25 Macedonia 0 34 30 64 40 30 70 6.0 64 62 64 Malta 0 5 5 0 5 0 0 0 0 0 -12.4 64 62 64 Malta 0 5 5 0 5 0 0 0 0 0 -12.4 64 62 64 Malta 0 36 1 37 40 40 80 39.6 40 62 8 Netherlands 3 6 4 13 10 5 15 -4.4 11 29 Norway 1 5 1 7 5 5 5 10 -4.1 14 29 Norway 1 1 5 11 7 5 5 5 10 -4.1 14 30 Poland 0 4 0 4 5 0 5 5 -6.5 11 31 Portugal 1 1 0 0 2 0 5 5 5 -4.8 9 32 8 Romania 0 15 10 25 10 20 30 -9.9 22 33 Russia 2 18 12 32 20 40 60 24.0 36 34 Slovakia 0 18 0 18 10 10 20 -3.8 23 5 Slovakia 0 18 0 18 10 10 20 -3.8 23 5 Slovakia 0 18 0 18 10 10 20 -3.8 23 37 Sweden 1 10 2 13 10 5 15 -4.4 11 39 Ukraine 0 27 0 27 20 10 30 -9.9 15 36 Spain 0 30 0 30 20 20 40 5.7 34 34 Slovakia 1 3 35 2 38 40 5 45 3.8 41 39 Ukraine 0 27 0 27 20 10 30 -1.6 31 40 United Kingdom 2 18 4 24 10 20 30 1.0 29 42 1 57 Western Hemisphere 42 Antigua & 2 0 3 7 20 57 60 40 100 42.1 57 Western Hemisphere 44 Antigua & 2 3 1 6 5 5 0 5 -8.3 13 45 Barbuda 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Bolivia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 60 20 80 6.4 73 Slovakia 35 40 0 75 5 60 20 80 6.4 73 Slovakia 35 40 0 75 5 60 20 80 6.4 73 Slovakia 35 40 0 75 5 60 20 80 6.4 73 Slovakia 35 40 0 75 5 60 20 80 6.4 73 Slovakia 35 40 0 75 5 60 20 80 6.4 75 5 5 5 10 5 6.5 7.4 12 55 Dominica 4 0 0 0 4 0 0 5 5 5 5 10 5 7.4 12 55 Dominica 4 0 0 0 4 0 0 5 5 5 5 10 5 7.4 12 55 Slovakia 34 8 49 43	23 Lithuania	0	20	12	32	20	10	30	-6.0	36.0
26 Malta 0 5 5 0 5 0 0 0 0 -12.4 122 7 Moldova 0 36 1 37 40 40 80 39.6 40 28 Netherlands 3 6 4 13 10 5 15 -4.4 19 29 Norway 1 5 1 7 5 5 5 10 -4.1 14 30 Poland 0 4 0 4 5 0 5 -6.5 11 31 Portugal 1 1 0 0 2 0 5 5 5 -4.8 9 32 Romania 0 15 10 25 10 20 30 -9.9 23 33 Russia 2 18 12 32 20 40 60 24.0 33 45 Slovakia 0 18 0 18 10 10 20 -3.8 23 35 Slovenia 0 8 1 9 5 5 10 -5.9 15 36 Spain 0 30 0 30 20 20 40 5.7 9 37 Sweden 1 10 2 13 10 5 15 5 -4.4 19 38 Switzerland 1 35 2 38 40 5 15 -4.4 19 39 Ukraine 0 27 0 27 20 10 30 -1.6 31 30 Uhrited Kingdom 2 18 4 24 10 20 30 1.0 28 41 Yugoslavia 0 37 20 57 60 40 100 42.1 57 **Western Hemisphere** 42 Antigua & 2 0 0 0 15 5 5 10 -11.1 22 43 Barbados 3 0 1 4 5 0 0 5 -8.3 13 44 Bahamas 15 0 0 15 5 5 10 -11.1 24 45 Barbados 3 0 1 1 4 5 0 0 5 -8.3 13 46 Belize 56 60 0 116 60 0 60 -49.5 10 47 Bolivia 35 40 0 75 60 20 80 60 65 53 48 Brazil 50 1 1 5 5 5 10 -6.5 11 46 Belize 56 60 0 116 60 0 60 -49.5 10 47 Bolivia 35 40 0 75 60 20 80 64 73 48 Brazil 50 1 1 5 5 5 10 -5.5 10 50 Chile 7 3 3 0 10 5 5 5 10 -6.5 11 51 Colombia 15 3 1 19 10 5 0 5 5 5 10 -6.5 11 52 Costa Rica 3 2 0 5 5 5 0 5 5 -6.5 11 53 Cuba 34 0 0 34 20 0 0 0 -12.4 12 54 Dominica 4 0 0 4 0 0 5 5 5 10 0 -12.4 12 55 Dominica 4 0 0 0 4 0 0 5 5 5 10 0 -12.4 12 56 Ecuador 35 25 0 60 40 30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	24 Luxembourg	0	30	0	30	0	0	0	-34.2	34.2
27 Moldova 0 36 1 37 40 40 80 39.6 40 28 Netherlands 3 6 4 13 10 5 15 -4.4 19 29 Norway 1 5 1 7 5 5 10 -4.1 14 30 Poland 0 4 0 4 5 0 5 5 10 -4.1 14 30 Poland 0 14 0 2 0 5 5 5 -6.5 11 31 Portugal 1 1 0 2 0 5 5 5 -4.8 93 22 Romania 0 15 10 25 10 20 30 -99 29 33 Russia 2 18 12 32 20 40 60 24.0 36 34 Slovakia 0 18 0 18 10 10 20 -3.8 23 35 Slovenia 0 8 1 9 5 5 10 -5.9 15 36 Spain 0 30 0 30 20 20 40 5.7 34 37 Sweden 1 10 2 13 10 5 15 -4.4 19 39 Ukraine 0 27 0 27 20 10 30 -1.6 31 40 United Kingdom 2 18 4 24 10 20 30 1.0 29 41 Yugoslavia 0 37 20 57 60 40 100 42.1 57 **Western Hemisphere** 42 Antigua & 2 0 0 0 5 5 -8.3 13 44 Bahamas 15 0 0 15 5 5 10 -11.1 21 45 Barbados 3 0 1 1 6 5 0 5 -6.5 11 46 Belize 56 60 0 116 60 0 60 -49.5 10 47 Bolivia 35 40 0 75 60 20 80 60 49.5 10 48 Brazil 50 1 1 5 3 1 1 6 6 5 0 5 -6.5 11 51 Colombia 15 3 1 1 6 6 5 0 5 -6.5 11 51 Colombia 15 3 1 1 6 6 5 0 5 -6.5 11 51 Colombia 15 3 1 1 6 6 5 0 5 -6.5 11 51 Colombia 15 3 1 1 6 6 5 0 5 -6.5 11 51 Colombia 15 3 1 1 6 6 5 0 5 -6.5 11 51 Colombia 15 3 1 1 6 6 5 0 5 -6.5 11 51 Colombia 15 3 1 1 6 6 5 0 5 5 -6.5 11 51 Colombia 15 3 1 1 9 10 10 20 -4.6 24 52 Costa Rica 3 2 0 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25 Macedonia	0	34	30	64	40	30	70	6.0	64.0
28 Netherlands 3 6 4 13 10 5 15 -4.4 19 29 Norway 1 5 5 1 7 7 5 5 10 -4.1 19 30 Poland 0 4 0 4 5 0 5 5 10 -4.1 11 31 Portugal 1 1 1 0 2 2 0 5 5 5 -4.8 93 32 Romania 0 15 10 25 10 20 30 -9.9 93 33 Russia 2 18 12 32 20 40 60 24.0 36 34 Slovakia 0 18 0 18 10 10 20 -3.8 23 35 Slovenia 0 8 1 9 5 5 10 -5.9 13 36 Spain 0 30 0 30 0 30 20 20 40 5.7 34 37 Sweden 1 10 2 113 10 5 15 -4.4 19 38 Switzerland 1 35 2 38 40 5 45 3.8 41 39 Ukraine 0 27 0 27 20 10 30 -1.6 31 40 United Kingdom 2 18 4 24 10 20 30 1.0 29 41 Yugoslavia 0 37 20 57 60 40 100 42.1 57 Western Hemisphere 42 Antigua & 2 0 0 0 2 0 0 0 -9.8 9 Barbuda 43 Argentina 2 3 1 6 5 5 0 5 -8.3 13 44 Bahamas 15 0 0 15 5 5 10 -1.1 12 45 Barbados 3 0 1 4 5 5 0 5 -6.5 11 46 Belize 56 60 0 16 60 20 60 -49.5 10 47 Bolivia 35 40 0 75 60 20 80 6.4 73 48 Brazil 50 1 1 5 52 40 20 60 6.5 53 49 Canada 4 37 4 45 40 10 20 60 6.5 53 49 Canada 4 37 4 45 40 20 60 6.5 53 49 Canada 4 37 4 45 40 20 60 6.5 53 51 Colombia 15 3 1 19 10 10 20 -4.6 24 52 Costa Rica 3 2 0 5 5 5 0 5 10 -1.1 22 53 Cuba 34 0 0 34 0 0 34 20 0 0 0 0 0 -49.5 10 55 Dominican 20 7 0 27 20 10 30 -1.6 31 55 Dominica 4 0 0 4 0 0 5 5 5 6.5 10 -1.5 11 56 Cuadro 35 25 0 60 40 20 60 6.5 53 57 El Salvador 10 10 0 20 5 5 5 6.65 11 58 Granda 4 4 37 4 45 40 20 60 60 6.5 53 59 Cuba 34 0 0 34 20 0 20 -1.7 7 37 54 Dominica 4 0 0 0 4 0 0 5 5 5 6.65 11 55 Dominican 20 7 0 27 20 10 30 -1.6 31 56 Cuadro 35 25 0 60 40 20 60 60 -0.5 60 57 El Salvador 10 10 0 20 5 5 5 10 0 -1.5 55 58 Grenada 5 0 0 5 5 60 80 140 48.9 91 60 Guyana 48 49 43 140 80 20 100 -30.4 130 61 Haiti 5 0 0 0 5 5 0 0 5 -7.4 12 62 Honduras 8 5 0 0 13 10 5 15 -4.4 19 63 Jamaica 8 11 0 9 9 5 0 0 5 5 -7.4 12 64 Honduras 8 5 0 0 13 10 0 5 15 -1.0 9 15 65 Paraguay 2 2 0 0 4 5 5 5 10 -1.5 11	26 Malta	0	5	0	5	0	0	0	-12.4	12.4
29 Norway 1 5 1 7 5 5 10 -4.1 14 30 Poland 0 4 0 4 5 0 5 -6.5 -1.8 9 31 Portugal 1 1 0 2 0 5 5 -4.8 9 32 Romania 0 15 10 25 10 20 30 -9.9 29 33 Russia 2 18 12 32 20 40 60 24.0 3.8 23 35 Slovenia 0 8 1 9 5 5 10 -5.9 15 36 Spain 0 30 0 30 20 20 40 5.7 44 19 38 Switzerland 1 35 2 38 40 5 45 3.8 41 39 Ukraine 0 27 0 27 20 10 30 <t< td=""><td>27 Moldova</td><td>0</td><td>36</td><td>1</td><td>37</td><td>40</td><td>40</td><td>80</td><td>39.6</td><td>40.4</td></t<>	27 Moldova	0	36	1	37	40	40	80	39.6	40.4
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58 Grenada 5 0 0 5 0 0 -12.4 12 59 Guatemala 45 50 0 95 60 80 140 48.9 91 60 Guyana 48 49 43 140 80 20 100 -30.4 130 61 Haiti 5 0 0 5 5 0 5 -7.4 12 62 Honduras 8 5 0 13 10 5 15 -4.4 19 63 Jamaica 8 1 0 9 5 0 5 -10.9 15 64 Mexico 30 10 0 40 30 20 50 7.0 43 65 Nicaragua 14 10 0 24 10 5 15 -14.0 29 66 Panama 21 10 0 31 20 5 25 -10.1 35 67 P	•	35	25	0	60	40	20	60	-0.5	60.5
58 Grenada 5 0 0 5 0 0 -12.4 12 59 Guatemala 45 50 0 95 60 80 140 48.9 91 60 Guyana 48 49 43 140 80 20 100 -30.4 130 61 Haiti 5 0 0 5 5 0 5 -7.4 12 62 Honduras 8 5 0 13 10 5 15 -4.4 19 63 Jamaica 8 1 0 9 5 0 5 -10.9 15 64 Mexico 30 10 0 40 30 20 50 7.0 43 65 Nicaragua 14 10 0 24 10 5 15 -14.0 29 66 Panama 21 10 0 31 20 5 25 -10.1 35 67 P										25.5
59 Guatemala 45 50 0 95 60 80 140 48.9 91 60 Guyana 48 49 43 140 80 20 100 -30.4 130 61 Haiti 5 0 0 5 5 0 5 -7.4 12 62 Honduras 8 5 0 13 10 5 15 -4.4 19 63 Jamaica 8 1 0 9 5 0 5 -10.9 15 64 Mexico 30 10 0 40 30 20 50 7.0 43 65 Nicaragua 14 10 0 24 10 5 15 -14.0 29 66 Panama 21 10 0 31 20 5 25 -10.1 35 67 Paraguay 2 2 0 4 5 5 10 -1.5 11 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>12.4</td>										12.4
60 Guyana 48 49 43 140 80 20 100 -30.4 130 61 Haiti 5 0 0 5 5 0 5 -7.4 12 62 Honduras 8 5 0 13 10 5 15 -4.4 19 63 Jamaica 8 1 0 9 5 0 5 -10.9 15 64 Mexico 30 10 0 40 30 20 50 7.0 43 65 Nicaragua 14 10 0 24 10 5 15 -14.0 29 66 Panama 21 10 0 31 20 5 25 -10.1 35 67 Paraguay 2 2 0 4 5 5 10 -1.5 11										91.1
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65 Nicaragua 14 10 0 24 10 5 15 -14.0 29 66 Panama 21 10 0 31 20 5 25 -10.1 35 67 Paraguay 2 2 0 4 5 5 10 -1.5 11	64 Mexico									43.0
66 Panama 21 10 0 31 20 5 25 -10.1 35 67 Paraguay 2 2 0 4 5 5 10 -1.5 11	65 Nicaragua	14	10	0	24	10	5	15		29.0
67 Paraguay 2 2 0 4 5 5 10 -1.5 11										35.1
	67 Paraguay		2	0	4		5	10	-1.5	11.5
00 1 ciu 40 50 0 70 40 40 00 5.5 54	68 Peru	46	30	0	76	40	40	80	5.5	54.5

Appendix I. continued

			Di	ivision		Conflict					
State	Racial division	National/ language	Religious division	Ethnic heter.	Institutional conflict	Violent conflict	Ethnic conflict	Residual ethnic conflict	Predicted ethnic conflict		
69	St. Kitts	5	0	0	5	0	0	0	-12.4	12.4	
70	St. Lucia	4	0	0	4	0	0	0	-11.5	11.5	
71	St. Vincent	7	0	0	7	0	0	0	-14.1	14.1	
72	Suriname	62	63	52	177	60	40	100	-62.8	162.8	
73	Trinidad & Tobago	43	20	35	98	60	10	70	-23.7	93.7	
74	United States	20	10	5	35	20	20	40	1.4	38.6	
75	Uruguay	2	0	2	4	5	0	5	-6.5	11.5	
	Venezuela	12	1	2	15	5	10	15	-6.1	21.1	
~~	Asia	0	70	00	00	00	00	1.40	50.0	00.7	
	Afghanistan	0	70	20	90	60	80	140	53.3	86.7	
	Bahrain	0	32	40	72	40	20	60	-11.0	71.0	
	Bangladesh	1	1	17	19	10	20	30	5.4	24.6	
	Bhutan	30	30	30	90	40	40	80	-6.7	86.7	
	Brunei	18	33	37	88	20	5	25	-60.0	85.0	
	Burma	0	35	20	55	40	60	100	43.9	56.1	
	Cambodia	0	10	5	15	5	20	25	3.9	21.1	
	China	1	9	3	13	5	20	25	5.6	19.4	
	Cyprus	0	20	18	38	60	5	65	23.8	41.2	
	India	3	70	17	128	68	40	100	-19.9	119.9	
	Indonesia	1	60	13	74	20	40	60	-12.7	72.7	
	Iran	0	50	15	65	40	30	70	5.1	64.9	
	Iraq	0	26	45	71	40	80	120	49.9	70.1	
	Israel	0	20	20	40	80	40	120	77.0	43.0	
	Japan	0	1	1	2	5	0	5	-4.8	9.8	
	Jordan	0	1	10	11	10	0	10	-7.6	17.6	
	Kazakhstan	0	56	46	102	60	20	80	-17.2	97.2	
	Korea, North	0	0	0	0 0	0	0 0	0	-8.0	8.0	
	Korea, South	0 0	0 60	0	70	0		0	-8.0	8.0	
	Kuwait	0	48	10 26	70 74	40 40	40 20	80 60	$10.8 \\ -12.7$	69.2 72.7	
	Kyrgyzstan Laos	0	34	26 15	74 49	20	20	40	-12.7 -10.9	50.9	
	Laos Lebanon	0	34 18	67	49 85	80	40	120	37.7	82.3	
	Malaysia	9	54	47	110	80	10	90	-14.2	104.2	
	Maldives	0	0	0	0	0	0	0	-8.0	8.0	
	Mongolia	6	6	6	18	0	0	0	-23.8	23.8	
	Nepal	0	47	13	60	40	5	45	-15.5	60.5	
	Oman	3	26	14	43	20	0	20	-25.6	45.6	
	Pakistan	0	52	3	55	40	40	80	23.9	56.1	
	Philippines	0	45	6	51	10	20	30	-22.6	52.6	
	Qatar	0	55	7	62	20	0	20	-42.2	62.2	
	Saudi Arabia	2	27	16	45	20	10	30	-17.4	47.4	
	Singapore	9	24	24	57	30	0	30	-27.9	57.9	
	Sri Lanka	0	26	31	57	40	80	120	62.1	57.9	
	Syria	0	11	28	39	20	5	25	-17.1	42.1	
	Taiwan	0	16	0	16	20	0	20	-2.0	22.0	
	Tajikistan	0	38	8	46	40	60	100	51.8	48.2	
	Thailand	0	15	5	20	5	10	15	-10.5	25.5	
	Turkey	0	25	20	45	20	40	60	12.6	47.4	

Appendix I. continued

		D	ivision				Conflict		
State	Racial division	National/ language	Religious division	Ethnic heter.	Institutional conflict	Violent conflict	Ethnic conflict	Residual ethnic conflict	Predicted ethnic conflict
116 Turkmenistan	0	28	10	38	10	5	15	-26.2	41.2
117 United Arab Emirates	1	67	5	73	40	0	40	-31.9	71.9
118 Uzbekistan	0	29	9	38	20	20	40	-1.2	41.2
119 Vietnam	0	13	10	23	10	10	20	-8.1	28.1
120 Yemen	0	10	40	50	10	20	30	-21.7	51.7
Africa									
121 Algeria	0	27	1	28	10	10	20	-12.5	32.5
122 Angola	2	63	0	65	40	80	120	55.1	64.9
123 Benin	0	40	15	55	40	10	50	-6.1	56.1
124 Botswana	1	2	0	3	5	0	5	-5.6	10.6
125 Burkina Faso	0	45	20	65	40	5	45	-19.9	64.9
126 Burundi	0	20	0	20	60	100	160	134.5	25.5
127 Cameroon	0	55	22	77	40	20	60	-15.3	75.3
128 Cape Verde	29	0	0	29	10	0	10	-23.4	33.4
129 Central African Republic	0	69	5	74	40	5	45	-27.7	72.7
130 Chad	54	40	50	144	60	60	120	-13.9	133.9
131 Comoros	0	0	14	14	10	0	10	-10.3	20.3
132 Congo	0	53	2	55	40	20	60	3.9	56.1
133 Cote d'Ivoire	1	73	22	96	40	20	60	-32.0	92.0
134 Djibouti	11	50	6	67	60	40	100	33.4	66.6
135 Egypt	0	7	10	17	10	10	20	-2.9	22.9
136 Equatorial Guin		15	0	15	20	10	30	8.9	21.1
137 Eritrea	0	50	50	100	40	60	100	4.5	95.5
138 Ethiopia	0	60	40	100	60	40	100	4.5	95.5
139 Gabon	3	50	1	54	40	20	60	4.8	55.2
140 Gambia	0	40							
			15	55 70	20	5	25	-31.1	56.1
141 Ghana	0	56	16	72	40	20	60	-11.0	71.0
142 Guinea Bisson	0	52	16	68	40	10	50	-17.5	67.5
143 Guinea-Bissau	2	0	30	32	20	0	20	-16.0	36.0
144 Kenya	1	60	20	81	60	40	100	21.2	78.8
145 Lesotho	0	1	0	1	0	0	0	-8.9	8.9
146 Liberia	0	56	20	76	40	60	100	25.5	74.5
147 Libya	1	10	1	12	5	5	10	-8.5	18.5
148 Madagascar	0	69	9	69	20	0	20	-48.5	68.5
149 Malawi	0	40	15	55	40	10	50	-6.1	56.1
150 Mali	6	50	10	65	20	40	60	-4.9	64.9
151 Mauritania	15	60	0	75	60	60	120	46.4	73.6
152 Mauritius	30	32	48	110	60	0	60	-44.2	104.2
153 Morocco	0	40	1	41	10	20	30	-13.9	43.9
154 Mosambique	0	60	10	70	40	40	80	10.8	69.2
155 Namibia	5	54	0	59	40	20	60	0.4	59.6
156 Niger	10	46	15	71	40	40	80	9.9	70.1
157 Nigeria	0	45	50	95	60	20	80	-11.1	91.1
158 Rwanda	0	11	1	12	60	100	160	141.5	18.5
159 Sao Tomé & Principe	0	0	0	0	0	0	0	-8.0	8.0
160 Senegal	2	33	6	41	20	30	50	6.1	43.9

Appendix I. continued

		D_{I}	ivision		Conflict					
State	Racial division	National/ language	Religious division	Ethnic heter.	Institutional conflict	Violent conflict	Ethnic conflict	Residual ethnic conflict	Predicted ethnic conflict	
161 Seychelles	0	6	0	6	10	0	10	-3.3	13.3	
162 Sierra Leone	1	55	30	86	40	20	60	-23.2	83.2	
163 Somalia	0	80	0	80	60	100	160	82.0	78.0	
164 South Africa	24	80	3	107	80	40	120	18.4	101.6	
165 Sudan	59	35	30	124	80	100	180	63.6	116.4	
166 Swaziland	3	5	0	8	0	0	0	-15.0	15.0	
167 Tanzania	1	5	33	39	10	10	20	-22.1	42.1	
168 Togo	0	50	10	60	40	30	70	9.5	60.5	
169 Tunisia	0	5	0	5	0	0	0	-12.4	12.4	
170 Uganda	1	59	16	76	40	40	80	5.5	74.5	
171 Zaire	0	60	10	70	40	40	80	10.8	69.2	
172 Zambia	1	65	1	67	20	10	30	-36.6	66.6	
173 Zimbabwe	2	22	0	24	20	20	40	11.0	29.0	
Oceania										
174 Australia	5	5	2	12	5	5	10	-8.5	18.5	
175 Fiji	50	50	47	147	100	20	120	-16.6	136.6	
176 Kiribati	1	1	0	2	0	0	0	-9.8	9.8	
177 Micronesia	0	53	0	53	40	0	40	-14.4	54.4	
178 New Zealand	17	17	0	34	20	10	30	-7.7	37.7	
179 Papua New Guinea	2	20	0	22	20	20	40	12.7	27.3	
180 Solomon Islands	6	10	0	16	0	5	5	-17.0	22.0	
181 Tonga	2	2	0	4	0	5	5	-6.5	11.5	
182 Vanuatu	6	6	0	12	10	0	10	-8.5	18.5	
183 Western Samoa	1	1	0	2	0	0	0	-9.8	9.8	

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This book provides an overview of why European integration in foreign and security policy has proved so difficult. It shows how the obstacles to developing the common policy go to the heart of debates around the sovereignty of the nation-state. A leading group of international contributors explain how these problems arise and consider the future prospects of developing a more regional-based solution.

Broadly organized around the three areas of policy, actors and issues, the first section traces the reluctant growth of EU integration in foreign and security policy as it developed from the mid-1980s. In the second section the national policies and interests that typically obstruct a common policy are explored through four key member states. The third section considers ways of addressing problems like the EU's expansion to include Central and Eastern Europe, the impact of an independent European security identity on the transatlantic relationship, as well as the potential risks to European security from the Mediterranean rim.

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