# THE EVOLUTIONARY PSYCHOLOGICAL PERSPECTIVE ON WAR, CONQUEST, AND ALIEN RULE\*

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#### ABSTRACT

The evolutionary psychological perspective on wars suggests that the ultimate cause of all intergroup conflict is the relative availability of reproductive women. Polygyny, which allows some men to monopolize all reproductive opportunities and exclude others, should increase the prevalence of civil wars, but not interstate wars, which did not exist in the ancestral environment. The analysis of the Correlates of War data supports both hypotheses derived from the evolutionary psychological perspective; polygyny increases civil wars but not interstate wars. The evolutionary psychological perspective implies that women should be far less resistant to alien rule than men, because they have the option of marrying into the conquering group; however, this sex difference should disappear when women are no longer reproductive. The analysis of the Eurobarometer data from 15 European Union nations strongly confirms this prediction.

# THE EVOLUTIONARY PSYCHOLOGICAL PERSPECTIVE ON WAR, CONQUEST, AND ALIEN RULE

Evolutionary psychology (EP) has revolutionized many fields in the social sciences in the last couple of decades. Its influence extends, not only to the core fields of psychology and anthropology, but also to the neighboring fields of economics (Cosmides and Tooby 1994; Rogers 1994), sociology (Kanazawa 2001a), criminology (Daly and Wilson 1988), demography (Bock 1999; MacDonald 1999), history (Betzig 2002), and public policy (Browne 2002; Crawford and Salmon 2004). With a few notable exceptions (Orbell et al. 2004; Rubin 2002), however, political science tends to lag behind this trend, and, in particular, EP has yet to influence one subfield of political science, international relations. The keyword search with "evolutionary psychology" and "international relations" on the electronic database International Bibliography of the Social Sciences returns no hits (as of March 2005), and the same search on PsycInfo uncovers one book (Long and Brecke 2003) and its review only.

Since the subject matter of international relations -- relations between and among states -- is the most aggregate and macro of all subject matters in the social sciences, perhaps EP -- the study of evolved psychological mechanisms in the human brain -- may appear to many to be least relevant to it. The recent publications of *Darwin and International Relations: On the Evolutionary Origins of War and Ethnic Conflict*, by Bradley A. Thayer (2004), and *Bare Branches: Security Implications of Asia's Surplus Male Population*, by Valerie M. Hudson and Andrea M. den Boer (2004), however, explicitly introduce the evolutionary psychological perspective into international relations and promise the dawn of a new era in the field.

In this paper, I seek to make a contribution to international relations from the evolutionary psychological perspective, by demonstrating how the operation of evolved psychological mechanisms in the human brain and their interaction with the environment might affect the course of history at the national and international levels.

In particular, I offer the evolutionary psychological perspective on war and intergroup conflict, and support the perspective with the Correlates of War data (Small and Singer 1982). I then draw implications of the perspective for foreign conquest and alien rule, and provide empirical support for them with the 1997 Eurobarometer data from 15 European Union nations.

# 1. Evolutionary Psychological Perspective on Wars

# 1.1. Principles of Evolutionary Psychology

Evolutionary psychology (EP) is the study of universal human nature, which consists of domain-specific evolved psychological mechanisms. An evolved psychological mechanism is an information-processing procedure or decision rule that evolution by natural and sexual selection has equipped humans to possess in order to solve a particular adaptive problem (a problem of survival or reproduction). Unlike decision rules in microeconomic subjective utility maximization theory or game theory, however, evolved psychological mechanisms mostly operate behind and beneath conscious thinking. Evolved psychological mechanisms produce preferences and values, which rational human actors can then pursue within their constraints; they also engender emotions (Kanazawa 2001a).

There are two important principles of EP. First, from the evolutionary psychological perspective, the ultimate (albeit unconscious) goal of all biological organisms, including humans, is reproductive success. Humans, just like all other species, are designed by natural and sexual selection to reproduce. The fact that many of us do not think that's the ultimate goal of our existence or that some of us choose not to reproduce is irrelevant. We are not privy to the evolutionary logic behind our design, and, no matter what we choose to do in our own lifetimes, we are all descended from those who chose to reproduce. None of us inherited our psychological mechanisms from our ancestors who remained childless. Everything else in life, even survival, is a means to reproductive success.

Second, evolved psychological mechanisms need only be adaptive in the environment in which they evolved, called the environment of evolutionary adaptedness (EEA). For the most part, the EEA is the African savanna during the Pleistocene Epoch. Our evolved psychological mechanisms, and the human nature they comprise, are designed for and adapted to the EEA. To the extent that our current environment is radically different from the EEA, however, our evolved psychological mechanism might produce maladaptive behavior. When the environment changes too rapidly for evolution to catch up (as human civilization has in the past 10,000 years), our evolved psychological mechanisms often produce maladaptive behavior, due to the disjuncture between the EEA, for which they are designed, and the current environment, in which they now express themselves.

This second observation leads to what I call the Savanna Principle (Kanazawa 2002, 2004), which states that the human brain has difficulty comprehending and dealing with entities and situations that did not exist in the EEA. The Savanna Principle explains, among other things, why humans make the irrational decision to contribute to large collective action, such as voting in Presidential elections, when their marginal contribution to the outcome is infinitesimal. This is because any collective action in the EEA involved only a handful of individuals and their contribution did make a difference (Kanazawa 2004). It also explains why individuals who watch certain types of TV shows are more satisfied with their friendships, as if they had more friends or socialized with them more frequently. This is because TV (or any other realistic images of other humans) did not exist in the EEA and our human brain consequently has difficulty distinguishing our real friends and TV characters (Kanazawa 2002).

# 1.2. Ultimate Causes of War from the Evolutionary Psychological Perspective

How would evolutionary psychology explain war and intergroup conflict?

Recall that EP avers that the ultimate motive for all human behavior is reproductive.

While modern nations go to war on philosophical, moral, political and economic

principles, such as "the defense of democracy," or even vaguer "the protection of national interest," the primary motives for engaging in warfare in the EEA must have been reproductive. Ethnographic studies of contemporary hunter-gatherer societies, which are often used as approximate (albeit imperfect) analogs of human groups in the EEA, underscores the reproductive motives behind warfare.

In one such study, Chagnon (1997, p. 191) recounts his conversation with a Yanomamö warrior.

The headman of the village, Säsäwä, coveted my British commando knife and kept begging me to give it to him. He wanted me to tell him all about the knife, its origin, history, and how often it had been exchanged in trades. When I told him that it was used by people of my "group" when they went on raids against their enemies, his interest shifted to our military exploits.

'Who did you raid?' he asked.

'Germany-teri.'

'Did you go on the raid?'

'No, but my father did.'

'How many of the enemy did he kill?'

'None.'

'Did any of your kinsmen get killed by the enemy?'

'No.'

You probably raided because of women theft, didn't you?'

'No.'

At this answer he was puzzled. He chatted for a moment with the others, seeming to doubt my answer.

Chagnon (1997, p. 190) notes that "the Yanomamö themselves regard fights over women as the primary causes of the killings that lead to their wars." Buss (1994, pp. 219-220) summarizes: "Among the Yanomamö, there are two key motives that spur men to declare war on another tribe -- a desire to capture the wives of other men or a desire to recapture wives that were lost in previous raids.... It seemed silly to them to risk one's life for anything other than capturing women." This ultimate reproductive motive behind wars can explain why it is so common for invading soldiers to rape women of the conquered group (Shields and Shields 1983). From this perspective, rape is not an unfortunate byproduct of war; it is its original purpose.

If the ultimate (albeit unconscious to most peoples except for the Yanomamö) motive for intergroup conflict is the desire to abduct women from another group, then

a shortage of reproductive women in one's own group should heighten such a desire. Apart from exogenous shocks like imbalanced sex ratios (potentially caused by, among other things, earlier history of warfare), one social factor which artificially decreases the availability of reproductive women in a group is polygyny. By allowing some men to monopolize many or most reproductive women, polygyny reduces the number of women left available for the rest of the men, even when the sex ratio is roughly 50:50. Earlier studies show that the degree of polygyny increases men's tendency toward violence (Daly and Wilson 1988; Kanazawa and Still 2000); the more polygynous the society, the greater the incidence of violent crimes. Similarly, the degree of polygyny may increase men's desire to raid another group in order to gain access to reproductive women.

Now does this mean that EP would predict that polygynous societies engage in a greater number of interstate wars than monogamous societies? No. Modern interstate wars are initiated, declared, orchestrated, conducted, and fought by modern, bureaucratic states, not by men or even groups of men. And the Savanna Principle suggests that the human brain would have difficulty comprehending and dealing with modern, bureaucratic states, because they did not exist in the EEA. Polygyny, even in modern society, creates a shortage of reproductive women, and this in turn makes young men more violent and desirous of abducting and capturing women. (It is almost always the young resourceless men of low status who are left without mates in polygynous societies.) For this reason, the degree of polygyny does increase the incidence of rape in society (Kanazawa and Still 2000). However, men's evolved psychological mechanisms, adapted to and designed for the EEA, would not compel them then to channel their heightened desire through legislatures, political parties, aristocracies, royal families, or dictatorships in order to mount a war on another state, especially since the political leaders who control these institutions already have multiple wives.

So polygyny would not increase the incidence of modern interstate wars. However, it should increase any other instance of intergroup conflict, initiated and fought by groups of men, at a lower level of aggregation, in a form that existed in the EEA. One such instance of intergroup conflict within a society is civil wars. Civil wars happen when self-organized groups of men rebel or fight. Unlike interstate wars, the initiation and declaration of civil wars do not require that men channel their desires and frustrations through the bureaucracy of the modern states. Any group of men, frustrated by the lack of reproductive opportunities, can violently express their dissatisfaction, rebel, and fight. Thus EP would predict that polygynous societies have a greater number and extent of civil wars than monogamous societies.

The evolutionary psychological perspective on wars would therefore lead to two complementary hypotheses:

 $H_1$ : The degree of polygyny in society does not increase the incidence and extent of interstate wars.

H<sub>2</sub>: The degree of polygyny in society increases the incidence and extent of civil wars.

I will test these two hypotheses with the Correlates of War data in the next section.

# 1.3. Empirical Analyses

# 1.3.1. Data

I use Small and Singer's (1982) Correlates of War data, which are among the most comprehensive and highest-quality data on interstate and civil wars during the period 1816-1980. They list all the interstate and civil wars, selected by carefully-stated criteria for inclusion and exclusion, and their quantitative indicators such as the number, duration, and total battle deaths. Then they later summarize these data for each nation. The Correlates of War data have been used by major studies in international relations (Bremer 1992; Rummel 1983).

# 1.3.2. The Unit of Analysis

My unit of analysis is the nation state, which are members of what Small and Singer (1982, pp. 38-43) define as the *interstate system*. To be a member of the interstate system, before 1919, a political entity must be recognized by both Britain and France, and have a population of at least half a million. After 1920, it must be recognized by at least two major powers (see below), and have a population of at least half a million or be a member of the League or the United Nations.

In addition to the interstate system, Small and Singer define two other systems of nations. For the period 1816-1919, the *central system* consists of nations which are "active and influential in European-centered diplomacy" or the "European state system," which nonetheless includes non-European nations such as the United States, Japan, and China (Small and Singer 1982, pp. 43-44). Small and Singer no longer makes a distinction between Central and Peripheral systems after 1920. Finally, for the entire period (1816-1980), Small and Singer (1982, pp. 44-45) specify the smallest subset of nations, the *major power system*, but do not explicitly define it, other than to say that "all students of world politics use, or appreciate the relevance of, the concept of "major power." At any rate, it consists of the Unites States (1899-1980), the United Kingdom (1816-1980), France (1816-1940, 1945-1980), Germany (1816-1918, 1925-1945), Austria-Hungary (1816-1918), Italy (1860-1943), Russia/USSR (1816-1917, 1922-1980), Turkey/Ottoman Empire (1816-1919), China (1950-1980), and Japan (1895-1945).

# 1.3.3. Wars

A war is a military conflict with at least 1,000 battle deaths in total (or per year in the case of extra-systemic wars; see below) among all the system members. A system member qualifies as a participant in a war if it sustains at least 100 battle deaths or deploys at least 1,000 combat troops (Small and Singer 1982, pp. 54-57).

Small and Singer (1982) define three different types of wars: *Intra-systemic* wars, fought between two or more members of the interstate system (n = 67); *Extra-systemic* (imperial or colonial) wars, fought between a member of the interstate

system and its colony or other nonmember (n = 51); *Civil* wars, fought within a member of the interstate system, between subnational groups and the central government (n = 160). In my analysis of interstate wars, I include both intra- and extra-systemic wars (n = 118), even though, confusingly, Small and Singer use "interstate wars" specifically as a synonym for intra-systemic wars). In my analysis of civil wars, I include Small and Singer's civil wars.

# 1.3.4. Dependent Variables

For both interstate and civil wars, Small and Singer (1982) use 10 quantitative indicators.

- 1. Total battle deaths (in 1,000s).
- 2. Battle deaths per 10,000 population.
- 3. Battle deaths per war month (month during which the war is fought).
- 4. Battle deaths per war.
- 5. Battle deaths per system year (year during which the nation is a member of the interstate system).
  - 6. War months per war.
  - 7. Total number of wars.
  - 8. Total war months.
  - 9. Number of wars per system year.
  - 10. Total wars per system year.

Small and Singer (1982, Table 10.1) then summarizes the "national war experiences, totaled, averaged, and normalized" for each system member. Each system member has a number for each of these indicators for all the wars they fought during 1816-1980. I use these 10 indicators of "national war experiences" as my dependent variables for both interstate and civil wars.

# 1.3.5. Independent Variable: Polygyny

I use Kanazawa and Still's (1999) polygyny scores, compiled from the *Encyclopedia of World Cultures* (Levinson 1991-1995). It varies continuously from 0.000 (monogamy is the rule and is widespread) to 3.000 (polygyny is the rule and is widespread). (See Kanazawa and Still (1999) for details of the index construction.) It is important to point out that the polygyny scores that I use here are not devised for the current purposes, but were instead originally compiled more than half a decade ago for a comparative study of marriage institutions (Kanazawa and Still 1999), and have subsequently been used for analyses of crime (Kanazawa and Still 2000) and menarche (Kanazawa 2001b).

# 1.3.6. Control Variables

Because a nation can only engage in interstate wars or experience civil wars within its borders if it is a member of Small and Singer's (1982) interstate system, I control for the number of years that a nation has been a member of the system, except for dependent variables which are already standardized for system years. It serves as a measure of "risk exposure." In addition, because the nation's position in the world systems may affect its likelihood of waging interstate wars or (less likely) of experiencing civil wars, I also control for the numbers of years that a nation is defined as a central power, and as a major power, by Small and Singer (1982).

# **1.3.7.** Results

The results presented in Table 1 support Hypothesis 1. Even though polygyny increases the level of *interpersonal* violence, such as murder and rape (Kanazawa and Still 2000), polygyny has no effect on interstate wars. Six of the coefficients for polygyny has the positive sign; the other four have the negative sign. None of the coefficients for polygyny has a statistically significant effect on the measures of interstate wars. These results provide direct support for Hypothesis 1, and indirect support for the Savanna Principle, which states that the human brain has difficulty

comprehending and dealing with entities and situations which did not exist in the EEA, such as the modern, bureaucratic states.

-- Table 1 about here --

The results in Table 2 support Hypothesis 2. Nine out of the 10 coefficients for polygyny are positive, and five are statistically significant. The level of polygyny significantly increases battle deaths per 10,000 population (p < .05), battle deaths per system year (p < .10), war months per war (p < .05), total number of civil wars (p < .05), and total war months (p < .10). (All statistical tests are two-tailed.) Consistent with the evolutionary psychological perspective on wars, it appears that polygyny heightens the level of intergroup conflict, when groups of men, frustrated by the limited reproductive opportunities, could engage in violent conflict and war without having to channel their frustrations through evolutionarily-novel entities such as the apparatuses of the modern state.

-- Table 2 about here --

# 2. Implications for Foreign Conquest and Alien Rule

What theoretical and empirical implications does the evolutionary psychological perspective on war and intergroup conflict have for foreign conquest and alien rule?

One immediate implication is the sex difference in the consequences for the conquered. The evolutionary psychological perspective suggests that access to reproductive women is the ultimate goal of all wars and intergroup conflict, including foreign conquest and alien rule. On the one hand, this unfortunately means, as I suggest above, that the rape of young women by the conquering soldiers would be a routine part of war and conquest, part of the goal rather than a byproduct (Shields and Shields 1983).

On the other hand, the perspective simultaneously implies that women will not be killed by the conquering soldiers, because they are too valuable, while all men will be killed. Among many primate species, when one group attacks and conquers another, all the males are immediately killed or driven out, while the females remain and mate with the conquering males, *except for older females, who are also killed*. Among the chimpanzees of Gombe, for example, "the response of adult males to a "stranger" female -- that is, a female unknown to the human observers and presumed to be from a neighboring community -- depends to a large extent on her age and reproductive state" (Goodall 1986, p. 493). Among the Yanomamö,

The stated object of a raid is to kill one or possibly two men and escape. If the raiders can do so without risking losses, however, they may abduct a woman from the enemy village. The abducted woman will be raped by all the raiders, taken to their village, raped by the remaining men in the village, and then given as a wife to one man. She can expect to spend the rest of her life with her new companions (Wrangham and Peterson 1996, p. 67).

Strictly from the genetic perspective, it does not matter for the female with whom she mates and reproduces, because the resulting offspring will always have half her genes, regardless of whether the other half comes from the males of her native (now conquered) group or the foreign (conquering) group. In some sense, females should prefer to mate with the conquering males, because they have proven themselves to be superior on average to the native males (most of whom are now dead). As generations of German, Japanese, Korean and Vietnamese women in the 20th century can attest, human females may sometimes prefer to mate with the conquering males under alien rule.

This reasoning leads me to suggest that women have less to fear from foreign conquest and alien rule than men do. Of course, it is terrible to face the risk of being raped repeatedly by the conquering soldiers, but it could not be worse than the certainty of death, especially since, if they survive, the women from the conquered group have the option of marrying into the conquering group and reproducing with the conquerors, who might possess superior genes. And the conquering soldiers are much less likely to kill the (potential or actual) mothers of their offspring.

However, this option is open only to reproductive females. As the case of chimpanzee wars shows, older females are "useless" to the conquering males and thus

face the same certain death as males do. I thus suggest two complementary hypotheses for the implications of the evolutionary psychological perspective on wars and intergroup conflict for foreign conquest and alien rule.

H<sub>3</sub>: Younger (reproductive) women fear alien rule less than younger men.

H<sub>4</sub>: Older (postreproductive) women do not fear alien rule less than older men.

# 2.1. Empirical Analyses

# 2.1.1. Data

There are no systematic, high-quality data with representative samples from conquered groups under alien rule. Thus I must rely on a more innocuous data set. For this purpose, I use Eurobarometer 48.0: Holiday Travel, October-November 1997 (Melich 1998). The sample consists of multistage national probability samples and national stratified quota samples of persons aged 15 and over, residing in the (then) 15 European Union member nations: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. The total sample size is 16,186.

The Eurobarometer data set is particularly advantageous for testing evolutionary psychological hypotheses about species-typical (cross-culturally universal) psychological mechanisms, since it comprises respondents from 15 different nations. It is also fortuitous for the present purpose of testing propositions about the consequences of alien rule, because many of the nations have either experienced life under alien rule in recent history.

One set of questions in Eurobarometer 48.0 ask whether the respondents find disturbing people of another nationality, race, and religion. I use their binary responses to these three questions (1 = yes, 0 = no) as measures of xenophobia and fear of aliens. The main predictor is the respondent's sex (1 = male, 0 = female). In addition, because the education and socioeconomic status may affect individual

attitudes toward aliens, I control for the respondent's education (in years) and income (in 12 ordinal categories of local monetary unit). Finally, since an earlier study using the same data set (Kanazawa and Frerichs 2001) finds that marital status affects individual attitudes toward foreign cultures, I also control for the respondent's marital status (1 = currently married, 0 = otherwise).

## **2.1.2.** Results

Results in Table 3 strongly confirm Hypotheses 3 and 4. The top panel of Table 3 shows that, among the Eurobarometer respondents under 50, there is a large and statistically significant sex differences in the three measures of xenophobia. Men under 50 are significantly more likely to say that they find disturbing people of another nationality (p < .001), race (p < .01), and religion (p < .01) than women under 50, even after controlling for their education. The sex differences are substantively, as well as statistically, significant. Controlling for education, income and marital status, men under 50 have 23-28% greater odds of responding affirmatively to these questions than women under 50.

# -- Table 3 about here --

In sharp contrast, the sex differences disappear entirely among respondents who are 50 years old or older. The difference in the sex differences between the two subsamples is very large. The Wald statistic associated with sex ranges from 8.97 to 11.58 among respondents under 50; it ranges from .01 to .47 among respondents 50 and above.

Interestingly, a separate analysis (not shown) demonstrates that the interaction term between sex and age in a combined sample of all ages is not statistically significant, except for religion. It means that, at least for nationality and race, women do not gradually and linearly become more xenophobic over the life course. They *suddenly* become *qualitatively* more xenophobic sometime between the ages of 40 and 50.

## 3. Discussion

The evolutionary psychological perspective on wars suggests that the root cause of all intergroup conflict is the lack of reproductive opportunities for young men, and polygyny, which produces a large number of mateless young men, should increase such conflict. However, the application of the Savanna Principle would lead to the prediction that polygyny does not necessarily increase the incidence and extent of interstate wars, while it should increase the number and scope of civil wars. The analysis of the Correlates of War data confirms both hypotheses derived from the evolutionary psychological perspective on wars. Polygyny increases civil wars, while it has no effect on interstate wars.

In their study of the surplus male population (called "bare branches" in Chinese) in China and India, Hudson and den Boer (2004, p. 202) note:

Two observations would seem to follow from the analysis thus far. First, high-sex-ratio societies are governable only by authoritarian regimes capable of suppressing violence at home and exporting it abroad through colonization or war. Second, high-sex-ratio societies that are ethnically heterogeneous are likely to experience civil strife directed against minority ethnic groups, which the government (if it represents the majority ethnic group) may seek to encourage. In our view, the first observation holds for China, and the second, for India.

I completely agree with their prediction for India; regardless of ethnic composition, high sex ratios, whether created by offspring sex selection or polygyny, should increase crime, violence, civil unrest and ethnic conflict. However, I disagree with their prediction for China. Bare branches "belong predominantly to the lowest socioeconomic class," are "more likely to be underemployed or unemployed" and "typically transients with few ties to the communities," and "live and socialize with other bare branches" (pp. 188-192). They are simply not likely to compel the elite state leaders to wage wars on their behalf, so that they may acquire mates from abroad. I therefore predict that, while it will experience high rates of crime and violence and possibly civil wars, China will *not* wage interstate wars against another state in the near future.

However, Hudson and den Boer argue that it may be in the state leaders' self-interest in maintaining internal social order to send and expend bare branches in imperial wars and foreign expeditions (pp. 207-227). Although my analysis presented above of the Correlates of War data do not support their theory (imperial and colonial wars are subsumed under interstate wars in my analysis), further empirical research is necessary to adjudicate between these two theoretical predictions.

While my evolutionary psychological theory of war attributes its ultimate cause to the reproductive needs of humans, Thayer's (2004) competing theory from the same perspective attributes it to their material needs. Thayer argues that humans engage in wars in order to gain and defend resources (pp. 97-115). On the theoretical grounds, Thayer's logic appears to be backwards, because, from the evolutionary psychological perspective, men need material resources in order to gain access to reproductive resources (women), thus reproductive resources are more primary than material resources. On the empirical grounds, my analysis of the Correlates of War data seems to contradict Thayer's prediction, since wealthier nations (measured by their Central System and Major Power status) are usually more likely to experience both interstate and civil wars than poorer nations, although Thayer might suggest that wealthier nations need to engage in wars to defend their resources. At any rate, future empirical studies must test my evolutionary psychological theory of war against Thayer's from the same perspective.

For foreign conquest and alien rule, the evolutionary psychological perspective suggests that women should fear alien rule much less than men, but only so long as they are reproductive, because they then have a good chance of being spared by the conquerors and have the option of marrying into them. Accordingly, the analyses of the Eurobarometer data show that young women are much less xenophobic than young men, but the sex differences disappear around age 50.

In his 1999 book *The Lexus and the Olive Tree*, the *New York Times* columnist Thomas L. Friedman predicted that the first major war in the 21st century, after the end of the Cold War, would not be fought between nations. It will instead be declared

by what Friedman called "Super-Empowered Angry Men," such as, among others, (the then little-known) Osama bin Laden, who would use the power of modern technology, like the internet, email, and cell phones, to mount a successful war against modern states, possibly even a superpower like the United States. In his September 13, 2001, *NYT* column, filed from Jerusalem, Friedman once again predicted that the events in New York and Washington two days earlier signified the start of the World War III. Nearly four years later, we are still in the middle of the World War III.

From my perspective, there are two points to note in Friedman's predictions. First, the World War III is not an interstate war between nations; it is instead the first global civil war in human history. Bin Laden and other "Super-Empowered Angry Men" do not represent any nation or state, and they need not express their anger through the channels of modern bureaucratic states. Western allies, such as the United States and the United Kingdom, are fighting groups of angry, frustrated men, not other states.

Second, the one factor which unites all of our otherwise diverse enemies, from al Qaeda in the Middle East, to Jemaah Islamiyah in the South East Asia, to the Chechen rebels in Russia, is the Muslim religion, and Muslims, unlike members of other major religions in the world, are polygynous. From the evolutionary psychological perspective, it is no coincidence that the first major global civil war is declared, initiated and fought by a polygynous group. Many young resourceless Muslim men of low status are left mateless because young reproductive women are monopolized by wealthy polygynous men of high status. The prospect of an exclusive access to 72 virgins in heaven sounds quite appealing to such mateless men in comparison to the bleak reality on earth of being complete reproductive losers. The same prospect would not be so appealing if they had even one mate on earth, which monogamy guarantees.

There is one ethnic group in the world which is significantly more polygynous than Muslims, however, and that is the tribal societies in the sub-Saharan Africa.

Accordingly, sub-Saharan Africa has the world's highest levels of violence, measured by interpersonal crimes such as murder and rape (Kanazawa and Still 2000), and the region suffers from a long history of interminable civil wars. Currently, however, the region is still too poor to mount a global civil war against western nations. Very few young men in sub-Saharan Africa have access to the internet, email, and cell phones which allow bin Laden and his allies to be so effective. It is my prediction, derived from the evolutionary psychological perspective on wars, that the first non-Muslim bin Laden will emerge from sub-Saharan Africa, when communication technology in the region reaches the level currently available in the Middle East.

Table 1 **Polygyny Does Not Increase Interstate Wars** 

	Dependent variable				
	Total battle	Battle deaths	Battle deaths	Battle deaths	Battle deaths
	deaths (1000s)	per 10,000	per war month	per war	per system
		population			year
Polygyny	14.9879	-1.7128	3226	-3.7358	.0930
	(59.6497)	(34.3480)	(.3481)	(9.0131)	(.4767)
System	.2359	2.3011**	0035	0717	
	(1.4610)	(.8413)	(.0085)	(.2208)	
Central	1.1420	-1.8065	.0141	.1909	.0068
	(2.7308)	(1.5725)	(.0159)	(.4126)	(.0192)
Major	24.8294****	2.0038	.1034****	1.9198****	.1634****
	(2.4067)	(1.3859)	(.0140)	(.3637)	(.0199)
Constant	5.7668	-36.8833	1.1283	23.9929	.6874
	(114.3243)	(65.8312)	(.6672)	(17.2745)	(.6781)
n	155	155	155	155	155
$R^2$	.5506	.0866	.4119	.2501	.4293

	Dependent variable				
	War months	Total number	Total war	Number of	Total war
	per war	of wars	months	wars per	months per
				system year	system year
Polygyny	.6827	.0338	2.9539	0024	.0250
	(1.7159)	(.1819)	(5.0761)	(.0026)	(.0920)
System	.1540***	.0209****	.5356****		
	(.0420)	(.0045)	(.1243)		
Central	0816	.0195*	.2701	.0001	.0031
	(.0786)	(.0083)	(.2324)	(.0001)	(.0037)
Major	.0251	.0740****	1.5775****	.0005****	.0101**
	(.0692)	(.0073)	(.2048)	(.0001)	(.0038)
Constant	1.6368	.0122	-6.7069	.0210	.3499
	(3.2886)	(.3487)	(9.7288)	(.0037)	(.1308)
n	155	155	155	155	155
$R^2$	.1065	.7162	.5902	.2502	.0980

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors.

† p < .10 \* p < .05 \*\* p < .01 \*\*\* p < .001 \*\*\*\* p < .0001 (two-tailed)

Table 2 **Polygyny Increases Civil Wars** 

	Dependent variable				
	Total battle	Battle deaths	Battle deaths	Battle deaths	Battle deaths
	deaths (1000s)	per 10,000	per war	per war	per system
		population	month		year
Polygyny	32.3410	1.2261*	-2.0173	15.4674	.7517†
	(27.9462)	(.5755)	(1.9374)	(10.2057)	(.4262)
System	1.5252*	.0732****	0318	.3641	
	(.6845)	(.0141)	(.0475)	(.2500)	
Central	9932	0309	0109	4524	.0034
	(1.2794)	(.0264)	(.0887)	(.4672)	(.0171)
Major	1.3630	0228	.0265	.8265*	.0106
	(1.1276)	(.0232)	(.0782)	(.4118)	(.0178)
Constant	-57.1015	-2.5070	6.5499	-9.9073	.1000
	(53.5616)	(1.1031)	(3.7132)	(19.5601)	(.6063)
$R^2$	.0564	.1697	.0093	.0533	.0223
n	155	155	155	155	155

	Dependent variable				
	War months	Total number	Total war	Number of	Total war
	per war	of wars	months	wars per	months per
				system year	system year
Polygyny	3.5529*	.2467*	8.8874†	.0026	.1589
	(1.5632)	(.1149)	(4.7063)	(.0020)	(.1053)
System	.1062**	.0204****	.5403****		
	(.0383)	(.0028)	(.1153)		
Central	0191	0138**	3215	0000	.0002
	(.0716)	(.0053)	(.2155)	(.0001)	(.0042)
Major	0110	.0017	0328	.0000	.0002
	(.0631)	(.0046)	(.1899)	(.0001)	(.0044)
Constant	-2.0982	6019	-18.5259	.0076	.1676
	(2.9961)	(.2203)	(9.0201)	(.0029)	(.1498)
$R^2$	.0733	.2783	.1385	.0114	.0159
n	155	155	155	155	155

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors.

† p < .10 \* p < .05 \*\* p < .01 \*\*\* p < .001 \*\*\*\* p < .0001 (two-tailed)

Table 3
Sex Differences in Xenophobia by Age

Do you find disturbing people of another...

	Respondents under 50			
	nationality?	race?	religion?	
Sex	.2481***	.2134**	.2051**	
(1 = male)	(.0729)	(.0707)	(.0685)	
Education	0764***	0613****	0161*	
	(.0094)	(.0088)	(.0077)	
Income	.0152	.0026	.0087	
	(.0114)	(.0111)	(.0107)	
Marital status	0371	.0822	.0482	
(1 = married)	(.0771)	(.0755)	(.0731)	
Constant	-1.1867	-1.2503	-1.7559	
	(.1442)	(.1384)	(.1314)	
-2LogLikelihood	5219.18	5467.84	5747.84	
$\chi^2$ (df=4)	84.39****	63.01****	14.60**	
% correctly	87.41	86.47	85.47	
classified				
n	7,006	6,978	6,952	

	Respondents Age 50 and above			
	nationality?	race?	religion?	
Sex	.0227	.0098	0569	
(1 = male)	(.0866)	(.0809)	(.0833)	
Education	0260**	0234**	0061	
	(.0085)	(.0078)	(.0077)	
Income	0138	0172	0171	
	(.0145)	(.0135)	(.0138)	
Marital status	.0132	.0377	.0938	
(1 = married)	(.0970)	(.0906)	(.0942)	
Constant	-1.3349	-1.1339	-1.4027	
	(.1085)	(.1012)	(.1042)	
-2LogLikelihood	3793.12	4194.83	4010.51	
$\chi^2$ (df=4)	14.39**	15.32**	4.05	
% correctly	83.99	80.87	82.19	
classified				
n	4,328	4,313	4,285	

Note: Main entries are unstandardized regression coefficients.

Numbers in parentheses are standard errors.

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