

- tation: *An anthropology perspective*. Edited by L. Cronk, N. Chagnon, and W. Irons, pp. 65–86. New York: Elsevier.
- EDER, J. F. 1987. *On the road to tribal extinction*. Berkeley: University of California Press.
- EMBER, C. 1978. Myths about hunter-gatherers. *Ethnology* 17: 439–48.
- HAWKES, K., J. F. O'CONNELL, AND N. G. BLURTON JONES. 1991. Hunting income patterns among the Hadza: Big game, common goods, foraging goals, and the evolution of the human diet. *Philosophical Transactions of the Royal Society of London* 334:243–51.
- . 2001. Hadza meat sharing. *Evolution and Human Behavior* 22:113–42.
- HAWKES, K., N. G. BLURTON JONES, H. ALVAREZ, AND E. L. CHARNOV. 1998. Grandmothering, menopause, and the evolution of human life histories. *Proceedings of the National Academy of Sciences, U.S.A.* 95:1336–39.
- HEWLETT, B. S. 1991. Demography and childcare in preindustrial societies. *Journal of Anthropological Research* 47:1–37.
- HIATT, B. 1974. "Woman the gatherer," in *Woman's role in aboriginal society*. Edited by F. Gale, pp. 4–15. Canberra: Australian Institute of Aboriginal Studies.
- HILL, K., C. BOESCH, J. GOODALL, A. PUSEY, J. WILLIAMS, AND R. WRANGHAM. 2001. Mortality rates among wild chimpanzees. *Journal of Human Evolution* 40:437–50.
- HILL, K., AND A. M. HURTADO. 1996. *Ache life history: The ecology and demography of a foraging people*. New York: Aldine.
- HURTADO, A. M., K. HILL, H. KAPLAN, AND I. HURTADO. 1992. Trade-offs between female food acquisition and child care among Hiwi and Ache foragers. *Human Nature* 3: 185–216.
- KAPLAN, H., AND K. HILL. 1985. Food sharing among Ache foragers: Tests of explanatory hypotheses. *CURRENT ANTHROPOLOGY* 26:223–46.
- KAPLAN, H., K. HILL, J. LANCASTER, AND A. M. HURTADO. 2000. A theory of human life history evolution: Diet, intelligence, and longevity. *Evolutionary Anthropology* 9: 156–85.
- KELLY, R. L. 1995. *The foraging spectrum: Diversity in hunter-gatherer lifeways*. Washington, D.C.: Smithsonian Institution Press.
- LACK, D. 1968. *Ecological adaptations for breeding birds*. London: Methuen.
- LANCASTER, J. B., AND C. S. LANCASTER. 1983. "Parental investment: The hominid adaptation," in *How humans adapt*. Edited by D. Ortner, pp. 33–58. Washington, D.C.: Smithsonian Institution Press.
- LEE, R. B. 1968. "What hunters do for a living, or How to make out on scarce resources," in *Man the hunter*. Edited by R. B. Lee and I. DeVore, pp. 30–48. Chicago: Aldine.
- LOVEJOY, O. 1981. The origin of man. *Science* 211:341–50.
- MARLOWE, F. 2000a. Paternal investment and the human mating system. *Behavioural Processes* 51:45–61.
- . 2000b. The patriarch hypothesis: An alternative explanation of menopause. *Human Nature* 11:27–42.
- . n.d. Why get married? Foraging, mating, and parenting among Hadza hunter-gatherers. MS.
- PENNINGTON, R. 1996. Causes of early human population growth. *American Journal of Physical Anthropology* 99:259–74.
- SELLEN, D. AND R. MACE. 1997. Fertility and mode of subsistence: A phylogenetic analysis. *CURRENT ANTHROPOLOGY* 38: 878–89.
- . 1999. A phylogenetic analysis of the relationship between sub-adult mortality and mode of subsistence. *Journal of Biosocial Science* 31:1–16.
- SMITH, C. S., AND S. D. FRETWELL. 1974. The optimal balance between size and number of offspring. *American Naturalist* 108:499–506.
- VAN DEN BERGHE, P. 1979. *Human family systems*. Prospect Heights: Waveland.
- WESTERMARCK, E. 1929. *Marriage*. New York: Jonathan Cape and Harrison Smith.

Ethnocentrism and Xenophobia: A Cross-Cultural Study¹

ELIZABETH CASHDAN

King's College Research Centre Human Diversity Project, King's College, Cambridge CB2 1ST, U.K. and Department of Anthropology, University of Utah, 270 S 1400 E Rm 102, Salt Lake City, Utah 84112-0060, U.S.A. (elizabeth.cashdan@anthro.utah.edu). 25 IV 01

People readily though not inevitably develop strong loyalties to their own ethnic group and discriminate against outsiders. In this report I use cross-cultural data to (1) determine the factors that strengthen and weaken these tendencies and (1) ascertain whether they have the same determinants. It is often supposed that ethnocentrism and xenophobia are opposite sides of the same coin, but a few voices have cautioned that this need not be the case.

Van den Berghe (1999) points out that it would be maladaptive for xenophobia to be an inevitable result of ethnocentrism. Ethnic affiliation, he reminds us, usually involves some claim of common ancestry (real or fictive), and a propensity to favor fellow ethnics is no doubt enhanced by this feeling of kinship. But reciprocal relationships with members of other groups can frequently be adaptive also, and it would be foolish to assume an attitude of hostility. The threshold for cooperation may be higher and the insistence on reciprocity may be greater, but a smart opportunist keeps his options open.

Recent experimental work in psychology also suggests that in-group favoritism is not a necessary concomitant of out-group hostility (Rabbie 1982, 1992; Ray and Lovejoy 1986; Struch and Schwartz 1989). While both can be enhanced by competition and external threats (see Sherif 1961 for the classic field experiment), in-group favoritism should be expected only if affiliation with the in-group can successfully counter the competitive threat (Rabbie et al 1974). If a group is unable to be successful, hostility to outsiders may be mirrored by ethnic breakdown and further hostility and competition within the group. Finally, threats can arise from environmental catastrophes as well as from outsiders, and we might expect that such disasters would foster enhanced group loyalty without any concomitant hostility to outsiders.

The cross-cultural data analyzed here provide no support for the proposition that out-group hostility is a nec-

© 2001 by The Wenner-Gren Foundation for Anthropological Research. All rights reserved 0011-3204/2001/4205-0005 \$1.00

1. This research was undertaken as part of the King's College Human Diversity Project. I am particularly indebted to Robert Foley and the King's College Research Centre of Cambridge University for financial support and a stimulating intellectual environment. I also thank Napoleon Chagnon, Carol Ember, Patrick Gray, Hartmut Lang, Alan Rogers, Pierre van den Berghe, and Polly Wiessner for helpful advice.

essary concomitant of in-group loyalty. The threat to the group that arises from catastrophic food shortage enhances ethnic loyalty without increasing hostility to outside groups, and even when the threat arises from other groups (external warfare), the associated ethnocentrism and xenophobia seem to have different causes. Overall, ethnocentrism and xenophobia were uncorrelated in this dataset, with the latter being most strongly associated with the overall level of violence within as well as between ethnic groups.

METHODS

The study uses published codes and data collected for the standard cross-cultural sample of 186 societies (Murdoch and White 1969). The sample was selected to maximize geographic and linguistic independence. The phylogenetic methods advocated by Mace and Pagel (1994) to ensure independence were not used here both for theoretical reasons suggested elsewhere (Rogers and Cashdan 1997) and because the intensity of intraethnic loyalty and the intensity of interethnic hostility are highly labile traits and therefore unlikely to be affected by distant historical connections between societies. Each society in the sample is pinpointed to a specific place and time; for most societies, that time is the early to middle 20th century.

Ross (1983) and Lang (1995) have independently used somewhat different subsets of the standard sample to code both ethnic loyalty and out-group hostility. Ross defines the former as "in-group loyalty, or we feeling, directed towards the wide society" (i.e., in contrast to the local community, which he coded separately). Lang's definition refers specifically to "loyalty within the ethnic group," loyalty being defined as "consciousness of belonging together." Both measures of out-group hostility refer to attitudes rather than behaviors: Ross's measure "seeks to evaluate the feelings towards other societies" and Lang's definition specifies "negative attitudes and emotions, contempt, mistrust." As with the loyalty measures, Ross specifies hostility to "other societies" while Lang specifies hostility to "other ethnic groups." I have sometimes reversed the order of Ross's ratings in order to make them consistent with those of Lang and the other researchers cited. In all cases reported here, larger numbers indicate more of a variable (greater loyalty, more frequent warfare, more severe famine, etc.). The measures of Ross and Lang are significantly, although not strongly, correlated with each other.

Two types of threat are considered here: famine, coded independently by Ember and Ember (1992b) and Dirks (1993), and external warfare, coded independently by Ember and Ember (1992b), Ross (1983), and Lang (1995). As with the loyalty and hostility variables, consistent results from independently derived data allow greater confidence in the conclusions. These and other variables used in the analysis are fully defined in the appendix. All data are available not only in the cited sources but in the electronic journal *World Cultures*.

Nonparametric statistics (Spearman's correlation co-

TABLE 1
Intraethnic Loyalty and Interethnic Warfare

Measure	Loyalty (Ross)			Loyalty (Lang)		
	r_s	p	n	r_s	p	n
All societies						
External warfare (R)	.21	.07	74	.30	.04	45
External warfare (E)	.44	.0006	59	.28	.02	63
External warfare (L)	.13	n.s.	35	.11	n.s.	61
Interethnic violence (L)	.44	.003	43	.24	.05	72
Unpacified societies only						
External warfare (R)	.45	.001	47	.45	.01	30
External warfare (E)	.60	<.0001	37	.32	.04	42
External warfare (L)	.33	n.s.	21	.35	.02	41
Interethnic violence (L)	.63	.0002	30	.37	.008	50

NOTE: See text and appendix for variable definitions.

SOURCES: R, Ross (1983); E, Ember and Ember (1992b); L, Lang (1995).

efficients) are used throughout because the data are ordinal, with most variables taking only four values. Although I have predicted the direction of effects, all significance tests reported below are two-tailed.

INTRAETHNIC LOYALTY

Threats and competition from outside groups are often cited as an important force in fostering ethnic loyalty (Levine and Campbell 1972, Roosens 1989, van der Dennen 1987, Durham 1994). In order to explore this proposition cross-culturally, I correlated frequency of external warfare, as measured by Ross (1983), Lang (1995), and Ember and Ember (1992b), with ethnic loyalty as measured by Ross (1983) and Lang (1995). As table 1 shows, this proposition receives support from the codings of Ross and Ember and Ember. The absence of patterning with Lang's external-warfare variable probably derives from differences in the way this variable was coded. Lang's definition of external warfare differs in applying only to societies in which formal political offices are present. His measure of interethnic violence ("frequency of interethnic violence/attacking") is applicable to all societies and shows patterning similar in strength and direction to the external-warfare variables of Ross and Ember and Ember. The absence of association with Lang's measure of warfare suggests that external warfare promotes ethnic loyalty more strongly in egalitarian societies.

Ember and Ember, noting that some societies lack warfare only because they have been pacified, omitted such societies from their sample when they analyzed the determinants of warfare, since pacified societies might still have conditions that predisposed to it (1992a, b). I used their measure of pacification for an analogous reason and found that the relationship between external warfare and ethnic loyalty was much stronger when only unpacified

TABLE 2
Intraethnic Loyalty and Risk of Famine

Measure	Loyalty (Ross)			Loyalty (Lang)		
	r_s	p	n	r_s	p	n
Routine food shortage						
Chronic resource problems (E)	.07	n.s.	54	.05	n.s.	55
Ordinary nutrition (D)	-.13	n.s.	52	.11	n.s.	53
Short-term starvation (D)	.07	n.s.	74	.08	n.s.	80
Seasonal starvation (D)	-.02	n.s.	73	.03	n.s.	80
Catastrophic food shortage						
Threat of famine (E)	.39	.008	44	.23	.11	48
Severity of famine (D)	.19	n.s.	51	.17	n.s.	54
Persistence of famine (D)	.37	.009	49	.28	.04	56
Recurrence of famine (D)	.30	.02	59	.17	n.s.	67
Catastrophic food shortage, unpacified societies only						
Threat of famine (E)	.58	.0009	29	.42	.02	32
Severity of famine (D)	.41	.02	33	.24	n.s.	36
Persistence of famine (D)	.63	.0002	30	.39	.02	38
Recurrence of famine (D)	.42	.007	39	.19	n.s.	46

NOTE: See appendix for variable definitions.

SOURCES: E, Ember and Ember (1992*b*); D, Dirks (1993).

societies were considered. Pacification need not mean the end of interethnic competition—indeed, colonialism has often exacerbated it (Gulliver 1969, Arens 1978, Roosens 1989)—hence we might expect that absence of warfare due to pacification would typically not remove the competitive pressures that lead to strengthened ethnic loyalty. In other words, warfare in pacified societies was suppressed but the competition that fostered ethnic loyalty typically was not. If this argument is correct, including pacified societies would weaken the correlation between frequency of warfare and ethnic loyalty, as it does here (see table 1).

Threats to the group need not come from outsiders. In order to see whether environmentally induced hardships also promote group loyalty, I correlated loyalty with various measures of food stress and famine. As table 2 shows, routine food shortage (mild, chronic, or seasonal) has no effect on ethnic loyalty whereas real famine (severe and socially disruptive food shortage) has a moderate but statically significant positive effect. The strongest correlations are with threat of famine as measured by Ember and Ember and persistence of famine as measured by Dirks. Threat of famine measures the likelihood of its occurrence and is chiefly a measure of frequency. Persistence of famine assesses specifically how often living members of the society have experienced famine (see appendix for complete definitions). Famine, by Dirks's definition, is never routine, but a society that has some experience of it in its cultural memory might be more likely to respond in productive, culturally mediated ways. A society facing famine with no history to guide it might be more susceptible to societal chaos and the breakdown of mutual support.

Table 2 also shows that the correlation between famine and ethnic loyalty is stronger when the sample is

limited to unpacified societies. This result was unanticipated, but the explanation may lie in the greater infrastructure and organizational complexity of the "pacifying" society, together with the economic dependency such a situation often imposes. Any society able to pacify another is likely to be better able to buffer food shortages through storage and trade, so perhaps people in pacified societies respond to famine by relying on the dominant society rather than by bonding together to help themselves.

I explored some likely antecedents of warfare and famine to see whether these variables were also correlated with ethnic loyalty but found no relationships. Variables I considered included measures of density pressure (population density, land availability, agricultural intensification), Ember's measure of natural disasters (a correlate of warfare), and various climatological measures of harshness and unpredictability (a possible cause of famine). Variable and unpredictable climates have a strong effect on the spatial extent of ethnic groups (Cashdan 1991), but I found no consistent climatic associations with ethnic loyalty or interethnic hostility.

INTERETHNIC HOSTILITY

If interethnic hostility is the flip side of intraethnic loyalty, the two should be strongly correlated and have the same determinants. Neither is the case.

Both external warfare and famine are associated with ethnic loyalty. It is reasonable to expect external warfare to be associated with interethnic hostility, and table 3 shows that this is indeed the case. But interethnic hostility is also associated with *internal* warfare (warfare between communities of the same society or ethnic group); the associations are in the same positive direction

and of similar magnitude. The same is true of Lang's measures of intra- and interethnic violence (see table 3), and Ross's measures of local and intercommunity conflict show trends in the same direction. Taken together, these data suggest that hostility to outsiders is not simply a direct response to external threat but is likely to reflect the prevailing level of violence in the region.

Levine and Campbell (1972:213-14) note that while most theories of ethnicity predict an inverse relationship between in-group loyalty and out-group hostility (albeit for different reasons), other theories predict a continuity in the violence experienced at different levels of grouping. These data suggest there is a continuity of violence at local (intraethnic) and regional (interethnic) levels rather than the discontinuity that would result if in-group loyalty were reflected in out-group hostility.

Famine, the other threat considered here, is correlated with ethnic loyalty but not with interethnic hostility. The lack of correlation may reflect the complexity of these relationships, as illustrated by Levine and Campbell's account of catastrophic food shortages in Kenya. They argue that while destruction of cattle by rinderpest exacerbated out-group hostility, famines due to grain crop failures in the same area "were traditionally times of formal peacemaking, increased trade, sharing across ethnic group lines, and the peaceable transfer of children and women from the group with most famine to others more fortunate, in exchange for grain" (Levine and Campbell 1972:36).

Rabbie (1982, 1992) has shown experimentally that intragroup cooperation can foster an in-group bias without necessarily increasing the level of hostility between groups. This finding is supported in this dataset by the relationship between crosscutting ties within a society (data from Ross) and ethnic loyalty as measured by Ross ($r_s = .62, p < .0001, n = 77$) and Lang ($r_s = .40, p = .005, n = 47$) and the absence of any such correlation with hostility. Extensive crosscutting ties (presumably related

TABLE 4
Intraethnic Loyalty and Interethnic Hostility

Correlates	r_s	p	n
Loyalty (Lang) × loyalty (Ross)	.54	.0001	44
Hostility (Lang) × hostility (Ross)	.37	.03	36
Loyalty × hostility (Lang)	-.06	n.s.	64
Loyalty × hostility (Ross)	-.01	n.s.	69
Loyalty (Lang) × hostility (Ross)	.08	n.s.	41
Loyalty (Ross) × hostility (Lang)	-.25	n.s.	39

to the level of intragroup cooperation) foster ethnic loyalty but are unrelated to interethnic hostility.

Since ethnic loyalty and interethnic hostility appear to have different determinants, we might expect them not to be strongly correlated. This is indeed the case. We see in table 4 both the correlation between Ross's and Lang's measures of the same variables and the absence of any relationships between ethnic loyalty and hostility to outsiders in either dataset.

The absence of correlation between ethnic loyalty and hostility to outsiders is encouraging for the prospects of a peaceful multiethnic state and suggests that the flowering of ethnicity is not necessarily something to fear. Most of the societies in this sample, however, were described in the early to middle 20th century. As ethnic groups become increasingly class-based elements in complex societies, the frustration of being have-nots in a wealthy society is always a potential source of violence and hostility. What this study shows is that interethnic hostility is not an integral part of strong ethnic identity and that its source must be sought elsewhere.

TABLE 3
Hostility to Other Societies, Violence, and Warfare

Measure	Hostility (Ross)			Hostility (Lang)		
	r_s	p	n	r_s	p	n
Interethnic fighting						
External warfare (R)	.72	<.0001	68	.34	.03	42
External warfare (E)	.32	.02	53	.17	n.s.	56
External warfare (L)	.34	.07	30	.37	.008	52
Interethnic violence (L)	.34	.03	39	.19	n.s.	64
Intraethnic fighting						
Internal warfare (R)	.47	<.0001	69	.12	n.s.	43
Internal warfare (E)	.48	.0005	49	.29	.04	50
Intraethnic violence (L)	.40	.007	45	.21	.09	68
Intercommunity conflict (R)	.37	.002	69	.07	n.s.	40
Local conflict (R)	.22	.06	69	.24	n.s.	40

NOTE: See appendix for variable definitions.
SOURCE: R, Ross (1983); L, Lang (1995); E, Ember and Ember (1992b).

APPENDIX: VARIABLE DEFINITIONS AND NOTES

From Dirks (1993):

Famine: "an episode of starvation that is attended by sharply increased mortality rates and marked disruptions in community life. Its duration exceeds short-term starvation. Unlike seasonal starvation it does not occur annually. Unlike short-term and seasonal starvation, famine lacks a routine character. It disrupts society from the start and it can progress to the point of massive institutional collapses" (p. 30). (This distinction parallels the distinction in table 1 between "routine food shortage" and "catastrophic food shortage.")

Endemic starvation: "a condition of chronic undernutrition, unrelated to daily contingencies, season, or the fortunes that affect food availability in any particular year" (p. 30). "Endemic starvation exists when there is evidence that some members of society suffer caloric insufficiency under normal conditions."

Short-term starvation: "an episode of starvation that has a duration of a few days or weeks. . . . [These episodes

are] typically recurrent and familiar. As a result, outbreaks do not excite alarm [and one] usually does not result in death" (p. 30).

Seasonal starvation: "occurs at regular times every year. It may last from several weeks to as long as three or four months. [Increased morbidity and mortality] are not detected readily, and, until recently, not often reported. Like short-term starvation, seasonal starvation is a familiar event. Consequently communities that experience it have a repertoire of customary adjustments by means of which they avoid social disruption" (p. 30).

Severity of famine: "the extent to which a community or some segment of it progresses toward complete institutional breakdown" (p. 31).

Persistence of famine: "the frequency of its occurrence over a relatively short period of time [50 years]—how often a living set of generations has had direct experience with famine" (p. 31).

Recurrence of famine: "its repetition over long periods of time. . . . at least one famine in each of the two immediately preceding centuries" (p. 31).

From Ember and Ember (1992b):

Famine: "a time of starvation when either many human deaths occur or it is reported that a substantial segment of the society has to move because of a lack of food . . . [or] the ethnographer uses the word famine" (p. 180). The measure "picks up only extremely serious resource problems" (p. 180) and does not include chronic hunger. It is chiefly a measure of famine frequency.

Chronic resource problems: distinguished from "unpredictable resource problems" (p. 181).

Warfare: "socially organized armed combat between members of different territorial units (communities or aggregates of communities)" (p. 172).

Internal warfare: "socially organized armed combat between territorial units (communities or larger aggregates) *within* the same society. By 'society' we mean a more or less continuously distributed population that speaks a common language" (p. 173).

External warfare: "war between the focal society and other societies" (p. 173).

Pacification: "the elimination of war by an external power *before* the twenty-five-year time period" (p. 175). (I considered societies coded 1 or 2 "unpacified.")

From Lang (1995):

Ethnic group: "group of persons perceiving themselves as unit and set themselves apart from other such units. The unity is based on real or supposed common origin, common fate, common language or relation, adherence to common norms and values" (p. 50).

Loyalty: "consciousness of belonging together . . . the variable measures the degree of loyalty within the ethnic group as a whole. If for instance there are strong feelings of loyalty among a small part of the ethnic group and no loyalty within the group as a whole the code 1 [=low] applies" (p. 50).

Hostility: "negative attitudes and emotions, contempt, mistrust" (p. 51). (Code incorporates both degree of hostility and its targets; I lumped values for the different

types of targets so that the scale measured only degree of hostility.)

External warfare: "warfare where at least one party involved is a maximal unit of political authority" (p. 36). (I deleted cases coded 0, "no formal political office present," since this does not discriminate the amount of fighting in such societies.)

Interethnic violence: "frequency of interethnic violence/attacking" (p. 54). (I deleted the few societies with no interethnic contact.)

Intraethnic violence: "intensity of intraethnic violence" (p. 54).

(Internal warfare was not rated for societies with "no political office above the level of the local community," more than half of the codable societies. I did not use these variables for this reason and because of their lack of comparability with the internal-warfare measures of Ross and Ember.)

From Ross (1983):

Loyalty to the wider society: "in-group loyalty, or we feeling, directed towards the wider society" (distinguished from loyalty to the local community, which Ross coded separately) (p. 180).

Hostility toward other societies: "bitter feelings" toward "outsiders" (p. 180).

Internal warfare: warfare "between communities of same society" (p. 179).

External warfare: "with other societies" (p. 179).

Local conflict: political conflict and social conflict more generally at the local community level (p. 177).

Intercommunity conflict: conflict between communities of the same society (p. 178).

Crosscutting ties: "politically relevant" links between individuals living in different communities of the same society (p. 181).

References Cited

- ARENS, W. 1978. "Changing patterns of ethnic identity and prestige in East Africa," *Perspectives on ethnicity*. Edited by R. E. Holloman and S. A. Arutiunov, pp. 211–20. The Hague: Mouton.
- CASHDAN, E. 1991. Ethnic diversity and its environmental determinants: Effects of climate, pathogens, and habitat diversity. *American Anthropologist* 103(4).
- DIRKS, R. 1993. Starvation and famine: Cross-cultural codes and some hypothesis tests. *Cross-Cultural Research* 27:28–69.
- DURHAM, W. 1994. "Conflict, migration, and ethnicity: A summary," in *The anthropology of ethnicity: Beyond "Ethnic Groups and Boundaries"*. Edited by H. Vermeulen and C. Govers, pp. 138–45. Amsterdam: Het Spinhuis.
- EMBER, C. R., AND M. EMBER. 1992a. Resource unpredictability, mistrust, and war: A cross-cultural study. *Journal of Conflict Resolution* 36:242–62.
- . 1992b. Warfare, aggression, and resource problems: Cross-cultural codes. *Behavior Science Research* 26:169–86.
- GULLIVER, P. H. 1969. "Introduction," in *Tradition and transition in East Africa: Studies of the tribal element in the modern era*. Edited by P. H. Gulliver, pp. 5–38. Berkeley: University of California Press.
- LANG, H. 1995. Conan: An electronic code-text data-base for cross-cultural studies. *World Cultures* 9(2):13–56.
- LEVINE, R. A., AND D. T. CAMPBELL. 1972. *Ethnocen-*

- trism: Theories of conflict, ethnic attitudes, and group behavior.* New York: John Wiley.
- MACE, R., AND M. PAGEL. 1994. The comparative method in anthropology. *CURRENT ANTHROPOLOGY* 35:549-57.
- MURDOCK, G. P., AND D. R. WHITE. 1969. Standard cross-cultural sample. *Ethnology* 8:329-60.
- RABBIE, J. M. 1982. "The effects of intergroup competition on intragroup and intergroup relationships," in *Cooperation and helping behavior: Theories and research*. Edited by V. J. Derlega and J. Grzelak, pp. 123-49. New York: Academic Press.
- . 1992. "The effects of intragroup cooperation and intergroup competition on in-group cohesion and out-group hostility," in *Coalitions and alliances in humans and other animals*. Edited by A. H. Harcourt and F. B. M. de Waal, pp. 175-205. Oxford: Oxford University Press.
- RABBIE, J. M., F. BENOIST, H. OOSTERBAAN, AND L. VISSER. 1974. Differential power and effects of expected competitive and cooperative intergroup interaction on intragroup and outgroup attitudes. *Journal of Personality and Social Psychology* 30:46-56.
- RAY, J. J., AND F. H. LOVEJOY. 1986. The generality of racial prejudice. *Journal of Social Psychology* 126:563-64.
- ROGERS, A. R., AND E. CASHDAN. 1997. The phylogenetic approach to comparing human populations. *Evolution and Human Behavior* 18:353-58.
- ROOSENS, E. E. 1989. *Creating ethnicity: The process of ethnogenesis*. Newbury Park, Calif.: Sage.
- ROSS, M. 1983. Political decision making and conflict: Additional cross-cultural codes and scales. *Ethnology* 22:169-92.
- SHERIF, M. 1961. *Intergroup conflict and cooperation: The Robbers Cave experiment*. Norman: University Book Exchange.
- STRUCH, N., AND S. H. SCHWARTZ. 1989. Intergroup aggression: Its predictors and distinctness from in-group bias. *Journal of Personality and Social Psychology* 56:364-73.
- VAN DEN BERGHE, P. L. 1999. "Racism, ethnocentrism, and xenophobia: In our genes or in our memes?" in *In-group/out-group behaviour in modern societies: An evolutionary perspective*. Edited by K. Thienpont and R. Cliquet. Brussels: NIDI CBGS Publications.
- VAN DER DENNEN, J. M. G. 1987. "Ethnocentrism and in-group/out-group differentiation: A review of the literature," in *The sociobiology of ethnocentrism: Evolutionary dimensions of xenophobia, discrimination, racism, and nationalism*. Edited by V. Reynolds, V. Falger, and I. Vine, pp. 1-47. Athens: University of Georgia Press.