University of Groningen

Of badges, bonds and boundaries:

van der Dennen, J.M.G.

Published in:
In-group/out-group behaviour in modern societies. An evolutionary perspective

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Final author's version (accepted by publisher, after peer review)

Publication date:
2000

Citation for published version (APA):
van der Dennen, J. M. G. (2000). Of badges, bonds and boundaries: Ingroup/outgroup differentiation and ethnocentrism revisited. In K. Thienpont, & R. Cliquet (Eds.), *In-group/out-group behaviour in modern societies. An evolutionary perspective* (pp. 37 - 74). NJCM Boekerij.

Of Badges, Bonds and Boundaries:
Ingroup/outgroup differentiation and ethnocentrism revisited

by Johan M.G. van der Dennen

Abstract

At the fifth Annual Meeting of the European Sociobiological Society (ESS), St. John's College, Oxford, U.K. (January 5-6, 1985), I presented the following paper:

"I present a literature review of theories and research concerning the phenomena of ethnocentrism, ingroup/outgroup differentiation, moralistic aggression, xenophobic aggression, collective intolerance, and intergroup violence, all of which are regarded as parts of one complex and composite syndrome. An attempt to interpret the ethnocentrism syndrome as a symbol-system-cum-sentiment-structure is offered, and its value as an explanatory category for the causation of 'primitive' warfare is assessed" (The paper was published as "Ethnocentrism and in-group/out-group differentiation" in: V. Reynolds, V. Falger & I. Vine (Eds.) *The Sociobiology of Ethnocentrism: Evolutionary dimensions of xenophobia, discrimination, racism and nationalism*, 1987, pp. 1-47).

In this paper I intend to revisit this literature and research, and especially what has been added since that time (in particular the important Shaw & Wong (1989) *Genetic Seeds of Warfare* monography and Anne Katrin Flohr's (1994) *Fremdenfeindlichkeit: biosoziale Grundlagen von Ethnozentrismus*. I shall also attempt to assess the value of sociobiological or evolutionary ethnocentrism theory to account for the origin of warfare and intergroup violence in general.

Introduction

In order to appreciate what is so special about human group phenomena and ethnocentrism, I start by presenting some observations on human (collective) violence generally.

Violence in and between human societies, with the exception of some forms of domestic, criminal and pathological violence, is virtually always a collective activity or committed in the name of a collectivity. "Adults kill and torture each other only when organized into political parties, or economic classes, or religious denominations, or nation states. A moral distinction is always made between individuals killing for themselves and the same individual killing for some real or supposed group interest" (Durbin & Bowlby, 1938).

This moral double standard leads to the masquerading of the violence committed in the name of one's own in-group as justified self-defense, or as a well-deserved punishment for transgressions of mores, laws, or ideological orthodoxy. The violence may range from sanctions against a dissenter or potential renegade within the group, to punitive expeditions, and even genocide, between groups.

Total identification with the group makes the individual perform altruistic acts to the point of self-sacrifice, and at the same time behave with ruthless cruelty towards the enemy or victim of the group. As Koestler (1967) observed: the self-assertive behavior of the group is based on the self-transcending behavior of its members. The egotism of the group feeds on the altruism of its members.

The ulterior justification and legitimation of collective violence invokes complex ideological, symbolic constructions, superordinate goals, spiritual values, high moral principles, and the

most noble, virtuous, righteous, self-transcendent and altruistic motives. "The most pernicious phenomena of aggression, transcending self-preservation and self-destruction, are based upon a characteristic feature of man above the biological level, namely his capability of creating symbolic universes in thought, language and behavior" (von Bertalanffy, 1958).

It is the 'good' intentions of mankind, man's 'high' moral principles, his 'noble' strivings that lead to Armageddon. Or, as Koestler (1967) eloquently stated: "The crimes of violence committed for selfish, personal motives are historically insignificant compared to those committed *ad majorem gloriam Dei*, out of a self-sacrificing devotion to flag, a leader, a religious faith, or a political conviction. Man has always been prepared not only to kill but also to die for good, bad, or completely futile causes".

Collective violence is covered with a thick patina of self-justification, ratiomorphic nonsense and pathos. "Men will die like flies for theories and exterminate each other with every instrument of destruction for abstractions" (Durbin & Bowlby, 1938). The most extensive, quixotic and disgusting violence is justified with the invocation of a utopian ideology, a paradise myth, a superiority doctrine, an eschatological or millenarian ideal state, or other highly abstract political/ethical categories, metaphysical values, and quasi-metaphysical mental monstrosities: National Security, Raison d'Etat, Freedom, Democracy, God, Volk und Heimat, Blut und Boden, Peace, Progress, Empire, Historical Imperative, Sacred Order, Natural Necessity, Divine Will, and so on and so forth. The human being as the 'most ferocious of beasts' as William James called him, is only a beast in the name of some superhuman ideal, which serves as a 'sanction for evil' (Sanford & Comstock, 1971); divine or diffuse permission for large-scale destructiveness. The purity and sacredness of our cause, and the divine sanction of our actions ('with God on our side') is guaranteed by the wickedness of the enemy, who is envisaged as the incorporation of evil, the devil incarnate.

Ubiquitously evident in all forms of collective intolerance, Willhoite (1977) observes, is an expressed desire by leaders and/or members to protect and promote the uniformity, conformity, 'purity' of the group by denouncing or acting intolerantly toward individuals or groups perceived – simply because they are different – as threats to the well-being and integrity of the intolerant collectivity. As Berger & Luckman (1966) explained: "All social reality is precarious. All societies are constructions in the face of chaos. The constant possibility of anomic terror is actualized whenever the legitimations that obscure the precariousness are threatened or collapse".

Serious threats to a well-established, taken-for-granted symbolic universe may arise from deviants within the society ('heretics') or from external contact with another society possessing a radically different – but also taken-for-granted internally – symbolic universe. One possible – and historically common – response to such threats is 'nihilation', the conceptual liquidation of everything inconsistent with the official doctrine. That is, deviants or foreigners may be labeled as less than human, as 'devils' or 'barbarians' who dwell in impenetrable darkness. "Whether one then proceeds from nihilation to therapy, or rather goes on to liquidate physically what one has liquidated conceptually, is a practical question of policy".

Berger & Luckmann's description of this device for protecting a symbolic universe is acutely perceptive, but, as Willhoite (1977) points out, it does not explain why such differences should be perceived as threats that demand a nihilating response. This question is, at least in part, answered by Erikson's (1964) concept of cultural pseudospeciation.

Man is the cultural animal *par excellence*. All members of the (sub)species *Homo sapiens sapiens* share the characteristic of being capable to create, and be created by, culture. At the same time, however, culture is the great unbalancer, the great catalyst of diversity and reinforcer of differences, underlying universal human cultural *pseudospeciation*. Owing to this process, human groups (be they ethnies, tribes or nations) tend to differ from one another to such a degree that the groups come to perceive each other as though they were totally different species.

Erikson's concept of pseudospeciation denotes the fact that while Man is obviously one species, he appears on the scene split into groups (from tribes to nations, from castes to classes, from religions to ideologies) which provide their members with a firm sense of distinct and superior identity and the illusion of immortality. This demands, however, that each group must invent for itself a place and moment in the very center of the universe where and when an especially provident deity caused it to be created superior to all others, the mere mortals. Thus Man is "indoctrinated with the conviction that his 'species' alone was planned by an all-wise deity, created in a special cosmic event, and appointed by history to guard the only version of humanity... Man once possessed by this combination of lethal weaponry, moral hypocrisy, and identity panic is not only apt to lose all sense of species but also to turn on another subgroup with a ferocity generally alien to the 'social' animal world" (Willhoite, 1977).

Especially Tinbergen (1968, 1981) has pointed out how violence changes in character from intraspecific to interspecific/predatory the more the enemy is dehumanized and 'pseudospeciated'. No holds are barred in hunting down a foreign species.

MacCurdy (1918) foreshadowed this valuable concept of pseudospeciation in his *Psychology of War*. According to him, early tribal warfare had fixed the idea that strangers were another species, and thus was overcome the natural taboo [i.e., inhibition] against killing conspecifics. Humans by their herd nature were doomed to split into groups, and these groups behaved biologically like separate species struggling for existence. During times of war, he suggested, humans still felt vestigial emotions of hostility to their enemies as species other than themselves (Crook, 1994).

Definitely involved in human violence are highly complex and elaborate, abstract and rule-governed, cognitive conceptual and symbolic processes, meanings and constructs of reality, attitudes, norms, values, codes of conduct, anticipations, strategies, etc. This, in turn, has its negative side; the ability of Man to create psychological 'distancing devices', to dehumanize, diabolize, to exterminate his enemies like vermin in fantasy and in reality; and to generate *Weltanschauungen* in which only a small portion of humanity fits, and social paradises from which the 'misfits' have to be expelled.

Together with the concept of cultural pseudospeciation, dehumanization (the perception or definition of other people as less than human or even nonhuman) is probably the most important proximate concept for understanding malignant (mass)violence phenomena, including 'ethnic cleansing', war atrocities, massacres and genocide, in humans (and probably as 'dechimpization' [Goodall, 1986] in chimpanzees as well). There is a profound paradox involved in the process of dehumanization in the sense that one can only dehumanize what is recognized and acknowledged to be human in the first place.

Volkan (1992) identifies, besides dehumanization, two more elements in the group dynamics toward violence and war: the 'Chosen Trauma' and the 'Chosen Glory' of the group. Similarly, Galtung (1994) identifies Chosenness, Trauma and Myths of a Glorious Past, which together form a syndrome: the Chosenness-Myth-Trauma (CMT) complex or, more evocatively, the 'collective megalo-paranoia syndrome'. Chosenness means the idea of being a people chosen by transcendental forces (the gods), above all others, endowed, even anointed, to be a light unto others, with the right and even the duty to govern them. Trauma means the idea of being a people hit and hurt by others, possibly out of their envy, by enemies lurking anywhere, intent on hitting again. Chosenness induces collective sentiments of grandeur relative to all others. This is then built into the Myths of a Glorious Past to be recreated, the present being suspended between the glorious past and the glorious future. But the traumas can also be used to validate the idea of chosenness; "we have suffered so much, there must be a deeper meaning to that suffering". New traumas are then expected for the future, with a mixture of fear and the lustful anticipation of self-fulfilling prophecies coming true. The three parts of the syndrome reinforce each other socially, not only as ideas, in a vicious circle.

The group incorporates the mental representation of the traumatic event(s) into its identity, thus leading to the intergenerational transmission of historical enmity. Once a trauma becomes a chosen trauma, the historical truth about it does not really matter. In war or war-like situations, the leader evokes the memory of the chosen trauma, as well as that of the chosen glory, to galvanize his people and make his group more cohesive. Historical enmity thus acts much like an amplifier in an electrical circuit (Volkan, 1991).

In this context it is appropriate to recall that hostility, enmity, and especially cruelty presuppose elaborate, highly evolved abstract symbolization as well as complex information processing, storage and recall facilities, or, in short: good long-term memory.

> [I]t is precisely what are widely thought to be the most unusually highly evolved biological characteristics of *Homo sapiens*, our cognitive and symbolic skills, which offer the readiest facilitation to violence and aggression. The same zest for analytical skill and strong commitment to group norms, which is the essence of science, is at the root of the successful construction of the social and ideological boundaries which are the effective prerequisite to large-scale persistent aggressive interaction (Tiger, 1990).

Ethnocentrism

Hobbes and Ferguson

In 1767 the Scottish philosopher Adam Ferguson published an *Essay on the History of Civil Society*, probably the first attempt at an empirical investigation of the origins of war using ethnographic data. His analysis seemed to confirm Hobbes (1651): the primitive state was indeed a state of war (*status hostilis*): "We have had occasion to observe, that in every rude state the great business is war; and that in barbarous times, mankind, being generally divided into small parties, are engaged in almost perpetual hostilities" (*Essay* 3.5).

Among the Hobbesian motives for war – competition, diffidence, and glory – Ferguson clearly assigns priority to glory. Both cannibals and kings fight for honor more than for booty or any other material interest: "Mankind not only find in their condition the sources of variance and dissension: they appear to have in their minds the seeds of animosity, and they embrace the occasions of mutual opposition, with alacrity and pleasure" The basic cause of war is rivalry. And Ferguson sees positive value in it, where Hobbes had seen only a necessary evil. Ferguson points out that warfare enforces civic unity, engenders civic virtue, promotes social organization, and in fact may be an essential condition for the very existence of civilization (Dawson, 1996).

In addition to maintaining the balance-of-power *between* societies, Ferguson ascribes to warfare the function of maintaining solidarity and morale *within* societies. In-group amity depends upon out-group enmity and *vice versa*. This idea could also be found, in primordial form, in classical authors, especially the Roman historians (e.g., Sallust), but Ferguson probably offers the first analysis of the phenomenon of ethnocentrism in history.

Ethnocentrism is considered to be a schismatic in-group/out-group differentiation, in which internal cohesion, relative peace, solidarity, loyalty and devotion to the in-group, and the glorification of the sociocentric-sacred (the own cosmology, ideology, social myth, or *Weltanschauung*; the own 'godgiven' social order) is correlated with a state of hostility or permanent quasi-war (*status hostilis*) toward out-groups, which are often perceived as inferior, subhuman, and/or the incorporation of evil. Ethnocentrism results in a dualistic, Manichaean morality which evaluates violence within the in-group as negative, and violence against the out-group as positive, even desirable and heroic.

This is, admittedly, a rather extreme definition. The usual dictionary definition of ethnocentrism is "the tendency to regard one's own group and culture as intrinsically superior to all others" (Webster's Dictionary). Superiority of the own group and culture, however, (psycho)logically implies inferiority of other groups and cultures. And viewing other groups/cultures as inferior empirically appears to imply some degree (however small) of contempt, stereotyping, discrimination and dehumanization of, and at least a modicum of hostility toward, members of those other groups/cultures. Ethnocentrism and its canonical variants (tribalism, nationalism, patriotism, parochialism, jingoism, etc.) also appears to be intimately connected with xenophobia, a complex attitude system-cum-sentiment structure involving dislike, distrust, aversion, revulsion, fear and antagonism vis-à-vis strangers/foreigners/aliens and everything the stranger/foreigner/alien represents.

Two forms of the ethnocentric syndrome must probably be distinguished: (1) A belligerent, megalomaniac, superiority-delusional form (Chosen People complex), and (2) a relatively peaceful, self-conceited, isolationist form (e.g., the true Hellenes in relation to the 'Barbaroi'; the Han Chinese vis-à-vis the peripheral 'y_mán' peoples).

Hardin (1972) introduced the related concept of tribalism: "Any group of people that perceives itself as a distinct group, and which is so perceived by the outside world, may be called a tribe. The group might be a race, as ordinarily defined, but it need not be; it can just as well be a religious sect, a political group, or an occupational group. The essential characteristic of a tribe is that it should follow a double standard of morality – one kind of behavior for in-group relations, another for out-group".

Other authors use terms like 'group egoism', 'groupism', etc. in a similar sense.

There are two prevailing views of the fundamental nature of ethnicity. One emphasizes the ascriptive, or primordial, nature of ethnic group membership and the importance of kinship, early socialization, and strong emotional ties. The other insists that ethnicity is situationally defined, that ethnic group boundaries are malleable and permeable, and that ethnicity may be acquired or divested at will (Richmond, 1987). This has been called the instrumentalist position. Van den Berghe (1981) has attempted to show that the primordialist-instrumentalist controversy is based on a simple-minded antinomy, and that the two views complement rather than contradict each other.

Ethnocentrism: Brief History of the Concept

'Ethnocentrism' is a major theme in both biological and cultural theories of the causes of primitive war. Furthermore, it is a relatively old one. Though the term 'ethnocentrism' was to be coined a few decades later, the concept was by no means unknown among 19th century anthropologists such as Tylor (1871): "The old state of things is well illustrated in the Latin word *hostis*, which, meaning originally stranger, passed quite naturally into the sense of enemy. Not only is slaying an enemy in open war looked on as righteous, but ancient law operates on the doctrine that slaying one's own tribesman and slaying a foreigner are crimes of quite different order...". He viewed ethnocentrism (as well as the obligations of the blood feud) as making sense within a framework of primitive concepts of law and justice.

Also Darwin (1871) had noticed that early humans and contemporary primitive peoples as a rule confined their sympathy to the own tribe and generally did not regard violence against other tribes as a crime. He clearly saw the correlation between intergroup competition and intragroup cooperation, which is the core of the ethnocentrism syndrome, in human evolution. So did his contemporaries such as Comte (1869), Spencer (1850 et seq.), Bagehot (1872) and Gumplowicz (1883).

In 1892-1893, after half a century of work, Spencer completed his vast system of philosophy with two volumes on *The Principles of Ethics*. In his studies of evolution he had hoped to find a code which placed human conduct on a scientific footing. Instead, he discovered that evolution, as seen to work in human communities, spoke with two voices, each enunciating a separate code. He called the one the 'Code of Amity', and the other the 'Code of Enmity':

Rude tribes and... civilized societies... have had continually to carry on an external self-defence and internal co-operation – external antagonism and internal friendship. Hence their members have acquired two different sets of sentiments and ideas, adjusted to these two kinds of activity... A life of constant external enmity generates a code in which aggression, conquest and revenge, are inculcated, while peaceful occupations are reprobated. Conversely a life of settled internal amity generates a code inculcating the virtues conducing to a harmonious co-operation: justice, honesty, veracity, regard for each other's claims (Spencer, 1892).

Sumner (1906; 1911), who later coined the term 'ethnocentrism' for this dual code of conduct, heavily implicated ethnocentrism, and its collateral xenophobia, in the evolution of warfare. In his *Folkways*, Sumner (1906), echoing Spencer and Bagehot, writes: "The exigencies of war with outsiders are what make peace inside, lest internal discord should weaken the in-group for war. The exigencies also make government and law in the in-group, in order to prevent quarrels and enforce discipline. Thus war and peace have reacted on each other, and developed each other, one within the group, the other in the inter-group relations. The closer the neighbors, the stronger they are, the intenser the warfare, and then the intenser is the internal organization and discipline of each".
Subsequently, Sumner (1911) elaborated his concept of ethnocentrism as follows:

It is no paradox at all to say that peace makes war and that war makes peace. There are two codes of morals and two sets of mores, one for comrades inside and the other for strangers outside, and they arise from the same interests. Against outsiders it was meritorious to kill, plunder, practice blood revenge, and to steal women and slaves, but inside none of these things could be allowed because they would produce discord and weakness. Hence, in the ingroup, law (under the forms of custom and taboo) and institutions had to take the place of force. Every group was a peace group inside, and the peace was sanctioned by the ghosts of the ancestors who had handed down the customs and taboos. Against outsiders religion sanctioned and encouraged war, for the ghosts of the ancestors, or the gods, would rejoice to see their posterity and worshippers once more defeat, slay, plunder, and enslave the ancient enemy...
The sentiment of cohesion, internal comradeship, and devotion to the ingroup, which carries with it a sense of superiority to any outgroup and readiness to defend the interest of the ingroup against the outgroup is technically known as ethnocentrism. It is really the sentiment of patriotism in all its philosophic fullness, that is, both in its rationality and in its extravagant exaggeration... Perhaps nine-tenths of all the names given by savage tribes to themselves mean 'men', 'the only men', or 'men of men'; that is, 'We are men, the rest are something else'... Religion has always intensified ethnocentrism; the adherents of a religion always think themselves the chosen people, or else they think that their god is superior to all others, which amounts to the same thing (Sumner, 1911).

In his *Folkways*, Sumner (1906) had already emphasized this superiority-delusional aspect of ethnocentrism, which he regarded as universal, in describing it as "this view of things in which one's own group is the center of everything, and all others are scaled and rated with reference to it... Each group nourishes its own pride and vanity, boasts itself superior, exalts its own

divinities, and looks with contempt on outsiders. Each group thinks its own folkways the only right ones, and if it observes that other groups have other folkways, these excite its scorn".

Though Sumner's thesis, as Shaw & Wong (1989) observed, imposed a rather reductionistic and mechanistic interpretation on the relationship between ethnocentrism and war proneness, it has been widely adopted (e.g., Murdock [1949]: "[I]ntergroup antagonism is the inevitable concomitant and counterpart of in-group solidarity"), supported by a substantial body of evidence (*vide infra*), and widely debated since its inception (e.g., Catton, 1961; LeVine & Campbell, 1972; Reynolds, Falger & Vine, 1987; A. Flohr, 1994).

The herd psychologists and instinctivists of the *fin de siècle* period also acquitted themselves well in the evolution and ethnocentrism debate (see Crook, 1994). McDougall (1908), for example, developed Darwin's theme that social solidarity and altruism arose from the need to organize for war.

The next author, after Sumner, to elaborate the theme of ethnocentrism in relation to primitive warfare was Davie (1929), who sketched a truly Hobbesian picture of the 'savage' world, pointing out that the relation of primitive groups to one another is one of isolation, suspicion, hostility and war; a *status hostilis*, if not a regular *status belli*. Yet within the tribe the common interest against every other tribe compels its members to unite for self-preservation. "Thus a distinction arises between one's own tribe – the 'in-group' – and other tribes – the 'out-group'; and between the members of the first peace and cooperation are essential, whereas their inbred sentiment toward all outsiders is one of hatred and hostility. These two relations are correlative".

Thus Davie did not add much to Sumner's arguments in terms of theoretical sophistication. He did, however, summarize the then available ethnological evidence from all over the world. In the accounts of contemporary anthropologists, the theme or Leitmotif of ethnocentrism, whether implicit or explicit, is clearly recognizable (e.g., Rappaport, 1968; Koch, 1974; Huber, 1975; Chagnon, 1977; Herdt, 1981; Paula Brown, 1982; Knauft, 1983; among many others).

Such a state of affairs has resulted in the isolation of many primitive peoples, their ignorance of one another, and the great variation in their mores (Davie, 1929), and languages (Bigelow, 1972). There are, for example, more than 700 mutually unintelligible languages in New Guinea today, and American Indians spoke several thousand different languages a few centuries ago. As Bigelow (1972) suggests: "When they cannot understand one another beyond the level of smiles and grunts and blatant gestures, people rarely achieve deep cultural bonds and common loyalties. It is therefore most unlikely that a sense of belonging and of mutual concern could have been extended through the whole of mankind during prehistoric times or that it could have persisted for several million years. The evolution of linguistic capacities, therefore, would have served to reinforce territorial and other segregating forces during prehistoric times. And greater linguistic abilities would have simultaneously increased the social cohesion within each separate group. Conceptual and emotional differences between 'us' and 'them' would have been accentuated".

Tiger & Fox (1971) similarly hypothesized that the evolution of linguistic capacities would have served to reinforce segregating forces during prehistoric times, while simultaneously increasing social cohesion within each separate group.

Ethnocentrism and Nationalism

Ethnocentrism is not a monopoly of primitive peoples. It is also a common theme, in the guise of nationalism, in the history of civilization.
Nationalism and ethnocentrism are similar in the sense that usually they both involve positive attitudes toward an in-group and negative attitudes toward some or all out-groups. They do not overlap completely, however. Nationalism, more often than ethnocentrism, involves loyalty to a politically distinct entity, membership in an elaborately organized and relatively populous social grouping, adherence to a formalized ideology, and performance of relatively stereotyped allegiance-expressing behavior (e.g., Rosenblatt, 1964; A.D. Smith, 1981, 1994).

Bauer (1907) defined a nation as a community shaped by shared experiences. The nation is a *Schicksalsgemeinschaft* – a community united by a common fate (see also Loewenberg, 1985, 1994). This is, psychologically, a much more sensible conception of the nation than the formal definitions of the political scientists.

The cognitive approach to nationalism, as exemplified by Hobsbawm (1990), regards it as a historical phenomenon concomitant with the rise and decline of the nation-state. Thus Hobsbawm (1972) argued that nationalism is a historical phenomenon, the product of the fairly recent past, and unlikely to persist indefinitely. Nationalism, he predicts, "will decline with the decline of the nation-state" (Hobsbawm, 1990). This approach would deny any primordial, individual human propensity to one form of ethnocentrism or another. The rational choice, marginal utility, and transactional theories of ethnic and nationalist identification do not, however, take into consideration the often irrational, passionate animosities, equally passionate loyalties, strong affective attachments to sacred symbols and myths, threat perceptions, and other emotional aspects involved. All too often in human affairs passion overrides reason, and ethnophobias turn into hatred, hostility, and violence (Loewenberg, 1994; Richmond, 1987). As Falger (1991, 1994) reasoned, the view of nationalism as a recent historical phenomenon is valid only for those who are insensitive to its underlying ultimate dimension. The association of nationalism with the nation-state is indeed relatively recent, but it is only one phenotypic expression of the deep in-group/out-group structure inherited from human prehistory.

In the view of LeVine & Campbell (1972), nationalism represents an advance over earlier forms of ethnocentrism in the sense that it obtains the more intense and broad responsiveness of a large population to the state leadership.

'Nationalism', according to A.D. Smith (1994), signifies both an ideological doctrine and a wider symbolic universe and fund of sentiments. In the nation's flags and anthems, its memorials and monuments, its parades and ceremonies are distilled the pride and hope of a 'community of history and destiny' which seeks to shape events and mould itself in the image of its ideals. To this end, the modern nation of 'fraternal citizens' must always return to the idealizations of its past, to its myths of ethnic origin, descent and development, and above all, to the 'golden ages' that guide its path and endow it with a confidence to face the unknown, and to the heroes whose virtues inspire public emulation and exalted faith. For as Durkheim (quoted in A.D. Smith, 1994) reminded us: "There can be no society which does not feel the need of upholding and reaffirming at regular intervals the collective sentiments and the collective ideas which make its unity and its personality".

In a recent perceptive contribution to the problem of (ethnic) nationalism, Ignatieff (1994) notes that nationalism is everywhere characterized by a deeply insincere and unauthentic rhetoric functioning as an excuse for excesses and atrocities. Everywhere historical truth is the 'first casualty'.

Wilson & Daly (1985) and Daly & Wilson (1987) noted the preponderance of young males in all kinds of criminal violence. They called it the "Young Male Syndrome". Ignatieff noticed that most nationalist violence, too, is committed by a small minority of young males (some of whom

may be psychopathic; most, however, are perfectly sane). Apparently not everyone abhors or fears violence. Presumably, it is deeply pleasurable and satisfactory for young armed males to have the power of life and death over other people; to fanatically assert themselves at the cost of others and to escape from insignificance; to rebel against and disrupt the deeply resented order of the state; to massively rape; to psychologically and morally and phylogenetically regress (see Bailey, 1987, for the theory of phylogenetic regression).

Wrangham & Peterson (1996) note that the underlying psychology is no different for urban gangs, pre-state warrior societies, and contemporary armies: "Demonic males gather in small, self-perpetuating, self-aggrandizing bands. They sight or invent an enemy 'over there' – across the ridge, on the other side of the boundary, on the other side of a linguistic or social or political or ethnic or racial divide. The nature of the divide hardly seems to matter. *What matters is the opportunity to engage in the vast and compelling drama of belonging to the gang, identifying the enemy, going on the patrol, participating in the attack*" (italics added).

The special blend of militant nationalism, pugnacious patriotism, and expansionist imperialism is called jingoism. In his *The Psychology of Jingoism*, Hobson (1901) attributed it to man's 'ancient savage nature' lurking somewhere in 'sub-conscious depths', under the superstructure or thin veneer of civilization. He spoke of the "animal hate, vindictiveness, and bloodthirstiness" that lurked in the mildest-mannered patriot. Also Inge (1915) traced the 'perverted patriotism' that according to him caused war to "the inborn pugnacity of the *bête humaine*". These are by now familiar variants of Plato's 'Beast Within'.

Marshall (1898), also writing in the *fin de siècle* instinct psychology tradition, included among his 'tribal instincts of a higher type', the patriotic instinct, which was aroused by aggressive threats from neighboring nations, or by opportunity for tribal aggrandizement. He explained the self-sacrificial behavior of warriors in terms of biological sacrifice, a form of extreme altruism that paid off in 'tribal advantage' (Crook, 1994), anticipating kin selection theory by more than half a century.

Sir Arthur Keith (1916) discovered 'somehow' (as Shafer [1972] condescendingly put it) that the feeling of nationality arose out of the 'tribal instinct', fostered on 'nature's cradles' among early men. Nature had, he divined, separated "mankind into herds and tribes and kept them isolated and pure for an endless period... by real and most effective barriers in the human heart".

The Adaptive Significance of Xenophobia

There is an analogy, according to Rosenblatt (1964), between immunological reactions of the body and the ethnocentric reactions of the individual or of a society.

Just as the body is better prepared to avoid destruction by foreign substances as a result of a generalized tendency to resist the impingement of foreign substances, so an individual or a society may be better prepared to avoid destruction by aliens as a result of a generalized tendency to distrust, avoid, or reject apparently foreign individuals. The disadvantage of severe damage or destruction, whether likely to occur or not, is so much greater than whatever advantages contact with things alien confers on one, that a psychological or biochemical paranoia is the preferred strategy for survival. Where one failure to anticipate the malevolence of an alien person or substance may be fatal, organisms that must acquire defensive reactions to each specific harmful person or substance are less likely to survive during a given period of time than organisms prepared to be defensive against all alien persons or substances (Rosenblatt, 1964)

Also Barash & Lipton (1985) postulated an adaptive significance of (mildly) paranoid thinking. In situations of strong intergroup competition, they explain, the payoff for vigilance, suspiciousness, and aggression could be substantial.

Similarly, Shaw & Wong (1989) contend, mechanisms which prompted appropriate behavior on the first encounter with potentially dangerous predators/strangers would be favored through selection over alternate mechanisms where behavior required experience with strangers. Indeed, the costs of not suspecting strangers, and being wrong, would have been so high that natural selection would not likely have left defensive behaviors to an open-minded experimental strategy alone. H. Flohr (1987) makes a similar point with respect to nonhuman animals. Cognitive appraisals of threats would not have been limited to imminent danger but to any special circumstances that might have upset the *status quo*. As Fromm (1973) points out, objects of our fear and anxiety need not be causal antecedent conditions. Rather, they can be *anticipated* events which might or might not happen.

"A genetically coded aversion toward strangers would have enabled individuals to avoid attack more readily or immediately than would learning alone, and by avoiding injury and death, survival would be enhanced, leaving more offspring from these individuals. Over time, those with the genetically coded aversion toward strangers would come to prevail in the population" (Shaw & Wong, 1989).

Indeed, as Lumsden & Wilson observe: "Better to have a generalized fear of the dark and to shrink thrilled and apprehensive from the unknown than to take time to learn and deal with each menace in turn".

MacDonald (1992) has probably explained the rationale underlying the paranoid stance most clearly. From an evolutionary perspective, he says, it would appear to be adaptive to exaggerate negative stereotypes about a genetically segregated group, or accept negative information based on minimal evidence, or to develop a generalized negative belief about an out-group which is based on the behavior of only a small minority of the out-group. Such a perspective can be seen to conform to a simple cost/benefit analysis: members of Group A benefit by erring on the side of preventing the error of rejecting a negative proposition regarding members of group non-A, when it could be true. In the language of statistics, people are proposed to behave as if attempting to minimize the probability of a Type II error: if the hypothesis is "Members of Group A are disloyal", people appear to be greatly concerned about making the error of rejecting this proposition when in fact it could be true. They place less emphasis on making a Type I error, which is the probability of accepting the proposition "Members of Group A are disloyal" when in fact they are loyal. The cost/benefit reasoning is that making a Type II error could be extremely costly, while making a Type I error costs little or nothing.

The general principle here is that if one knows that at least some members of a group are deceivers, but does not know exactly which ones, the best policy it to assume that all are deceivers if this policy has no negative consequences.

Such a strategy also makes good evolutionary sense for the explanation of the overperception of threat. An organism contemplating *sine ira et studio* every new situation arising in its immediate environment probably would not survive its first encounter with a predator. To be overcautious, overperceptive of threat or oversensitive to even minor signs of danger carries with it high costs in terms of vigilance (time/energy budget), sheltering, hiding, fleeing, etc., but these costs are insignificant compared to the costs of making the error of being not cautious enough. Such an error is fatal and final. An evolutionary strategy of being overcautious – jumping to conclusions given the slightest indication of danger – thus pays off in terms of survival and reproductive success, and may therefore be expected to be selected for.

According to Koestler (1967) the built-in schizophysiology of the human triune brain (e.g., MacLean, 1990) provides a physiological basis for "the paranoid streak running through human history".

Xenophobia is a widespread trait throughout the animal kingdom, according to Southwick et al. (1974), but it is by no means universal. Among vertebrates, xenophobic aggression has been demonstrated experimentally in a great number of species, especially those with prominent territorial and/or relatively closed social groups, which are organized on a hierarchical basis (e.g., Holloway, 1974; Southwick et al., 1974; E.O. Wilson, 1971, 1975; see Van der Dennen [1987] for a review). The introduction of unfamiliar conspecifics to such groups (e.g., rodents, many primate species) may release massive attacks and even killing from the resident animals.

When it occurs in natural settings, xenophobia may be considered to be a functional and adaptive trait in that it maintains the integrity of the social group. It ensures that group members will be socially familiar. It limits the flow of individuals between groups, and can therefore affect patterns of both social and genetic evolution. Xenophobia has apparently evolved in those species where discrete, bounded social groups are adaptively favored (Southwick et al., 1974).

Also Hebb & Thompson (1968) cite the evidence in favor of the mammal's xenophobia; the fear of and hostility towards strangers, even when no injury has ever been received from a stranger. The enmity aroused by conspecifics which are different (in anatomy, in coloration, in behavior, in language use) or by strangers, may easily lead toward discrimination, ostracism and cruelty in animals as well as man.

Markl (1976) deduced the following general rule from observations such as these: species with highly cooperative social behavior *within* the group are particularly apt to be very aggressive towards conspecifics that are not members of their group.

Several authors have suggested that mistrust and fear of the foreigner or the stranger may have biological origins. McGuire (1969) discussed the possible genetic transmission of xenophobia: "[I]t appears possible for specific attitudes of hostility to be transmitted genetically in such a way that hostility is directed toward strangers of one's own species to a greater extent than toward familiars of one's own species or toward members of other species. It would not be impossible for xenophobia to be a partially innate attitude in the human". Vine (1987) argued for a genetically primed, generalized, weakly xenophobic and suspicious tendency as a defense against being deceived. Holloway (1974) would submit that at least for adult humans, xenophobic responses are normative unless there has been strong cultural training and conditioning against it. Clannishness, or strong intragroup affiliation coupled with distantiation of other ethnic, religious, racial, or political groups, is an enforcing mechanism for continued xenophobias. The demagogue, he observes, knows this fact only too well.

Trivers (1971) speculated that 'moralistic aggression' – an urge to attack someone who is acting unjustly or unfairly – evolved in humans as indispensable protection against excessive failure to reciprocate altruistic acts. 'Moralistic aggression' seems to be readily mobilized against individuals believed to be deviating from basic group norms and symbolic allegiances; that is, it can help enforce collective intolerance.

On the other hand, Hebb & Thompson (1968) argued that fear or dislike of the stranger is not innate, since it depends on certain prior experiences, yet it still does not have to be taught. "If, therefore, man is not born with a dislike for those who differ from him in habits or appearance, he can still pick up the dislike with no help or encouragement" (Hebb & Thompson, 1968).

Also Hamilton (1975) and Alexander (1979) argue that social interactions of an individual with his close relatives can provide all of the experiential background necessary to produce xenophobia. We tend to react negatively to countenances which are uncommunicative, and which convey contradictory or paradoxical messages.

It is not clear whether the transient phenomenon of the fear of strangers in infants – which predictably develops between 6 and 9 months of age – has any impact on adult xenophobia (See e.g., A. Flohr, 1994). This infantile fear of strangers is also reported in other social species (e.g., canids), and its development does not depend upon aversive experience with strangers.

Furthermore, it also develops in congenitally deaf and blind children (e.g., Eibl-Eibesfeldt, 1982).

Although the expression of these predispositions varies, Emmert (1984) and Shaw & Wong (1989) conclude, it seems that initial distrust of social strangers is universal among humans and nonhuman primates. Also R.Flohr (1987) concludes that xenophobia seems to be universal, i.e., it seems to occur in all cultures. This is no proof, he states, but strong evidence in favor of a biological basis of xenophobia (cf. Markl, 1982; A. Flohr, 1994). The biological basis concerns, of course, the *tendency* towards xenophobic prejudices, not their specific content.

Peck (1990) has shown through formal models that mechanisms of outsider exclusion can be favored by evolution.

The Function of Enemies and the Need to Have Enemies
Studies of conflict in settings ranging from small-scale primitive societies to international disputes suggest a fundamental need to have enemies. Having an enemy provides many pragmatic advantages. It provides a clear Manichaean structuring of the world; it simplifies the social cosmology. It provides an affirmation of one's own moral superiority, and, by implication, the moral inferiority – even to the point of dehumanization and/or diabolization – of the enemy.

Enemy image thinking has its own (psycho)logic: if we are good, the enemy must be evil; if we are moral creatures, the enemy must be immoral; if we are virtuous, the enemy must be lascivious and vile; if we are human, the enemy must be less than human.

Moreover, it provides the opportunities for gratification of the satisfactions inherent in all kinds of ego-defense mechanisms, especially those of projection and scapegoating. "And there is the red-blooded satisfaction of being able to hate and to prepare to kill and destroy without feeling qualms of conscience" (Gladstone, 1959; see also Hartmann, 1982).

In the case of the 'lunatic fringe' members of such 'hate-monger' groups as e.g., the Ku Klux Klan, a grandiose pseudo-personality is provided for those who would otherwise be insignificant social 'non-entities' or peripheral psychotics.

Apart from increasing an individual's sense of identity with a larger social entity, engaging in a conflict can also result in the release of a considerable amount of personal tension, fear and frustration in a 'legitimate' manner.

Enemy images are not easily susceptible to change, among other things because they lead to the institutionalization of selective perception. Only whatever confirms the threat and the evil intentions of the enemy is perceived. Contradictory information does not pass this perceptual filter.

Theories of Ethnocentrism

Several theories have been proposed to explain the phenomenon of ethnocentrism. LeVine & Campbell (1972), whose work on the subject is a classic, listed the following: Realistic group conflict theory; evolutionary theories; reference group theory; sociopsychological theories (including a.o. group narcissism theory, projection theory, protest masculinity theory, and frustration-aggression-displacement theory which has been discussed more fully in Ch. 5); cognitive congruity theories; transfer theory; and reinforcement theory. The most relevant of these theories will be briefly discussed.

Realistic Group Conflict Theory
This theory assumes that group conflicts are rational in the sense that groups do have incompatible goals and are in competition for scarce resources. Such 'realistic' sources of group conflict are contrasted with the psychological theories that consider intergroup conflicts as displacements or projective expressions of problems that are essentially intragroup or intraindividual in origin.

"Real threat causes in-group solidarity" is the most recurrent explicit proposition of the theory. A parallel mechanism is the rejection of deviants and vengeance against renegades, apostates, revisionists, and heretics as a solidarity-promoting mechanism. Leaders may also seek out an enemy or create a fictitious one just to preserve or achieve in-group solidarity. This is certainly one of the most ubiquitous observations in the literature.

Group Narcissism
In *Group Psychology and the Analysis of the Ego* (1921), Freud regarded ethnocentrism as a form of narcissism at the group level. Later, in *Civilization and Its Discontents* (1930), he stated explicitly that the social function of group narcissism lay in its facilitation of the displacement of aggression from in-group to out-group.

Ethnocentrism may also be interpreted as redirected expression of individual narcissism, providing individual group members with narcissistic gratification (e.g., Fromm, 1964). A further narcissistic aspect of tribalism and nationalism is that the idealized people or nation supplies grandeur to those who feel personally inadequate and flawed: "The last refuge of a scoundrel" as Samuel Johnson aptly remarked.

The various human pseudospecies also exploit what Freud called the "narcissism of minor differences" to exaggerate their own distinctiveness and, by implication, their superiority. All too often the behavior of national governments or group leaders provides ammunition to those who revel in these differences, especially when they permit the luxury of dehumanization.

Projection
Perhaps no concept has been more consistently applied to group stereotypes by psychoanalytic observers than that of projection, that is, the attribution to others of unacceptable impulses within one's self. Taken in its most extreme form this approach argues that stereotypes of out-groups are simply fantasies wholly derived from the unconscious needs of in-group members with no correspondence to the objective attributes of out-groups.

Pseudospeciation may be understood – at least in part – as an expression of one group's projection of its demonology and displacement of its self-generated aggression onto another. Undesirable characteristics will turn up attributed to an out-group (projection) which will then serve as a rationalization for violence against the out-group (aggression displacement) (Erikson, 1964).

Loewenberg (1994) expressed the ambivalence within us and the projection of the bad internal objects thus: "The good is what is me and mine – my family, village, clan, and people. The bad is outside – the others, them, the aliens, foreigners, the strangers. The strangers are uncanny because they contain parts of the self which are unacceptable, asocial, dirty, foul, lascivious, murderous and cruel. Therefore these parts are projected onto outsiders and strangers".

Compensatory or Protest Masculinity

Bacon, Child & Barry (1963) present the basic position succinctly, in their discussion of the sex role identification of males as especially pertinent to the development of violent behavior. "It is assumed that the very young boy tends to identify with his mother rather than his father because of his almost exclusive contact with his mother. Later in his development he becomes aware of expectations that he behave in a masculine way and as a result his behavior tends to be marked by a compulsive masculinity which is really a defense against feminine identification".

The authors identify a particular pattern of child training factors which tends to produce in the child persistent attitudes of rivalry, distrust and hostility which would probably continue into adult life (cf. Whiting, 1965).

The protest masculinity hypothesis may have even broader application to the phenomena of intergroup conflict. LeVine & Campbell (1972) speculate "that it is protest masculinity, with its heightened group narcissism, its hypersensitive, proud, prestige-conscious belligerence, that lies behind the ethnocentrism syndrome in its most extreme and irrational forms, not only in fighting gangs and feuding warriors but in the contemporary nationalistic leadership of competing states".

Social Identity Theory and Group Animosity

Social identity theory – which was largely developed after the appearance of LeVine & Campbell's classic *opus* – proposes that individuals engage in a process in which they place themselves and others in social categories. There are several important consequences of this social categorization process:

(1) Similarities between self and in-group members, and dissimilarities with out-group members are exaggerated (the *accentuation* effect).

(2) The stereotypic behavior and attitudes of the in-group are positively valued, while out-group behavior and attitudes are negatively valued. Individuals develop favorable attitudes toward in-group members and unfavorable attitudes toward out-group members. The in-group develops a positive distinctness, a positive social identity and increased self-esteem as a result of this process. Within the group there is a great deal of cohesiveness, positive affective regard, and camaraderie, while relationships outside the group may be hostile and distrustful (MacDonald, 1992, 1996).

Tajfel (1970 et seq.), and many other social psychologists, provided experimental support for the hypothesis that an individual will discriminate against a member of an out-group even when (a) there is no conflict of interest; (b) there is no past history of intergroup hostility; and (c) the individual does not benefit personally from this behavior. Mere (random) categorization is sufficient to produce intergroup discrimination and prejudice (cf. also Rabbie, 1982, 1992; R. Brown, 1985; Hogg & Abrams, 1987, 1993; Tönnesmann, 1987; Vine, 1987; Abrams & Hogg, 1993; Triandis, 1990; MacDonald, 1992, 1996; among many others).

Furthermore, people very easily adopt negative stereotypes about out-groups and these stereotypes possess a great deal of inertia (i.e., they are slow to change and are resistant to countervailing examples). Stereotypes are learned at a very early age, even before a child has much awareness or explicit knowledge of the other group. Finally, the stereotypes tend to become more negative and hostile in situations where there is actual intergroup competition and tension.

Social identity theorists propose that it is the need for high self-esteem which drives the entire process (MacDonald, 1992, 1996). Also Horowitz (1985) posits the quest for the affirmation of 'personal worth' as a central motive of human behavior: "self-esteem is in large measure a function of the esteem accorded to groups of which one is a member". Hence, "the

sources of ethnic conflict reside, above all, in the struggle for relative group worth". The contest for group legitimacy, for political inclusion and exclusion, merges with the quest for group worth to form "a politics of ethnic entitlement". For Horowitz, this is the engine of mass ethnic conflict. He also understands ethnicity to be a form of "greatly extended kinship". The particular fierceness, bitterness and cruelty of ethnic conflicts can be understood, at least in part, through the relatedness of familial and ethnic consciousness: "If group members are potential kinsmen, a threat to any member of the group may be seen in somewhat the same light as a threat to the family" (Horowitz, 1985).

(3) The result of these categorization processes is group behavior which involves discrimination against the out-group; beliefs in the superiority of the in-group and inferiority of the out-group; and positive affective preference for the in-group and negative affect directed toward the out-group.
The stereotyping process can also result in scapegoating (i.e., the explanation of complex events as resulting from the behavior of the out-group), and dehumanization. External threat (real or perceived) tends to reduce internal divisions and maximize perceptions of common interest among group members.

Anthropological evidence indicates the universality of the tendency to view one's own group as superior (e.g., Davie, 1929; Vine, 1987; Shaw & Wong, 1989; MacDonald, 1996), and the empirical results of social identity research are highly compatible with an evolutionary basis for ethnocentric group behavior. A. Flohr (1994) similarly concludes her extensive review that there is a biological disposition toward ethnocentrism. Lopreato (1984), Irwin (1987, 1990), Shaw & Wong (1989), and Wuketits (1993) provide some compelling arguments why humans are genetically predisposed to ethnocentrism: in the EEA ethnocentrism and xenophobia enhanced individual reproductive success and survival. It can thus be considered to be a (bio)rational disposition.

In addition to the suggestion of universality, an evolutionary interpretation of these findings is supported by results indicating that these social identity processes also occur among 'advanced' animal species such as chimpanzees (e.g., Goodall, 1986).

Moreover, as MacDonald (1992, 1996) points out, the powerful affective component of social identity processes is very difficult to explain except as an aspect of the evolved machinery of the human mind. As Hogg & Abrams (1987) note, this result cannot be explained in terms of purely cognitive processes, and a learning theory seems hopelessly *ad hoc* and gratuitous. The tendency for humans to place themselves in social categories and for these categories to assume immense affective, evaluative overtones is the best candidate for the biological underpinning of ethnocentrism (MacDonald, 1992, 1996; Shaw & Wong, 1989).

Within the framework of social identity theory, there is clearly no requirement that the beliefs regarding the in-group or the out-group be true. Bigelow (1969) notes that "each group requires something intimate, unique to itself, around which its members can cohere. Irrational beliefs serve this purpose far better than rational ones; they are not only easier to produce, but also less likely to be confused with enemy beliefs. Irrational fantasies produce a continuous supply of 'group uniforms', promoting and maintaining internal cohesion within each group, and segregation between groups".

Also Tiger (1969) suggested that "males bond in terms of either a pre-existent object of aggression or a concocted one".

Dynamics of In-group/Out-group Differentiation

Many authors have suggested that the separation of ethnic, racial, or social groups fosters hostility by blocking off communication. Without interaction between people or groups, it is easy for autistic spirals of hostility to develop. Especially, Newcomb (1947) pointed out the vicious circle by which an individual or a group once ready for hostile responses gradually reduces the channels of communication with the potential enemy, thus preventing rectification of the early impression of hostility and redress by friendly actions. Hostile isolation or autistic hostility is likely to make hostile tension more enduring (which does not necessarily mean that contact reduces hostility and prejudice between individuals and groups).

The dynamics involved in the experimental studies of in-group/out-group differentiation can be summarized as follows: within the groups the members close ranks; there is an increase in group cohesiveness and solidarity; the one group is considered to be superior to the other group; each group becomes more hierarchically organized; there is a greater willingness to accept centralized leadership; deviating opinions are barely tolerated; the group demands more loyalty and conformity from its members. Between the groups negative stereotypes tend to develop; communication between the groups decreases preventing the correction of negative stereotypes; during intergroup negotiations, members pay more attention to points of disagreement than they do to agreement; distrust and hostility towards the other group rises, sometimes erupting into open aggression; tactics and strategy for winning are emphasized at the expense of concern about the merits of the problem to be negotiated; and leaders increasingly become victims of 'groupthink', i.e., deteriorating reality testing and rationality (Rabbie, 1982, 1992; Janis, 1971, 1972).

Realistic conflict does not always involve an opposition of material and objective interests, as is sometimes suggested. Sherif & Sherif (1966), for example, make it clear that groups may compete about both material and nonmaterial interests; "the issues at stake may relate to values and goals shared by group members, a real or imagined threat to the safety of the group, an economic interest, a political advantage, a military consideration, prestige, or a number of others". Mutually incompatible goals between groups are themselves considered to be sufficient condition for the rise of hostile attitudes and deeds toward another group.

Simmel (1904, 1955) and Coser (1956) proposed that conflict serves to establish and maintain the identity and boundary lines of societies and groups. According to the 'safety-valve theory' of conflict, conflict also serves as an outlet for the release of hostilities which, without it, would sunder the relation between the antagonists.

Sherif and his coworkers (Sherif, 1956 et seq.; Sherif & Sherif, 1953; 1966; Sherif et al., 1961) have been particularly interested in the experimental production and reduction of friction, conflict and negative stereotypes between groups. All the field experiments verify the hypothesis that conflict between two groups tends to produce an increase in solidarity within the groups. In the first experiment, the introduction of a common enemy (another competing group) was successful in reducing conflict between the original two groups. This set of studies substantiate the point that the external threat that increased internal cohesion must involve an achievable superordinate goal (Stein, 1976).

One of the few attempts to replicate the Sherif experiments was that of Diab (1970). This experiment had some frightening consequences for the subjects as well as for the researcher who had to be hospitalized for exhaustion after the experiment was abruptly terminated. He had been too successful in arousing intergroup hostility. The conflict got completely out of hand; some boys knifed each other and the police had to evacuate the camp to prevent further violence (Rabbie, 1982).

Some of the intricate dynamics of the process of in-group/out-group antagonism, escalating into downright 'warfare', may be grasped from the accounts of McNeil (1961, 1962), living with

a group of 70 "aggressive, anti-social, anti-adult boys" in a therapeutic summer camp. At once, the boys began a pattern of militant probing of one another in their individual and group relations seeking to establish a basis for dominance and submission. The camp's aggressive pecking order was established through a number of interpersonal devices which resemble those used by primitive communities as well as civilized states to establish their position in the world: saber rattling, recounting past glories, the role call of allies, and deterrence by attack.

See Van der Dennen (1987) and Flohr (1987) for a review of scapegoating, ostracism, rejection of deviants and dissenters, discrimination, conspecific mobbing, and moralistic aggression in the context of within-group dynamics, as well as the role of anonymity, deindividuation, obedience, compliance, conformity, dehumanization and suspension of personal responsibility on the facilitation of atrocities and other extreme violence when people act as part of a group.

The Logic of Ethnocentrism: The Duality of the Human Mind

The particular logic of ethnocentrism, its Manichaean duality which dichotomizes the world into A and non-A, self and other, in-group and out-group, us and them, friend and foe, seems to spring from the cognitive capacity of Man to juxtapose, classify, categorize, distinguish, differentiate, dichotomize and discriminate, but also his ability to abstract, generalize and detect common determinators in things highly diverse.
In this section I shall examine the cognitive aspects of the ethnocentrism syndrome, i.e., information processing and its distortions and biases, the mental representation of the social world, and the evolutionary algorithms underlying decision processes based on these cognitive maps.

The human tendency to think in binary categories or oppositions has often been noted, ever since Boole in his *Laws of Thought* (1854) made a strong case for its inevitability. It is part of our phylogenetic substrate of basic problem-solving strategies and cognitive heuristics.

The world view of many peoples seems to be made up of a number of binary opposites or antinomies (self/other; order/chaos; safety/danger; friend/foe; peace/war; clean/dirty; human/nonhuman; good/bad; familiar/alien, etcetera), which, furthermore, tend to cluster together at the positive and negative poles, such that the self (and, by extension, the in-group) is good, clean, and associated with order and safety; while the other (and, by extension, the out-group) is alien and strange, and associated with chaos, danger, dirt, and potential violence.

Meyer (1987) pointed to the phenomenon that members of primitive groups frequently take their traditional enemy group as a kind of negative identity reference.

The human being has a powerful urge to dichotomize, E.O. Wilson (1978) states, and "We seem able to be fully comfortable only when the remainder of humanity can be labelled as members versus nonmembers, kin versus nonkin, friend versus foe".

Possibly ethnocentrism operates as a primordial psychological mechanism which brings about a distinction of 'us' and 'them', in-group and out-group, and it may be hypothesized that 'advanced' species like chimpanzees and humans have extra-strong needs for group boundaries, demarcations or delimitations, the strength of which must somehow be related to the species' affective systems.

Our way of thinking has evolved as a response to the practical problems of living and reproducing in the Environment of Evolutionary Adaptedness, and not to solve academic puzzles. We tend to think more in terms of categories or classes than in terms of individuals. Using these generalizations we form schemata. These schemata are extremely useful, but at the same time they enable us to form stereotypes. With regard to this regrettable side-product one could say with Anderson (1980): "Stereotyping reflects the dark side of schema abstraction".

This tendency culminates in a tendency to dichotomize phenomena. This involves the classification of objects within the nervous system – often beginning with our sensory perception – according to some kind of either-or rule (Flohr, 1987).

All organisms have to rely to a considerable degree on extrapolations based on their experiences, i.e., they have to make inferential judgments, so to speak, whenever they cannot rely on genetically controlled behavioral instructions. Based on inferential judgments (pre-judgments) an organism will develop behaviors which could turn out to be wrong, but which could, by and large, overcompensate for this disadvantage by an increase in security and in rapidity. As long as they are more likely than a random search to lead to correct judgments, thereby protecting the conditions of survival, they are functional (Flohr, 1987).

Riedl (1980, 1985) has pointed to the enormous role that pre-judgments play in the behavior of all living systems. As he puts it: "The algorithm of living systems is not founded on the apparent contradictions of our inductive logic, but on probability". In order to perceive and to evaluate, we have innate pre-judgments at our disposal, a whole system of phylogenetically acquired orientations that has been called 'ratiomorphic apparatus'.

By sorting information from past experiences or environments through the use of behavioral predilections, such as rules of thumb or habit, adaptive rationality permits the efficient management of considerable information. More than this, pre-judgments and rules of thumb reduce uncertainty by prescribing paths of action that have worked, in the past, to yield positive net returns (Shaw & Wong, 1989).

Humans have evolved mechanisms to cope with the problem of reduction of uncertainty. If information that reduces uncertainty is insufficient or not available, humans will simply create it or otherwise employ strategies to at least have the illusion of control of the situation (Kalma, 1986, 1989).

The psychology of perception and attribution shows that our emotions and cognitions have a considerable impact on the selection, retention, and distortion of information. It has also been demonstrated that the processing of the perceived information is not some kind of objective, 'interest-free' registration. It is influenced instead at each important junction by emotional and cognitive commitments or 'wishful thinking' (Flohr, 1987).

The frequent overestimation of environmental conditions ('force of circumstances') when accounting for our own behavior, and the overestimation of stable personality characteristics (or persistently evil intentions) in observations of other people's behavior is one such perceptual and attributional distortion.

Reification ('ideas-become-real'), also called 'hypostatization', refers to the human capacity to treat an abstraction as a real thing, substance or entity. It may even be anthropomorphized, taking on human or quasi-human form. Reification is critical to human action. It imposes familiarity and order on an otherwise chaotic environment (Peterson, 1981; Lumsden & Wilson, 1981, 1983).

Examples are the anthropomorphized and personalized representations of the mother- or fatherland in nationalistic hymns, patriotic battle songs, and national anthems from all over the world. Such images are almost always employed as powerful mobilization devices in warfare.

The leader as the reification of the group is perhaps the most powerful form of symbolization. As Ike (1987) observes: "An individual person cannot identify himself with a large number of people; he needs a small group, a reference group, a peer group. Or he wants a symbol, a leader as stand-in for the larger mass of individuals with whom he cannot identify. The leader is the symbol, and the larger and stronger the number of individuals he represents, the better qualities are attributed to, or 'projected' on him".

History abounds in charismatic leaders who symbolized the group and more or less successfully mobilized their followers. Many adopted a patriarchical role, representing themselves as symbolic fathers and their followers as symbolic children. Followers, in turn, were, and still are,

are typically consumed by familylike devotion and, not infrequently, by fanatic loyalty (Shaw & Wong, 1989).

Humans have a deep-rooted propensity to respond emotionally to symbolic representations of their in-group. These emotional qualities may include spontaneous joy, a sense of pride, and the security of belonging. The in-group becomes emotionally integrated into the individual's self-system or identity (Isaacs, 1975; Tönnesman, 1987). In the expanded group context, emotions are typically aroused and reinforced through the language of kinship and the use of rituals, flags, anthems, drums, marches, and various kin-related heuristics (sacrifice for the Motherland) that have proven highly effective in promoting group solidarity (e.g., G.R. Johnson, 1986).

This strong emotional aspect is a rather neglected part of the dangers human groups constitute for each other, Elias (1987) observed. Human groups seem to take a strange delight in asserting their superiority over others, particularly if it has been attained by violent means. The feeling of group superiority appears to provide its members with an immense narcissistic gratification. People in power can usually count on a warm response of approval and often of affection and love from their compatriots whenever they praise or add to the glory of the social unit.

All these phenomena can be understood, in the last analysis, as pertaining to our finite time-and-energy budgets, and consequently our limited capacity for problem-solving, and our limited capacity to sympathize with, identify with, and be emotionally involved with more than a very limited number of conspecifics (Warnock, 1975; Ike, 1987). "Being a limited resource, affectivity in man favors interaction units where this resource may be invested in the most economical manner: it can be bestowed on a limited number of persons only" (Meyer, 1987). Hence the individual's limited niche in the nexus of cross-cutting human configurations. Human affectivity is of major importance in the establishment of social boundaries. Any social system requires boundary maintenance and mutual identification of actors (Meyer, 1987; Ike, 1987; a.o.).

The human sympathy group seems to be limited to about 11 individuals (Buys & Larson, 1979). These authors suppose that this magnitude possibly has co-antecedents in the human social-biological evolution, i.e., in the small hunting bands of our ancestors. So too, Washburn & Harding (1975) state: "Man evolved to feel strongly about few people, short distances, and relatively brief intervals of time; and these are still the dimensions of life that are psychologically important to him".

For most of our evolutionary history group identification was essential to the survival and well-being of the individual (Wallace, 1864; Darwin, 1871; Alexander, 1974 et seq.; Corning, 1983; Barash & Lipton, 1985; Dunbar, 1987; Flohr, 1987; Slurink, 1994; Caporael, 1996; a.o.). Thus we see that an important element in the psychological make up of human beings is a profound inclination to *belong*, to be part of a group, and the bigger and more powerful the group, the better. For our ancestors "security came in large part from the defense of the tribe against other tribes" (Barash & Lipton, 1985). Survival depended on the cooperative assistance of one's fellow group members.

Alexander (1974 et seq,), Slurink (1994) and Caporael (1996), among others, argued that during hominid/human evolution individuals better adapted to group-living (even to the point of hypersociality and obligate interdependence) would have been selectively favored.
At all times we had to rely on support by the group, and also on being accepted by the group. For this reason we had to adapt to the group; we had to adopt its modes of behavior and its value orientations. High respect for one's group more or less (psycho)logically implies devaluing out-groups. A tendency to form prejudices can thus be derived from our striving for group identity (Flohr, 1987).

Lorenz (1966) hypothesized that the formation of affiliative bonds between members of the same group are intensified by aggression directed towards individuals outside of the group: "The

principle of the bond formed by having something in common which has to be defended against outsiders remains the same, from cichlids defending a common territory or brood, right up to scientists defending a common opinion and – most dangerous of all – fanatics defending a common ideology. In all these cases aggression is necessary to enhance the bond".

Prejudices thrive on polarization, on the maximization of differences between classes. Stereotypes and prejudices are, unmoralistically considered, heuristics or cognitive templates which work most of the time, *and* which prevent the stimulus overload of the cognitive system, *and* which provide some degree of self-esteem by creating a simple order out of chaos and uncertainty. "We love our prejudices, because they not only provide us with cognitive, but also with social stability" (Bergler, 1976). Prejudices acquired at some time are stabilized not only by selective perception, but also by the fact that the behavior of those who are discriminated against is changed due to our discrimination in a way that further seems to justify our stereotypes.

Ethnic and racial prejudices are not necessarily based on personal experiences and they do not necessarily have to reflect private interests. Instead they can be acquired early in life along with other values and attitudes that are normative in their social environment.

Van den Berghe (1997) reasoned that, far from being inflexible, irrational, resistant to experience, and situationally insensitive, stereotypes are, for most people most of the time, low-cost statistical guides to action in situations where transient encounters between strangers make better information costly, unavailable or risky. They may be not much good, but they are generally at least somewhat better than nothing in helping to make predictions about the behavior of unknown others.

Stereotypes exaggerate the differences *between* groups (dichotomization) and underestimate the differences *within* them (generalization). They can result from erroneous attribution or from simplified judgment. Erroneous attribution can be the consequence not only of social pressures but also of endogenous factors. The ease, however, with which even absurd stereotypes are being formed all the time point in itself towards an innate tendency to think in stereotypes (Flohr, 1987).

R. Brown (1985) offered an analysis that puts ethnocentrism together with group stereotyping and perceived inequity in resources to explain group conflict. He regards the individual's desire for a positive self-image and in-group preference a basic tendency of humanity, and perception of inequity as a factor that moves a group from ethnocentrism to aggression and hostility.

Vine (1987) suggests the possibility that organized aggressive competition between groups of hominids did not appear during hominid evolution until the 'self-system' had evolved to an appreciable degree – making strong yet fluid collective social loyalties possible. During the evolutionary transition to self-awareness, Vine proposes, selection would have favored moderate levels of self-bias and self-deception, in preference to strictly realistic self-consciousness, in the service of the overarching 'meta-motive' of self-esteem.

Anne Flohr (1994) lists the following cognitive mechanisms: selective perception and perceptual distortions (double standard in judging the same behavior of members of ingroup and outgroup), avoidance of dissonant information, 'boomerang effect' (Jervis), 'confirmation bias' (Peterson), 'availability heuristic', 'halo effect', and 'evoked sets'. Furthermore, she identifies 'fundamental attribution error', 'black-white thinking' (dualities), 'worst-case thinking', 'self-fulfilling prophecies', and 'projection'.

Evolutionary Theories of Ethnocentrism

Ethnocentrism is a major *explanans* in contemporary theories of primitive warfare. The founding father of modern sociobiology, E.O. Wilson (1978) regards it as a culturally hypertrophied biological predisposition:

> The practice of war is a straightforward example of a hypertrophied biological predis-position. Primitive men cleaved their universe into friends and enemies and responded with quick, deep emotion to even the mildest threats emanating from outside the arbitrary boundary...
> The force behind most warlike policies is ethnocentrism, the irrationally exaggerated allegiance of individuals to their kin and fellow tribesmen.

Also Meyer (1977 et seq.) regards ethnocentrism and xenophobia as cultural hypertrophies. He argues that the extreme ethnocentrism of primitive peoples sets preconditions for violent interaction, while specific conditions serve as triggers. Meyer suggests that the basic motivation in violent encounters between members of distinct groups is not 'aggression' impelled by some sort of drive, instinct, or appetite, but 'fear'. Fear generated by the position of the cultural 'we-group' in a threatening universe made up of 'they-groups', endangering the social cosmos by their very existence.

Kin Selection and Inclusive Fitness
Evolutionary and sociobiological explanations of ethnocentrism and xenophobia are for the most part rooted in kin selection, inclusive fitness, and altruism theories. Inclusive fitness, as Alexander (1979) explains, is a simple idea. As social organisms we tend to lead our lives embedded in networks of near and distant kin. The concept of inclusive fitness simply tells us that not merely our offspring but any genetic relative socially available to us is a potential avenue of genetic reproduction. Altruism toward relatives is of course not really altruism at all, but rather the tendency of individuals to maximize the reproductive success of their genes via their relatives, that is, via the other bodies in which copies of these genes reside.
　　Alexander & Borgia (1978) argued that nepotism to nondescendants and distant descendant relatives is an extension of (evolutionarily) earlier altruism in the form of parental care. Alexander (1979) argued that reciprocity (or 'selfish cooperation' as Corning [1983] called it) is in turn largely derived from nepotism. Vanhanen (1992) considers tribalism, casteism, national-ism, etc. as forms of nepotism adapted to large societies).
　　In the small bands in which humans are generally presumed to have lived during most of their evolutionary history, virtually all social interactions were among relatives. The same is probably true for contemporary hunter-gatherer societies.'Generalized reciprocity' involves mostly one-way flows of benefits because it is largely nepotism (the return is genetic), and 'negative reciprocity' involves one-way flows because it consists of one-time interactions accompanied by a great deal of social cheating.
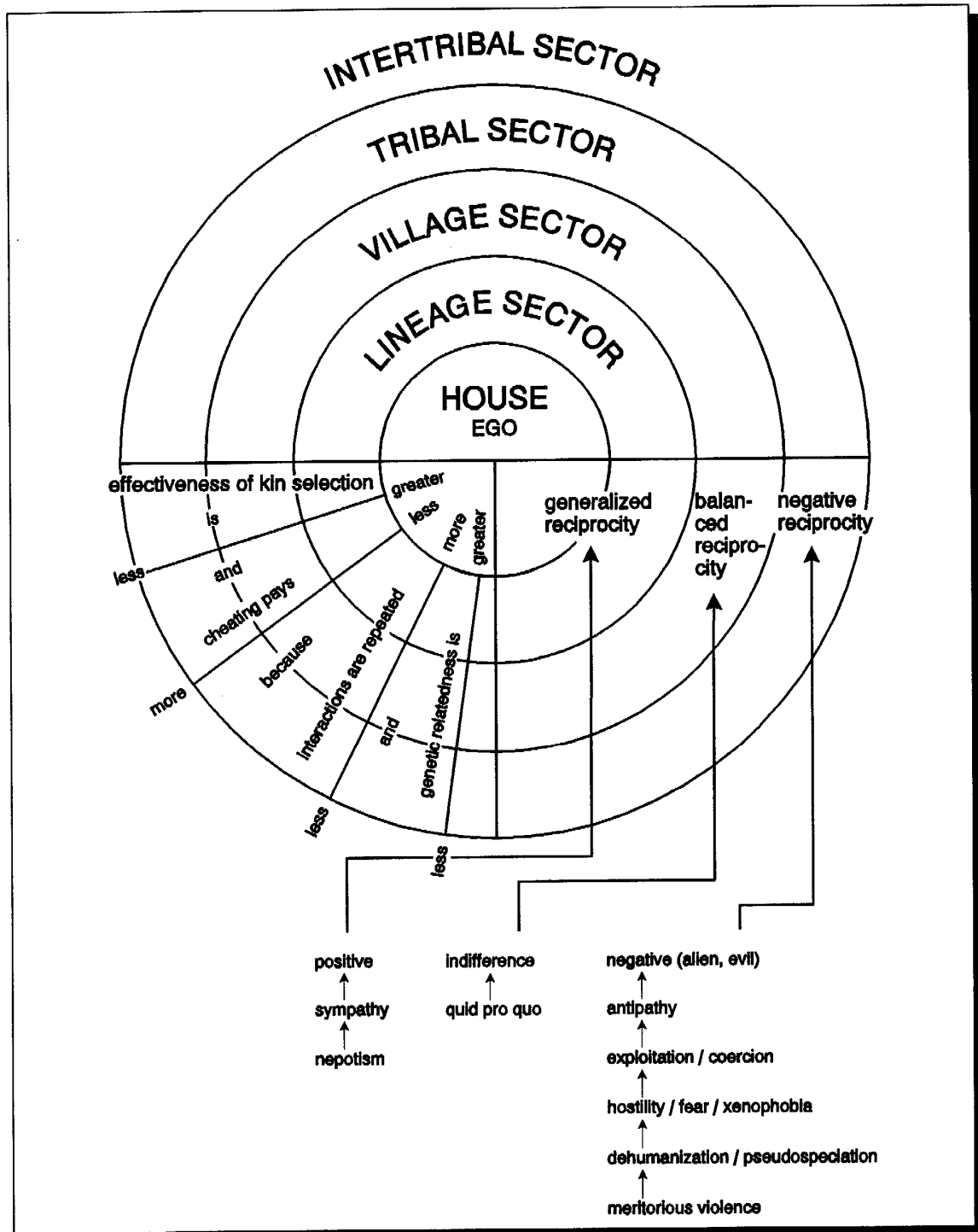
This diagram from Sahlins (1965) illustrates the different types of what he called 'social reciprocity' in primitive cultures. The information in the lower left quadrant has been added by Alexander (1975, 1979) to suggest how kin selection and evolutionary principles accord with reciprocity, as practised by human groups. The information in the lower right quadrant has been added by me.

'Balanced reciprocity', on the other hand, tends to occur between distant relatives or nonrelatives that are likely to interact repeatedly, and therefore involves balanced flows of benefits (see also Masters, 1964; Service, 1966; and Shaw & Wong, 1989).

The moral gradient and the vector of violence and dehumanization running through these concentric circles was already clearly seen and eloquently formulated by Marett (1933): "[T]here stand out in sharp contrast to each other three spheres of conduct, to which entirely separate commandments apply as follows: to the first, Thou shalt commit no murder; to the second, Thou shalt compound with thy neighbor on the principle that a life for a life is fair give-and-take; and to the third, Thou shalt utterly destroy the destroyer".

In discussing the absence of war in some Inuit tribes, Irwin (1987) predicted (in contrast to Hamilton, 1975) that social behavior can be polarized at all population boundaries where there is some variation in the coefficient of relatedness between adjacent demes. In other words, Irwin said, rivalry between closely related human populations is as predictable a phenomenon as sibling rivalry. If the humans in these populations stopped making war then something must have happened to the coefficient of relatedness, or the cost/benefit ratio, or both.

Cultural Badges (Markers) and the Proximate Mechanisms of Kin Recognition
What features will be chosen as ethnic markers or badges? There are many possibilities, tending to fall into three main categories of traits.
First, one can pick a genetically transmitted phenotype, such as skin pigmentation, stature, hair texture, facial features or some such 'racial' characteristic.
Second, one can rely on a man-made ethnic uniform. Members of one group are identified by bodily mutilations and/or adornments carried as visible badges of group belonging. These markers range from clothing and headgear to body painting, tattooing, circumcision, tooth filing and sundry mutilations of the lips, nose and earlobes.
Third, the test can be behavioral. Ethnicity is determined by speech, demeanour, manners, rituals, ceremonies, etiquette, esoteric lore or some other proof of competence in a behavioral repertoire characteristic of the group. Language is the supreme test of ethnicity (e.g., the *shibboleth*), because it is almost absolutely 'fake-proof'. Many, including non-ethnic groups, use particular attitudes or idiosyncrasies as litmus tests of group membership.

Some criteria seem to have more staying power than others, and the ones with high heritability appear to have an edge (Van den Berghe, 1981, 1989, 1992).

Shaw & Wong (1989) consider as recognition markers, taking on potent heuristic and emotive value in demarcating in-group/out-group boundaries, to include language, religion, phenotype, homeland, and myth of common descent.

The importance of kin recognition mechanisms as intermediaries of kin selection was recognized by Hamilton in his 1964 classic paper. He proposed four possible mechanisms: (1) recognition alleles; (2) spatial distribution or location (depending upon a high correlation between location and kinship); (3) association or familiarity (due to living and rearing arrangements, individuals with whom one is familiar are more likely to be kin than others); (4) phenotypic matching (dependent upon an assumed correlation between genotype and phenotype). Phenotypic matching, or self-referent phenotype matching (also known as the armpit effect because many animals recognize each other olfactorily – through the smell of their sweat) is based on perceived similarities and differences.

To deal with the problem of in-group membership recognition, natural selection has repeatedly evolved a proximate mechanism known as badging. Badges can be learned and may be one of the simplest, most rudimentary forms of culture presently known (e.g., bird song dialects).

As related individuals possess genes in common, they may produce a cue which is genetically determined and thus possessed by all kin. Detection of such a cue (innate badge) is possible due to a genetic mechanism in which a genetically coded phenotypic trait is tied to a genetically coded basis for recognition of that trait. This is the idea behind recognition alleles.

Of the mechanisms of kin identification, Holmes & Sherman (1983) consider the possibility of recognition alleles ('innate feature detectors' as Rushton [1989] called them) as most problematic. However, this 'green beard effect', as Dawkins (1976; 1981) calls it, is essentially what badging is; the only difference is that humans (and some song birds) do not grow differently colored beards to identify kin, they may wear false beards of different colors in the form of culture. Human dialects, like bird song dialects, may also function as population markers.

Thus, as Irwin (1987) suggests, many aspects of culture which vary dramatically from tribe to tribe could be understood as learned and culturally transmitted ethnocentric expressions of a genetic predisposition to group bonding and badging, rather than as adaptations of tribe to tribe differences in immediate ecology. Differences in dialect, dress, art, symbol, ritual, scarification, tattoos and/or body paint symptomatic of group membership could fall into this class of culture traits. Most cultural differences may be assumed to be of the badging variety. This would be especially true when sexual organs are involved, as in various forms of circumcision, which become cultural and tribal requirements for acceptable mates.

As badging of the kind described here evolved, at least in part, to determine questions of mate choice, then it would follow that tribal enculturation of this variety should be completed prior to mating. Thus it is no surprise that young adolescents are particularly impressionable and prone to the creation and wearing of badges with which to identify their ethnic in-groups (Irwin, 1987).

Association/familiarity is a very likely candidate for kin recognition among humans. But it seems probable that phenotypic matching is another and supplementary mechanism (Alexander, 1979; Essock-Vitale & McGuire, 1980; Michod, 1982).

From a sociobiological perspective, as Tönnesmann (1987) points out, one should not expect a human being to be willing to cooperate indiscriminately with any other conspecific, but to apply criteria such as similarity in physical appearance in order to assess the possibility of a genetic relationship. Thus one could say with Barkow (1980) that the theory of ethnocentrism is "the converse of altruism", and "that we should most readily learn distrust and hostility towards those who least resemble us, and towards those with whom we have no personal relationship, that is, strangers" (Barkow, 1980; cf. Rushton, 1980). In fact, similarity seems to be related to empathic responses, and, more generally, liking between individuals is increased when they perceive each other as similar (e.g., Turner, 1982).

Rushton (1986, 1988) and Rushton, Russell & Wells (1984) developed 'genetic similarity theory': "If a gene can better ensure its own survival by acting so as to bring about the reproduction of family members with whom it shares copies, then it can also do so by bringing about the reproduction of *any* organism in which copies can be found... It can be expected that two individuals within an ethnic group will, on average, be more similar to each other genetically than two individuals from different ethnic groups" (Rushton, 1986; see also Eibl-Eibesfeldt, 1989). Kenrick (1989), on the other hand, argued that "people are not so much attracted to similar others, as they are repulsed by those who are not similar". The consequence, however, a biologically based disposition toward ethnocentrism, would be the same (A. Flohr, 1994).

Although similarity in physical appearance may serve as an indicator of consanguinity in the absence of genealogical knowledge, as Barkow (1980) suggests, such knowledge could be fabricated, at least in superficial terms, by making people believe that they have descended from common ancestors. Ethnic markers, such as skin color, clothing, or behavioral peculiarities, could be used for the purpose of making an ethnic group appear to be a group of genetically related individuals. Altruistic acts on behalf of non-kin can be elicited by taking advantage of the cues produced by evolution for kin recognition. According to G.R. Johnson (1986), patriotism in contemporary large-scale societies is a brand of manipulated altruism. Large-scale

human societies have evolved processes of socialization which exploit the cues by which altruism originally came to be elicited in the course of several million years of hominid evolution.

Kin Selection, Nepotism and the Genetic Seeds of Warfare
In *The Ethnic Phenomenon*, Van den Berghe (1981) formulated the first theory of ethnocentrism as extended kin selection. Van den Berghe's basic argument is quite simple: ethnic sentiments are extensions of kinship sentiments. Ethnocentrism is thus an extended form of nepotism – the propensity to favor kin over nonkin. There exists a general behavioral predisposition, in our species as in many others, to react favorably toward other organisms to the extent these organisms are biologically related to the actor. The closer the relationship is, the stronger the preferential behavior. Genes that predispose their carrying organisms to behave nepotistically will be selected for, because, by favoring nepotism, they enhance their own replication. This genetically selected propensity for nepotism is also called kin selection.

The degree of cooperation between organisms can be expected to be a direct function of the proportion of the genes they share. Conversely, the degree of conflict between them is an inverse function of the proportion of shared genes.

Ethnicity is a matter of degree of relatedness. People typically form both alliances and cleavages, and grade the violence and destructiveness they inflict on each other on the basis of their real or perceived degree of relatedness. That is, both cooperation (nepotism and reciprocity) and conflict (coercion and exploitation; negative reciprocity) in and between human societies follow a calculus of inclusive fitness.

An ethnic group (or *ethny*) can be represented as a cluster of overlapping, ego-centered, concentric kin circles, encompassed within an ethnic boundary. The ethnic boundary is seldom completely closed. More typically, there is some migration, principally of women, among groups.

Ethnicity is defined, in the last analysis, by common descent. Ethnic boundaries are created socially by preferential endogamy and physically by territoriality. The prototypical ethny is thus a descent group bounded socially by inbreeding and spatially by territory.

We have evolved, Van den Berghe argues, the kind of brain to deal with small-scale, *Gemeinschaft*-type groups, the prototype of which is the ethny, the 'we-group', the 'in-group' of intimates who think of each other as an extended family. Ethnicity can be manipulated but not manufactured. Unless ethnicity is rooted in generations of shared historical experience, it cannot be created *ex nihilo*.

There is a profound asymmetry in the reproductive strategies for males and females, and, therefore, the ultimate scarce resource for competing males in the fitness game is reproductive females. Thus, the capture, defense and seduction of women often plays as salient a role in intergroup and interethnic relations, as it does between the individual members of the same ethny. The classical scenario for conquest is to rape the women and kill, castrate or enslave the men.

Subsequently, Van den Berghe (1997) argued that in contrast to ethnocentrism, which is universal as it is rooted in the biology of nepotism, racism, rooted in social categories, is exceptional and relatively ephemeral because it tends 'naturally' to decay; interbreeding blurs racial boundaries.

Furthermore, he argues, ethnocentrism does not automatically and invariably imply xeno-phobia. Being *for* one's own group does not, of necessity, imply being *against* all other groups. Unqualified exclusion of vast categories of potential partners in reciprocal exchanges is not the best strategy.

Shaw & Wong (1987, 1989) present an elaborate theory of kin selection, ethnocentrism, and the evolution of human warfare. They propose that inclusive fitness considerations have combined with competition over scarce resources, intergroup conflict, and weapon development, to
(1) reinforce humanity's propensity to band together in groups of genetically related individuals;
(2) predispose group members to act in concert for their own well-being; and
(3) promote xenophobia, fear, and antagonism among genetically related individuals towards strangers.

Shaw & Wong interpret these responses as 'emerging' or reinforcing proximate causes which shaped the structure of social behavior in hunter/gatherer groups for 99 percent of humanity's existence. Their model rests on three premises: that individuals have evolved not only to be egoistic, but to be nepotistically altruistic; that individuals in nucleus ethnic groups, are predisposed to mobilize for resource competition in ways that will enhance inclusive fitness and reproductive potential; and that intergroup conflict/warfare has been positively functional in humanity's evolution.

Kin selection implies that sexual organisms, such as humans, have evolved not only to be egoistic but to be fundamentally *nepotistically altruistic*. Kin selection also provides an ultimate, evolutionary rationale for anticipating origins of 'self-sacrifice to the death'. As individuals are motivated to maximize their inclusive fitness rather than personal survival and reproduction alone, sacrifice to the death can still have a genetic payoff; it can enhance reproduction and survival of close relatives who share the same genes by common descent. That is, an individual's genes – the units of natural selection – can still be propagated even though personal fitness is lost in the process. As shocking and destabilizing as the death of a group member may be, inclusive fitness considerations provide a rational basis for accepting costs of death in warfare.

Inclusive fitness has also been demonstrated to be an Evolutionarily Stable Strategy (ESS). This means that it would not likely be easily displaced by competing 'behavioral strategies' (that is, pure selfishness or unrestrained altruism) because of its superiority in maximizing reproduction and survival throughout evolution.

The considerations raised above interact to make mobilization for conflict or warfare a more viable, cohesive strategy if pursued among related kin. From an evolutionary perspective, these considerations are the bedrock upon which Shaw & Wong link ethnic mobilization and the *seeds* of warfare.

Since failure to maintain a balance of power could have resulted in extinction, groups and their expansion figure as *forces of selection* in Shaw & Wong's theory. Motivated by resource competition, conflict, and warfare, struggles to maintain balances of power gave rise to more complex societal units (e.g., chiefdoms, states) which continued the legacy of intergroup warfare. Groups as forces of selection must have reinforced suspicion and intolerance of out-group members as well as war proneness during a long period of humanity's past.

If resources are defendable, and if conflict is inevitable, as McEachron & Baer (1982) have explained, it makes better evolutionary sense for groups to compete to resolve ownership of the resources *as groups* rather than being submitted to both the internal conflict and decreased inclusive fitness that would accompany a merger.

As Hamilton (1975) observed, to raise mean fitness in hunter-gatherer groups either new territory or outside mates had somehow to be obtained. Capture of out-group females through successful warfare, Shaw & Wong continue, serves three functions: (1) it reduces inbreeding depression by increasing the number of available partners for reproduction; (2) it increases variation in the warring group's genetic stock; and (3) it contributes to group size. The latter consideration would have been especially important in environments where groups were effective forces of selection. The practice of taking females for loot would undoubtedly have set rival groups on edge and reinforced xenophobia and out-group enmity in the process.

In the evolutionary long run, larger groups would have displaced smaller groups and their members would thus have staked out a larger share of humanity's gene pool. This implies that behavioral predispositions that facilitated group expansion would have been retained and incorporated into the more permanent repertoire of individual and group behavior (see also Bigelow, 1969, 1972).

A perspective very similar to Van den Berghe's and Shaw & Wong's theories has been presented by Vanhanen (1991, 1992) and A. Flohr (1994).

Criticism

So far a brief outline of Shaw & Wong's theory of kin selection, ethnocentrism and the seeds of warfare.

"Inclusive fitness *may* account for xenophobia and kin group warfare", Somit (1990) commented, "but I find it unpersuasive when stretched to explain nationalism, patriotism, and contemporary warfare. I doubt, for example, that very many of the millions of soldiers who died during the last two great wars were motivated to any significant degree by the desire, conscious or unconscious, to maximize their inclusive fitness". Furthermore, one gets the impression that the authors view war as a spontaneous manifestation of mass sentiment. Little weight is given to the personal ambitions and animosities of those in high office, political rivalries, dynastic aspirations, or the capacity of the regime to compel, as well as persuade, military service. Not the many but the few make the ultimate decision to take up arms (Somit, 1990).

What seems to be the most serious problem in the evolutionary ethnocentrism theory as exposed by Shaw & Wong is that as soon as group competition for resources and the balance-of-power concept is introduced, the foregoing considerations of kin selection, nepotism, xenophobia and ethnocentrism seem to dwindle into insignificance as their role as explanatory categories vanishes. The most scathing criticism of (evolutionary) ethnocentrism theory has been formulated by Ferguson & Whitehead (1992; cf. McCauley, 1990): "Stereotypes of savages notwithstanding, it would be an extremely rare occurrence for members of one tribe to attack members of another simply because they are different, apart from any other source of conflict... Any idea that an innate sense of tribalism inclines people toward collective violence is sheer fantasy". In other words, ethnic conflicts do not occur in an economic or political vacuum; but at the same time the salience of the political and economic dimensions of the conflict make it increasingly invisible as an 'ethnic' conflict.

This paper is based on the chapter "Of badges, bonds and boundaries: ethnocentrism, xenophobia, and war" in: J.M.G. van der Dennen (1995) *The Origin of War*. Groningen: Origin Press.

Bibliography

Abrams, D. & M.A. Hogg (1993) *Social Identity Theory: Constructive and Critical Advances*. New York: Springer Verlag.
Alexander, R.D. (1971) The search for an evolutionary philosophy of man. *Proc. Roy. Soc. Victoria*, 84, 1, pp. 99-120.
Alexander, R.D. (1974) The evolution of social behavior. *Ann. Rev. Ecol. & Syst.*, 5, pp. 325-83.
Alexander, R.D. (1977) Natural selection and the analysis of human sociality. *Changing Scenes in the Natural Sciences*, 12, pp. 283-337.
Alexander, R.D. (1979) *Darwinism and Human Affairs*. Seattle: Univ. Washington Press.
Alexander, R.D. (1987) *The Biology of Moral Systems*. New York: Aldine.

Alexander, R.D. (1989) Evolution of the human psyche. In: Mellars & Stringer (Eds.), pp. 455-513.

Alexander, R.D. (1990) *How Did Humans Evolve: Reflections on the Uniquely Unique Species*. Michigan Mus. Zool., Spec. Publ. 1.

Alexander, R.D. & G. Borgia (1978) Group selection, altruism, and the levels of hierarchical organization of life. *Ann. Rev. Ecol. & Syst.*, 9, pp. 449-74.

Alexander, R.D. & K.M. Noonan (1979) Concealment of ovulation, parental care, and human social evolution. In: Chagnon & Irons (Eds.), pp. 436-53.

Alexander, R.D. & D.W. Tinkle (1968) A comparative review. *Bioscience*, 18, pp. 245-8.

Alexander, R.D. & D.W. Tinkle (Eds.) (1981) *Natural Selection and Social Behavior: Recent Research and New Theory*. Ann Arbor: Univ. Michigan Press.

Anderson, J.R. (1980) *Cognitive Psychology and its Implications*. San Francisco: Freeman.

Bacon, M.K.; I.L. Child & H. Barry (1963) A cross-cultural study of correlates of crime. *J. Abnorm. Soc. Psychol.*, 66, pp. 291-300.

Baer, D. & D.L. McEachron (1982) A review of selected sociobiological principles: Application to hominid evolution I: The development of group social structure. *J. Soc. & Biol. Structures*, 5, 1, pp. 69-90.

Bagehot, W. (1872/1884) *Physics and Politics: Thoughts on the Application of the Principles of 'Natural Selection' and 'Inheritance' to Political Society*. London: Henry S. King & Co.; New York: Appleton.

Bailey, K.G. (1987) *Human Paleopsychology: Applications to Aggression and Pathological Processes*. London: L. Erlbaum.

Barash, D.P. (1975/1977/1982) *Sociobiology and Behaviour*. Amsterdam: Elsevier.

Barash, D.P. & J.E. Lipton (1985) *The Caveman and the Bomb: Human Nature, Evolution, and Nuclear War*. New York: McGraw-Hill.

Barkow, J.H. (1980) Sociobiology: Is this the new theory of human nature? In: A. Montagu (Ed.) Sociobiology Examined. Oxford: Oxford Univ. Press, pp. 171-97.

Barkow, J.H.; L. Cosmides & J. Tooby (Eds.) (1992) *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. New York: Oxford Univ. Press.

Bauer, O. (1907) *Die Nationalitätenfrage und die Sozialdemokratie*. Wien: Verlag der Wiener Volksbuchhandlung.

Berger, P.L. & T. Luckmann (1966) *The Social Construction of Reality*. New York: Doubleday.

Berghe, P.L. van den (1981) *The Ethnic Phenomenon*. New York: Elsevier.

Berghe, P.L. van den (1989) Heritable phenotypes and ethnicity. *Behav. & Brain Sci.*, 12, 3, pp. 544-5.

Berghe, P.L. van den (1991) Sociology. In: Maxwell (Ed.), pp. 269-82.

Berghe, P.L. van den (1997) Racism, ethnocentrism and xenophobia: In our genes or in our memes? Paper ESS Conf., Ghent, July 7-9.

Bergler, R. (1976) *Vorurteile*. Köln: Deutscher Institutsverlag.

Bertalanffy, L. von (1958) Comments on aggression. *Bull. Menninger Clinic*, 22, pp. 50-57.

Bigelow, R. (1969) *The Dawn Warriors: Man's Evolution towards Peace*. Boston: Little, Brown.

Bigelow, R. (1972) The evolution of cooperation, aggression and self-control. *Nebraska Symp. on Motivation*, 20, pp. 1-57.

Bigelow, R. (1975) The role of competition and cooperation in human aggression. In: Nettleship, Givens & Nettleship (Eds.), pp. 235-61.

Brown, P. (1978) *Highland Peoples of New Guinea*. London: Cambridge Univ. Press.

Brown, P. (1982) Conflict in the New Guinea Highlands. *J. Conflict Resolution*, 26, 3, pp. 525-46.

Brown, R.W. (1985) Ethnic conflict. In: *Social Psychology*, 2nd ed. New York: Free Press, pp. 531-634.

Buys, C.J. & K.L. Larson (1979) Human sympathy groups. *Psychol. Rep.*, 45, pp. 547-53.

Campbell, B.G. (Ed.) (1972) *Sexual Selection and the Descent of Man: 1871-1971*. Chicago: Aldine.

Campbell, D.T. (1972) On the genetics of altruism and the counter-hedonic components in human culture. *J. Soc. Issues*, 28, 3, pp. 21-37.

Caporael, L.R. (1996) Coordinating bodies, minds and groups: Evolution and human social cognition. *J. Soc. & Evol. Systems*, 19, 3, pp. 261-75.

Catton, W.R. (1961) The functions and dysfunctions of ethnocentrism: A theory. *Social Problems*, 8, pp. 201-11.

Chagnon, N.A. (1977/1983) *Yanomamö: The Fierce People* (2nd and 3rd expanded eds.). New York: Holt, Rinehart & Winston.

Comte, A. (1830-42/1869) *Cours de la philosophie positive*. Paris: Baillière.

Corning, P.A. (1983) *The Synergism Hypothesis: A Theory of Progressive Evolution*. New York: McGraw-Hill.

Corning, P.A. (1995) Co-operative genes: Synergy and the bioeconomics of evolution. Paper ESS Conf., Cambridge, August 3-6.

Coser, L.A. (1956) *The Functions of Social Conflict*. New York: Free Press.

Crook, J.H. (1968) The nature and function of territorial aggression. In: Montagu (Ed.), pp. 141-78.

Crook, P. (1994) *Darwinism, War and History: The Debate over the Biology of War from the 'Origin of Species' to the First World War*. New York: Cambridge Univ. Press.

Daly, M. & M. Wilson (1987/1988) *Homicide*. Hawthorne: Aldine de Gruyter.

Darwin, C.R. (1859) *The Origin of Species by Means of Natural Selection, Or the Preservation of Favoured Races in the Struggle for Life*. London: Murray.

Darwin, C.R. (1871) *The Descent of Man, and Selection in Relation to Sex*. London: Murray.

Darwin, C.R. (1873) *The Expression of the Emotions in Man and Animals*. London: Murray.

Davie, M.R. (1929) *The Evolution of War: A Study of its Role in Early Societies*. New Haven: Yale Univ. Press.

Dawkins, R. (1976) *The Selfish Gene*. New York: Oxford Univ. Press.

Dawkins, R. (1979) Twelve misunderstandings of kin selection. *Z. f. Tierpsychol.*, 51, pp. 184-200.

Dawkins, R. (1981) *The Extended Phenotype: The Gene as the Unit of Selection*. Oxford: Oxford Univ. Press

Dawkins, R. (1982) Replicators and vehicles. In: King's College Sociobiology Group (Eds.) *Current Problems in Sociobiology*. Cambridge: Cambridge Univ. Press, pp. 45-64.

Dawkins, R. (1985/1986) *The Blind Watchmaker*. London: Longmans.

Dawkins, R. (1996) *Climbing Mount Improbable*. New York: Viking Press.

Dennen, J.M.G. van der (1987) Ethnocentrism and in-group/out-group differentiation: A review and interpretation of the literature. In: Reynolds, Falger & Vine (Eds.), pp. 1-47.

Dennen, J.M.G. van der (1988a) The Ethnological Inventory Project. 5 Vols., 3rd ed., Library Polemological Inst.

Dennen, J.M.G. van der (1990a) Origin and evolution of 'primitive' warfare. In: van der Dennen & Falger (Eds.), pp. 149-88.

Dennen, J.M.G. van der (1990b) Primitive war and the Ethnological Inventory Project. In: van der Dennen & Falger (Eds.), pp. 247-69.

Dennen, J.M.G. van der (Ed.) (1992) *The Nature of the Sexes: The Sociobiology of Sex Differences and the 'Battle of the Sexes'*. Groningen: Origin Press.

Dennen, J.M.G. van der (1993) Evolutionary theories of hominid/human warfare and the Ethnological Inventory Project. Paper Conf. Evolution and the Human Sciences, London School of Economics, June.

Dennen, J.M.G. van der (1995) *The Origin of War: The Evolution of a Male-Coalitional Reproductive Strategy*. Groningen: Origin Press.

Dennen, J.M.G. van der & V.S.E. Falger (Eds.) (1990) *Sociobiology and Conflict: Evolutionary Perspectives on Competition, Cooperation, Violence and Warfare*. London: Chapman & Hall.

Diab, L.N. (1970) A study of intra-group and inter-group relations among experimentally produced small groups. *Genetic Psychol. Monogr.*, 82, pp. 49-82.

Dunbar, R.I.M. (1987) Sociobiological explanations and the evolution of ethnocentrism. In: Reynolds, Falger & Vine (Eds.), pp. 48-59.

Durbin, E.F.M. & J. Bowlby (1938/1939) Personal aggressiveness and war. In: E.F.M. Durbin & G. Catlin (Eds.) *War and Democracy*. London: Kegan Paul.

Durkheim, E. (1893) *De la division du travail social*. Paris: Alcan.

Eibl-Eibesfeldt, I. (1989) Familiality, xenophobia, and group selection. *Behav. & Brain Sci.*, 12, 3, p. 523.

Eibl-Eibesfeldt, I. (1979) *The Biology of Peace and War*. London: Thames & Hudson.

Eibl-Eibesfeldt, I. (1982) Warfare, man's indoctrinability and group selection. *Z. f. Tierpsychologie*, 60, 3, pp. 177-98.

Eibl-Eibesfeldt, I. (1984/1986) *Die Biologie des menschlichen Verhaltens: Grundriß der Humanethologie*. München: Piper Verlag.

Elias, N. (1978) Transformations of aggressiveness. *Theory & Society*, 5, pp. 229-42.

Elias, N. (1987) *Involvement and Detachment*. Oxford: Blackwell.

Elkin, A.P. (1938) *The Australian Aborigines: How to Understand Them*. Sydney: Angus & Robertson.

Emmert, M.A. (1984) Biobehaviorism and small group research. *Politics & the Life Sciences*, 3, pp. 3-10.

Erikson, E.H. (1964/1966) *Childhood and Society*. rev. ed. New York: Norton.

Essock-Vitale, S.M. & M.T. McGuire (1980) Predictions derived from the theories of kin selection and reciprocation assessed by anthropological data. *Ethol. & Sociobiol*, 1, pp. 233-44.

Falger, V.S.E. (1987) From xenophobia to xenobiosis? Biological aspects of the foundation of international relations. In: Reynolds, Falger & Vine (Eds.), pp. 235-50.

Falger, V.S.E. (1991) The missing link in international relations theory (Review of 'Genetic Seeds of Warfare' by Shaw & Wong). *J. Soc. & Biol. Structures*, 14, pp. 73-77.

Falger, V.S.E. (1992) Cooperation in conflict: Alliances in international politics. In: Harcourt & De Waal (Eds.), pp. 323-49.

Falger, V.S.E. (1994) *Evolution and Politics*. Groningen: Origin Press.

Ferguson, A. (1767) *An Essay on the History of Civil Society*. Reprint ed. Chicago: Aldine, 1966.

Ferguson, R.B. & N.L. Whitehead (Eds.) (1992) *War in the Tribal Zone: Expanding States and Indigenous Warfare*. Santa Fe: School of American Research.

Flohr, A.K. (1994) *Fremdenfeindlichkeit: Biosoziale Grundlagen von Ethnozentrismus*. Opladen: Westdeutscher Verlag.

Flohr, H. (1987) Biological basis of social prejudices. In: Reynolds, Falger & Vine (Eds.), pp. 190-207.

Fox, R. (1989) *The Violent Imagination*. New Brunswick: Rutgers Univ. Press.

Freud, S. (1913) *Totem und Tabu*. Wien: Heller.

Freud, S. (1921) *Group Psychology and the Analysis of the Ego*. London: Hogarth Press.

Freud, S. (1930) *Civilization and its Discontents*. London: Hogarth Press.

Freud, S. (1932) Why War? In: *Collected Papers*, Vol. 5. London: Hogarth Press. Reprint in: Bramson & Goethals (Eds.), pp. 71-80.

Fromm, E. (1973/1974) *The Anatomy of Human Destructiveness*. New York: Holt, Rinehart & Winston.

Galtung, J. (1994) Are there therapies for bad cosmologies? *Medicine & War*, 10, pp. 170-82.

Gladstone, A.I. (1959) The conception of the enemy. *J. Conflict Resolution*, 3, 2, pp. 132-37.

Goodall, J. (1986) *The Chimpanzees of Gombe: Patterns of Behavior*. Cambridge MA: Harvard Univ. Press.

Gumplowicz, L. (1883) *Der Rassenkampf*. Innsbruck: Wagner.

Hamilton, W.D. (1964) The genetical evolution of social behaviour. *J. Theoret. Biol.*, 7, 1, pp. 1-52.

Hamilton, W.D. (1967) Extraordinary sex ratios. *Sci.*, pp. 477-88.

Hamilton, W.D. (1970) Selfish and spiteful behaviour in an evolutionary model. *Nature*, 228, pp. 1218-20.

Hamilton, W.D. (1971) Selection of selfish and altruistic behavior in some extreme models. In: Eisenberg & Dillon (Eds.), pp. 57-92.

Hamilton, W.D. (1975) Innate social aptitudes of man: An approach from evolutionary genetics. In: Fox (Ed.), pp. 133-55.

Hamilton, W.D. (1996) *The Evolution of Social Behaviour: Vol. 1. Narrow Roads of Gene Land*. Oxford: Freeman.

Hardin, G. (1968) The tragedy of the commons. *Sci.*, 162, 3859, pp. 1243-48.

Hardin, G. (1972) Population skeletons in the environmental closet. *Bull. Atomic Scientist*, 28, 6, pp. 37-41.

Harding, R.S.O. & G. Teleki (Eds.) (1981) *Omnivorous Primates: Gathering and Hunting in Human Evolution*. New York: Columbia Univ. Press.

Hartmann, F.H. (1982) *The Conservation of Enemies: A Study in Enmity*. Westport: Greenwood Press.

Hebb, D.O. & W.R. Thompson (1968) The social significance of animal studies. In: G. Lindzey & E. Aronson (Eds.) *The Handbook of Social Psychology*. Reading MA: Addison-Wesley.

Herdt, G.H. (1981) *Guardians of the Flutes; Idioms of Masculinity*. New York: McGraw-Hill.

Herdt, G.H. (1986) Aspects of socialization for aggression in Sambia ritual and warfare. *Anthropol. Quart.*, 59, 4, pp. 160-64.

Herdt, G.H. (1987) *The Sambia: Ritual and Gender in New Guinea*. New York: Holt, Rinehart & Winston.

Hobsbawm, E.J. (1990) *Nations and Nationalism since 1780: Programme, Myth, Reality*. Cambridge: Cambridge Univ. Press.

Hobson, J.A. (1901) *The Psychology of Jingoism*. London: Allen & Unwin.

Hogg, M.A. & D. Abrams (1987) *Social Identifications*. New York: Routledge.

Holloway, R.L. (Ed.) (1974) *Primate Aggression, Territoriality, and Xenophobia: A Comparative Perspective*. New York: Academic Press.

Holmes, W.G. & P.W. Sherman (1983) Kin recognition in animals. *Amer. Sci.*, 71, 1, pp. 46-55.

Horowitz, D.L. (1985) *Ethnic Groups in Conflict*. Berkeley: Univ. California Press.

Huber, P.B. (1975) Defending the cosmos: Violence and social order among the Anggor of New Guinea. In: Nettleship, Givens & Nettleship (Eds.), pp. 619-62.

Ignatieff, M. (1994) *Blood and Belonging: Journeys into the New Nationalism*. New York: Farrar, Straus & Giroux.

Ike, B.W. (1987) Man's limited sympathy as a consequence of his evolution in small kin groups. In: Reynolds, Falger & Vine (Eds.), pp. 216-35.

Inge, W.R. (1915) Patriotism. *Quart. Rev.*, 224, july, pp. 73-75, 83.

Irwin, C.J. (1987) A study in the evolution of ethnocentrism. In: Reynolds, Falger & Vine (Eds.), pp. 131-56.

Irwin, C.J. (1990) The Inuit and the evolution of limited group conflict. In: van der Dennen & Falger (Eds.), pp. 189-226.

Isaacs, H.L. (1975) *Idols of the Tribe: Group Identity and Political Change*. New York: Harper & Row.

James, W. (1890/1892) *Principles of Psychology*. New York: Holt.

James, W. (1910) The moral equivalent of war. In: W. James, *Memories and Studies*. New York: Longmans, Green & Co. Reprinted in: Bramson & Goethals (Eds.), pp. 21-31.

Janis, I.L. (1971) Groupthink among policy makers. In: Sanford & Comstock (Eds.), pp. 71-89.

Janis, I.L. (1972) *Victims of Groupthink: A Psychological Study of Foreign Policy Decisions and Fiascoes*. Boston: Houghton Mifflin.

Johnson, G.R. (1995) The evolutionary origins of government and politics. In: A. Somit & J.A. Losco (Eds.) *Research in Biopolitics*, Vol. 2., pp. 243-305.

Kalma, A.P. (1986) Uncertainty reduction: A fundamental concept in understanding a number of psychological theories. In: Wind & Reynolds (Eds.), pp. 213-41.

Kalma, A.P. (1989) *Dominantie en onzekerheidreductie*. PhD., Univ. Utrecht.

Keeley, L.H. (1996) *War Before Civilization: The Myth of the Peaceful Savage*. New York: Oxford Univ. Press.

Keith, A. (1916) War as a factor in the evolution of races. *L'Anthropologie*, 27, pp. 172-7.

Keith, A. (1947/1948) *A New Theory of Human Evolution*. London: Watts.

Kenrick, D.T. (1989) Altruism, Darwinism, and the gift of Josiah Wedgewood. *Behav. & Brain Sci.*, 12, 3, pp. 531-2.

Knauft, B.M. (1983) *Good Company and Anger: The Culture and Sociology of Sorcery among the Gebusi of the Strickland Plain, Papua New Guinea*. 2 Vols. Ann Arbor: Univ. Michigan Press.

Knauft, B.M. (1985a) *Good Company and Violence: Sorcery and Social Action in a Lowland New Guinea Society*. Berkeley: Univ. California Press.

Knauft, B.M. (1987) Reconsidering violence in simple human societies: Homicide among the Gebusi on New Guinea. *Current Anthropol.* 28, 4, pp. 457-500.

Knauft, B.M. (1991) Violence and sociality in human evolution. *Current Anthropol.*, 32, 4, pp. 391-409.

Koch, K.F. (1970) Cannibalistic revenge in Jalé warfare. *Nat. Hist.*, 79, 2, pp. 40-51.

Koch, K.F. (1974a) *War and Peace in Jalémo: The Management of Conflict in Highland New Guinea*. Cambridge MA: Harvard Univ. Press.

Koch, K.F. (1974b) *Anthropology of Warfare*. Menlo Park: Cummings.

Koestler, A. (1967) *The Ghost in the Machine*. London: Pan Books.

Lanternari, V. (1980) Ethnocentrism and ideology. *Ethnic & Racial Studies*, 3, pp. 52-66.

LeVine, R.A. & D.T. Campbell (1972) *Ethnocentrism: Theories of Conflict, Ethnic Attitudes and Group Behavior*. New York: Wiley.

Loewenberg, P. (1985) *Decoding the Past: The Psychohistorical Approach*. Berkeley: Univ. California Press.

Loewenberg, P. (1994) The psychological reality of nationalism: Between community and fantasy. *Mind & Human Interaction*, 5, 1, pp. 6-18.

Lopreato, J. (1984) *Human Nature and Biocultural Evolution*. Boston: Allen & Unwin.

Lumsden, C.J. & E.O. Wilson (1981) *Genes, Mind, and Culture: The Coevolutionary Process*. Cambridge MA: Harvard Univ. Press.

Lumsden, C.J. & E.O. Wilson (1983) *Promethean Fire: Reflections on the Origin of Mind*. Cambridge MA: Harvard Univ. Press.

MacCurdy, J.T. (1918) *The Psychology of War*. London: Heinemann.

MacDonald, K.B. (1992) Separation and its Discontents: Judaism as an Evolutionary Group Strategy. Manuscript (published as: *A People That Shall Dwell Alone: Judaism as a Group Evolutionary Strategy*. Westport: Praeger, 1994).

MacDonald, K.B. (1996) Creating evolutionarily effective groups: Judaism as a case study. Paper ESS Conf., Alfred NY, July 22-25.

MacLean, P.D. (1987) On the evolution of the three mentalities of the brain. In: Neuman (Ed.), pp. 29-41.

MacLean, P.D. (1990) *The Triune Brain in Evolution: Role in Paleocerebral Functions*. New York: Plenum Press.

Marett, R.R. (1933) *Sacraments of Simple Folk*. Oxford: Oxford Univ. Press.

Markl, H. (1976) *Aggression und Altruismus. Coevolution der Gegensätze im Sozialverhalten der Tiere*. Konstanz: Universitätsverlag.

Markl, H. (1982) Evolutionsbiologie des Aggressionsverhalten. In: R. Hilke & W. Kempf (Eds.) *Aggression. Naturwissenschaftliche und kulturwissenschaftliche Perspektiven der Aggressionsforschung*. Bern: Huber, pp. 21-43.

Marshall, H.R. (1898) *Instinct and Reason*. New York: Appleton.

Masters, R.D. (1964) World politics as a primitive political system. *World Politics*, 16, pp. 595-619.

Masters, R.D. (1975) Politics as a biological phenomenon. *Soc. Sci. Info.*, 14, pp. 7-63.

Masters, R.D. (1983) The biological nature of the state. *World Politics*, 35, 2, pp. 161-93.

Masters, R.D. (1989) *The Nature of Politics*. New Haven: Yale Univ. Press.

McCauley, C.R. (1990) Conference overview. In: Haas (Ed.), pp. 1-25.

McDougall, W. (1908/1914/1915) *An Introduction to Social Psychology*. London: Methuen; Boston: Luce.

McDougall, W. (1927) *Janus: The Conquest of War*. London: Kegan Paul, Trench, Trubner & Co.

McDougall, W. (1964) The instinct of pugnacity. In: Bramson & Goethals (Eds.), pp. 33-43.

McEachron, D.L. & D. Baer (1982) A review of selected sociobiological principles: Application to hominid evolution II: The effects of intergroup conflict. *J. Soc. & Biol. Structures*, 5, 2, pp. 121-39.

McGuire, W.J. (1969) The nature of attitudes and attitude change. In: G. Lindzey & E. Aronson (Eds.) *The Handbook of Social Psychology*. Vol. III. Reading: Addison-Wesley.

McNeil, E.B. (1961) Personal hostility and international aggression. In: *J. Conflict Resolution*, 5, 3, pp. 279-98.

McNeil, E.B. (1962) Waging experimental war: A review. *J. Conflict Resolution*, 6, pp. 77-81.

Meyer, P. (1977) *Kriegs- und Militärsoziologie*. München: Goldmann.

Meyer, P. (1981) *Evolution und Gewalt. Ansätze zu einer bio-soziologischen Synthese*. Hamburg: Parey Verlag.

Meyer, P. (1987) Ethnocentrism in human social behaviour; Some biosociological considerations. In: Reynolds, Falger & Vine (Eds.), pp. 81-93.

Meyer, P. (1990) Human nature and the function of war in social evolution: A critical review of a recent form of the naturalistic fallacy. In: van der Dennen & Falger (Eds.), pp. 227-40.

Meyer, P. (1992) The evolution of warfare: Origins of cultural variation. Paper 2nd World Congr. Violence and Human Coexistence, Montréal, July.

Meyer, P. (1993) Human nature and the origins of warfare: Some evolutionary considerations. Paper 16th Ann. Meeting Internat. Soc. Polit. Psychol., Cambridge MA, July.

Michod, R.E. (1982) The theory of kin selection. *Ann. Rev. Ecol. & Syst.*, 13, pp. 23-55.

Murdock, G.P. (1931) Ethnocentrism. *Encycl. Soc. Sci.*, Vol. 5, pp. 613-14.

Murdock, G.P. (1934) *Our Primitive Contemporaries*. New York: Macmillan.

Murdock, G.P. (Ed.) (1937) *Studies in the Science of Society*. New Haven: Yale Univ. Press.

Nettleship, M.A.; R.D. Givens & A. Nettleship (Eds.) (1975) *War, Its Causes and Correlates*. The Hague: Mouton.

Newcomb, T.M. (1947) Autistic hostility and social reality. *Human Relat.*, 1, pp. 3-20.

Peck, J.R. (1990) The evolution of outsider exclusion. *J. Theoret. Biol.*, 142, pp. 565-71.

Peterson, S.A. (1981) Sociobiology and ideas-become-real: Case study and assessment. *J. Soc. & Biol. Structures*, 4, pp. 125-43.

Rabbie, J.M. (1982) The effects of intergroup competition and cooperation on intra- and intergroup relationships. In: V.J. Derlega & J.L. Grzelak (Eds.) *Cooperation and Helping Behavior: Theories and Research*. New York: Academic Press, pp. 123-45.

Rabbie, J.M. (1992) The effects of intragroup cooperation and intergroup competition on ingroup cohesion and outgroup hostility. In: Harcourt & de Waal (Eds.), pp. 195-207.

Rappaport, R.A. (1967) Ritual regulation of environmental relations among a New Guinea people. *Ethnol.*, 6, pp. 17-30.

Rappaport, R.A. (1968/1984) *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People*. New Haven: Yale Univ. Press; rev. and exp. ed.

Reynolds, V. (1966) Open groups in hominid evolution. *Man*, 1, pp. 441-52.

Reynolds, V.; V.S.E. Falger & I. Vine (Eds.) (1987) *The Sociobiology of Ethnocentrism: Evolutionary Dimensions of Xenophobia, Discrimination, Racism and Nationalism*. London: Croom Helm.

Richmond, A.H. (1987) Ethnic nationalism: Social science paradigms. *Internat. Soc. Sci. J.*, 49, 1, pp. 3-18.

Riedl, R. (1980) *Biologie der Erkenntnis. Die stammesgeschichtliche Grundlagen der Vernunft*. Berlin: Paul Parey.

Riedl, R. (1985) *Die Spaltung des Weltbildes. Biologische Grundlagen des Erklärens und Verstehens*. Berlin: Paul Parey.

Rosenblatt, P.C. (1964) Origins and effects of group ethnocentrism and nationalism. *J. Conflict Resolution*, 8, 2, pp. 131-46.

Rushton, J.P. (1980) *Altruism, Socialization, and Society*. Englewood Cliffs: Prentice Hall.

Rushton, J.P. (1988) Genetic similarity, mate choice, and fecundity in humans. *Ethol. & Sociobiol.*, 9, pp. 329-33.

Rushton, J.P. (1989) Genetic similarity in male friendship. *Ethol. & Sociobiol.*, 10, pp. 361-73.

Rushton, J.P.; R.J. Russell & P.A. Wells (1984) Genetic similarity theory: Beyond kin selection. *Behav. Genetics*, 14, 3, pp. 179-93.

Russell, E.W. (1972) Factors of human aggression; A cross-cultural factor analysis of characteristics related to warfare and crime. *Behav. Sci. Notes*, 7, pp. 275-312.

Russell, E.W. (1973a) *Militarism in Primitive Societies*. Grindstone Island: Peace Res. Summer School.

Russell, E.W. (1973b) An additional warfare element in territorial expansion. *Behav. Sci. Notes*, 8, 2, pp. 201-7.

Russell, E.W. (1977) The dynamics of political states, towards an explanation of the rise and fall of political units. *Peace Res.*, 9, 3, pp. 133-46.

Sanford, N. (1971) Dehumanization and collective destructiveness. *Internat. J. Group Tensions*, 1, 1, pp. 26-41.

Sanford, N. & C. Comstock (Eds.) (1971) *Sanctions for Evil: Sources of Social Destructiveness*. San Francisco: Jossey-Bass.

Service, E.R. (1962/1971) *Primitive Social Organization: An Evolutionary Perspective*. New York: Random House.

Service, E.R. (1966) *The Hunters*. Englewood Cliffs: Prentice Hall.

Service, E.R. (1968) War and our contemporary ancestors. In: Fried, Harris & Murphy (Eds.), pp. 160-67.

Service, E.R. (1975) *Origins of the State and Civilization: The Process of Cultural Evolution*. New York: Norton.

Shafer, B.C. (1972) *Faces of Nationalism: New realities and old myths*. New York: Harcourt Brace Jovanovich.

Shaw, R.P. & Y. Wong (1989) *Genetic Seeds of Warfare: Evolution, Nationalism, and Patriotism*. London: Unwin Hyman.

Sherif, M. (1956) Experiments in group conflict. *Sci. Amer.*, 195, 5, pp. 54-58.

Sherif, M. (1958) Superordinate goals in the reduction of intergroup conflict. *Amer. J. Sociol.*, 63, pp. 349-56.

Sherif, M. (1967) *Social Interaction: Process and Products*. Chicago: Aldine.

Sherif, M. & C.W. Sherif (1953) *Groups in Harmony and Tension*. New York: Harper (2nd rev. ed., 1956).

Sherif, M. & C.W. Sherif (1966) *In Common Predicament: Social Psychology of Intergroup Conflict and Cooperation*. Boston: Houghton Mifflin.

Sherif, M. & C.W. Sherif (1969) *Interdisciplinary Relationships in the Social Sciences*. Chicago: Aldine.

Sherif, M. & C.W. Sherif (1970) Motivation and intergroup aggression: A persistent problem in levels of analysis. In: L.R. Aronson et al. (Eds.) *Development and Evolution of Behavior*. San Francisco: Freeman, pp. 563-79.

Sherif, M. et al. (1961) *Intergroup Conflict and Cooperation: The Robbers' Cave Experiment*. Norman: Univ. Oklahoma Press.

Simmel, G. (1904) The sociology of conflict. *Amer. J. Sociol.*, 9, pp. 490-525, 627-89, 798-84.

Simmel, G. (1955) *Conflict*. New York: Free Press.

Slurink, P. (1993) Ecological dominance and the final sprint in hominid evolution. *Human Evolution*, 8, 4, pp. 265-73.

Slurink, P. (1994a) Paradox and tragedy in human morality. *Internat. Polit. Sci. Rev.*, 15, 4, pp. 347-78.

Slurink, P. (1994b) Causes of our complete dependence on culture. In: B. Gardner & A. Gardner (Eds.) *The Ethological Roots of Culture*. Dordrecht: NATO-ASI Series, pp. 461-74.

Slurink, P. (1995) Culture and the evolution of the human mating system. Paper ESS Conf., Cambridge, Aug. 3-6.

Smith, A.D. (1971) *Theories of Nationalism*. London: Duckworth.

Smith, A.D. (1979) Towards a theory of ethnic nationalism. *Ethnic & Racial Studies*, 2, 1, pp. 21-37.

Smith, A.D. (1981) War and ethnicity: The role of warfare in the formation, self-images and cohesion of ethnic communities. *Ethnic & Racial Studies*, 4, 4, pp. 375-97.

Smith, A.D. (1986) *The Ethnic Origins of Nations*. Oxford: Blackwell.

Smith, A.D. (1994/1995) *Nations and Nationalism in a Global Era*. Cambridge: Polity Press.

Somit, A.O. (1990) Humans, chimps, and bonobos; The biological bases of aggression, war, and peacemaking. *J. Conflict Resolution*, 34, 3, pp. 553-82.

Southwick, C.H.; M.F. Siddiqi; M.Y. Farooqui & B.C. Pal (1974) Xenophobia among free-ranging rhesus groups in India. In: Holloway (Ed.), pp. 185-210.

Spencer, H. (1850/1864/1897) *Social Statics*. London: Williams & Norgate; New York: Appleton.

Spencer, H. (1873-81) *Descriptive Sociology*. 8 Vols. New York: Appleton.

Spencer, H. (1876/1885) *The Principles of Sociology*. 3 Vols. London: Williams & Norgate; New York: Appleton, 1912; etc.

Spencer, H. (1892/1895) *The Principles of Ethics*. London: Williams & Norgate; New York: Appleton.

Spencer, H. (1902/1916) *Man versus the State*. London: Williams & Norgate.

Stein, A.A. (1976) Conflict and cohesion: A review of the literature. *J. Conflict Resolution*, 20, 1, pp. 143-72.

Sumner, W.G. (1906) *Folkways: A Study of the Sociological Importance of Usages, Manners, Customs, Mores and Morals*. Boston: Ginn.

Sumner, W.G. (1911) *War and Other Essays*. New Haven: Yale Univ. Press.

Sumner, W.G. (1913) *Earth-Hunger and Other Essays*. New Haven: Yale Univ. Press.

Tajfel, H. (1970) Experiments in intergroup discrimination. *Sci. Amer.*, 223, 5, pp. 96-102.

Tajfel, H. (1974) Social identity and intergroup behaviour. *Soc. Sci. Info.*, 13, 2, pp. 65-93.

Tajfel, H. (1978) The psychological structure of intergroup relations. In: Tajfel (Ed.), pp. 1-28.

Tajfel, H. (Ed.) (1978) *Differentiation between Social Groups: Studies in the Social Psychology of Intergroup Relations*. London: Academic Press.

Tajfel, H. (1979) Human intergroup conflict: Useful and less useful forms of analysis. In: von Cranach et al. (Eds.), pp. 396-422.

Tajfel, H. (1981) *Human Groups and Social Categories: Studies in Social Psychology*. Cambridge: Cambridge Univ. Press.

Tajfel, H. (1982a) Intergroup relations. *Ann. Rev. Psychol.*, pp. 1-41.

Tajfel, H. (1982b) Experimental studies of intergroup behaviour. In: J.P. Codol & J.P. Leyens (Eds.) *Cognitive Analysis of Social Behaviour*. The Hague: Martinus Nijhoff, pp. 227-46.

Tajfel, H. (Ed.) (1982) *Social Identity and Intergroup Relations*. Cambridge: Cambridge Univ. Press.

Tajfel, H. (Ed.) (1984) *The Social Dimension*. 2 Vols. Cambridge: Cambridge Univ. Press.

Tajfel, H. & M. Billig (1974) Familiarity and categorization in intergroup behavior. *J. Exp. Soc. Psychol.*, 10, pp. 159-70.

Tajfel, H. & J.C. Turner (1979) An integrative theory of intergroup conflict. In: Austin & Worchel (Eds.), pp. 33-47.

Tajfel, H. & J.C. Turner (1986) The social identity theory of intergroup behavior. In: Worchel & Austin (Eds.), pp. 7-24.

Tajfel, H. et al. (1971) Social categorization and intergroup behavior. *Europ. J. Soc. Psychol.*, 1, pp. 149-78.

Tiger, L. (1969) *Men in Groups*. New York: Random House.

Tiger, L. (1979) Biology, psychology, and incorrect assumptions of cultural relativism. In: Chagnon & Irons (Eds.), pp. 511-18.

Tiger, L. (1987) *The Manufacture of Evil: Ethics, Evolution, and the Industrial System*. New York: Harper & Row.

Tiger, L. (1990) The cerebral bridge from family to foe. In: van der Dennen & Falger (Eds.), pp. 99-106.

Tiger, L. (1993) The biological antecedents of human aggression. In: Mason & Mendoza (Eds.), pp. 373-86.

Tiger, L. & R. Fox (1971/1989) *The Imperial Animal*. New York: Holt, Rinehart & Winston; 2nd rev. ed.

Tinbergen, N. (1968) On war and peace in animals and man. *Sci.*, 160, pp. 1411-18.

Tinbergen, N. (1976) Ethology in a changing world. In: Bateson & Hinde (Eds.), pp. 507-28.

Tinbergen, N. (1981) On the history of war. In L. Valzelli & L. Morgese (Eds.) *Aggression and Violence: A Psychobiological and Clinical Approach*. Saint Vincent: Edizioni Centro Culturale, pp. 31-38.

Tönnesmann, W. (1987) Group identification and political socialisation. In: Reynolds, Falger & Vine (Eds.), pp. 175-89.

Trivers, R.L. (1971) The evolution of reciprocal altruism. *Quart. Rev. Biol.*, 46, 4, pp. 35-57.

Trivers, R.L. (1972) Parental investment and sexual selection. In: Campbell (Ed.), pp. 136-79.

Trivers, R.L. (1974) Parent-offspring conflict. *Amer. Zool.*, 14, 1, pp. 249-64.

Trivers, R.L. (1985) *Social Evolution*. Menlo Park: Benjamin/Cummings.

Turner, J.C. (1982) Intergroup conflict and cooperation. In: A.M. Colman (Ed.) *Cooperation and Competition in Humans and Animals*, Berkshire: Van Nostrand Reinhold, pp. 218-49.

Turner, J.C. (Ed.) (1987) *Rediscovering the Social Group: A Self-Categorizing Theory*. Oxford: Blackwell.

Turner, J.C. & H. Giles (Eds.) (1981) *Intergroup Behaviour*. Oxford: Blackwell.

Turner, J.H. (1986) Toward a unified theory of ethnic antagonism: A preliminary synthesis of three macro models. *Sociol. Forum*, 1, 3, pp. 403-27.

Tylor, E.B. (1871/1874/1881) *Primitive Culture; Part 1: The Origins of Culture*. London: Murray.

Tylor, E.B. (1888/1909) *Anthropology: An Introduction to the Study of Man and Civilization*. New York: Appleton.

Tylor, E.B. (1889) On a method of investigating the development of institutions, applied to laws of marriage and descent. *J. Anthropol. Inst.* 18, pp. 245-72.

Vanhanen, T. (1991) *Politics of Ethnic Nepotism*. Reading Berks: Link Press.

Vanhanen, T. (1992) *On the Evolutionary Roots of Politics*. New Delhi: Sterling Publishers.

Vine, I. (1987) Inclusive fitness and the self-system: The roles of human nature and sociocultural processes in inter-group discrimination. In: Reynolds, Falger & Vine (Eds.), pp. 60-80.

Volkan, V.D. (1992) Ethnonationalistic rituals: An introduction. *Mind & Human Interaction*, 2, 3, pp. 3-19.

Wallace, A.R. (1864) Origin of the human races and the antiquity of man deduced from the theory of 'natural selection'. *J. Anthropol. Soc.*, 2, pp. 158-70.

Warnock, G.J. (1975/1976) *The Object of Morality*. London: Methuen.

Washburn, S.L. (1950) Analysis of primate evolution. In: *Origin and Evolution of Man*. Cold Spring Harbor Symp., pp. 66-77.

Washburn, S.L. (1957) Australopithecines: The hunters or the hunted? *Amer. Anthropol.*, 59, pp. 612-14.

Washburn, S.L. (1959) Speculations on the inter-relations of the history of tools and biological evolution. In: Spuhler (Ed.), pp. 21-31.

Washburn, S.L. (1960) Tools and human evolution. *Sci. Amer.*, 203, pp. 63-75.

Washburn, S.L (Ed.) (1961) *The Social Life of Early Man*. Chicago: Aldine.

Washburn, S.L. (1972) Aggressive behavior and human evolution. In: G.V. Coelho & E.A. Rubinstein (Eds.) *Social Change and Human Behavior*. Washington DC: USGPO.

Washburn, S.L. & V. Avis (1958) Evolution of human behavior. In: Roe & Simpson (Eds.), pp. 421-36.

Washburn, S.L. & I. DeVore (1961) The social life of baboons. *Sci. Amer.*, 204, pp. 62-71.

Washburn, S.L. & D.A. Hamburg (1968/1972/1973) Aggressive behavior in Old World monkeys and apes. In: Jay (Ed.), 1968, pp. 458-78; Also in: Dolhinow (Ed.), 1972, pp. 276-96; Also in: Otten (Ed.), 1973, pp. 63-81.

Washburn, S.L. & R.S. Harding (1975) Evolution and human nature. In: D.A. Hamburg & K. Brodie (Eds.) *American Handbook of Pyschiatry*, Vol. 6. New York: Basic Books.

Washburn, S.L. & F.C. Howell (1960) Human evolution and culture. In: S.Tax (Ed.) *The Evolution of Man*. Chicago: Univ. Chicago Press, pp. 33-56.

Washburn, S.L. & P.C. Jay (Eds.) (1968) *Perspectives on Human Evolution*. New York: Holt, Rinehart & Winston.

Washburn, S.L. & C.S. Lancaster (1968) The evolution of hunting. In: Lee & DeVore (Eds.), pp. 293-303.

Washburn, S.L. & E.R. McCown (1972) Evolution of human behavior. *Social Biol.*, 19, 2, pp. 163-70.

Washburn, S.L. & E.R. McCown (Eds.) (1978) *Human Evolution: Biosocial Perspectives*. Menlo Park: Benjamin/Cummings.

Washburn, S.L. & R. Moore (1980) *Ape into Human: A Study of Human Evolution*. Boston: Little, Brown.

Wells, C. et al. (1907) Social Darwinism. *Amer. J. Sociol.*, 7, pp. 695-716.

Wells, D.A. (1967/1971) *The War Myth*. New York: Pegasus.

Whiting, J.W.M. (1941) *On Becoming a Kwoma: Teaching and Learning in a New Guinea Tribe*. New Haven: Yale Univ. Press.

Willhoite, F.H. (1977) Evolution and collective intolerance. *J. Politics*, 39, 3, pp. 667-84.

Willhoite, F.H. (1980) Evolutionary biology and political authority. *Human Ethol. Newsletter*, 31, pp. 10-24.

Wilson, E.O. (1970) Competitive and aggressive behavior. *Soc. Sci. Info.*, 9, 6, pp. 123-54.

Wilson, E.O. (1971) *The Insect Societies*. Cambridge MA: Harvard Univ. Press.

Wilson, E.O. (1973) Group selection and its significance for ecology. *BioSci.*, 23, pp. 631-38.

Wilson, E.O. (1975) *Sociobiology: The New Synthesis*. Cambridge MA; Harvard Univ. Press

Wilson, E.O. (1978) *On Human Nature*. Cambridge MA: Harvard Univ. Press.

Wilson, H.C. (1958) Regarding the causes of Mundurucu warfare. *Amer. Anthropol*, 65, pp. 355-69.

Wilson, M. & M. Daly (1985) Competitiveness, risk-taking, and violence: The young male syndrome. *Ethol. & Sociobiol.*, 6, 1, pp. 59-73.

Wind, J. & V. Reynolds (Eds.) (1986) *Essays in Human Sociobiology*. Vol. 2. Brussels: VUB Press.

Wrangham, R.W. & D. Peterson (1996) *Demonic Males: Apes and the Origins of Human Violence*. Boston: Houghton Mifflin.

Wuketits, F.M. (1993) *Verdammt zur Unmoral? Zur Naturgeschichte von Gut und Böse*. München: Piper.