an Article from SCIENTIFIC AMERICAN

Tribal Warfare

Contact between Europeans and Native Americans may have shattered a delicate social balance that had existed among local tribes. One result was widespread violence

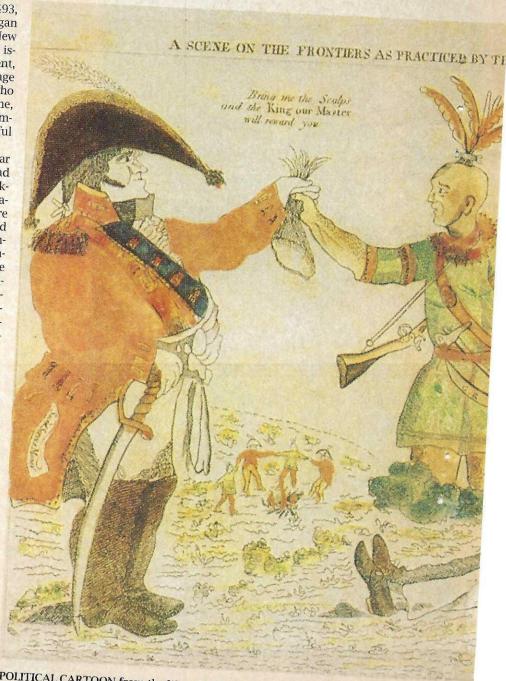
by R. Brian Ferguson

n the sixth day of January 1493, Christopher Columbus began his voyage back from the New World, leaving 38 of his crew on the island of Hispaniola. Their settlement, Villa de la Navidad, was near the village of the Taino chief, Guacanagari, who Columbus said "was proud to call me, and to treat me as, a brother." Columbus was convinced of the peaceful character of the local Indians.

But when he returned less than a year later, the men of Villa de la Navidad were dead. The settlement and blockhouse had been destroyed. Guacanagari blamed the destruction on more powerful chiefs who lived inland, and Columbus soon witnessed their continuing attacks on the villages of Guacanagari. But his crew also found the possessions of the dead Spaniards, including a ship's anchor, which Columbus believed would not have been bartered, concealed in the houses of Guacanagari's people. Columbus never discovered what actually happened.

The explorers and conquerors who followed Columbus often dwelt on lurid stories of unbridled native violence. When the philosopher Thomas Hobbes wrote in 1651 of the primeval war of "every man against every man," he observed that "the savage people in many places of America...live at this day in that brutish manner." Accepted wisdom even now holds that "primitive" cultures are typically at war and that the primary military effect of contact with the West

R. BRIAN FERGUSON is a cultural anthropologist who studies the causes and consequences of war. He has also investigated directly the interaction of local and large-scale processes involved in the relations between Puerto Rico and the U.S. Ferguson hopes eventually to merge these two distinct interests to develop a general approach for understanding social conflict and change. He is currently associate professor of anthropology at Rutgers University.



POLITICAL CARTOON from the War of 1812, drawn by the Scottish-born caricaturist William Charles, illustrates one of the ways that Native Americans could become embroiled in violence as a result of European presence. During the 18th cen-

is the suppression of ongoing combat.

In fact, the initial effect of European colonialism has generally been quite the opposite. Contact has invariably transformed war patterns, very frequently intensified war and not uncommonly generated war among groups who previously had lived in peace. Many, perhaps most, recorded wars involving tribal peoples can be directly attributed to the circumstances of Western contact.

Only in the past decade have anthropologists come to recognize that such a course of events is indicative of what could be called a "cultural Heisenberg effect." If Westerners are there to record events, be they anthropologists or conquistadors, their presence may be influencing native behavior.

People of the New World are not the only ones whose social patterns have been disrupted in this fashion. European imperial expansion around the globe has occasioned similar transformations of war—although with important variations related to local resistance to Western diseases, the implementation of metallurgy and so on. Nor is the colonial expansion of Europe

unique. Contemporary states of the Third World, along with ancient states from the Chinese to the Aztecs, have had major impacts on war among the nonstate peoples at their peripheries.

Neil L. Whitehead of the University of Oxford and I have attempted to map the contours of what we call "war in the tribal zone"—the area that extends outward from a state frontier and is affected in demonstrable ways by the proximity of the state. Patterns of war in this zone are transformed both directly by contact with the state and through interaction with larger changes resulting from the state presence. War is, after all, an expression of politics, and politics is a function of the total organization of society. That organization may undergo dramatic change in response to an expanding state, and the change often begins long before any literate observer arrives on the scene.

Anthropologists have identified three major causes of social change that can destabilize the tribal zone: diseases introduced by settlers, transformation of ecosystems by alien animals and plants, and changes in the way of life made possible by new goods and technologies. There is much debate about the extent of Native American deaths from new diseases before face-to-face contact with Europeans, but there is no question that massive losses followed quickly on the establishment of missions, forts and trading posts. Frequently these first epidemics were interpreted as a result of witchcraft by local enemies, and aggressive retaliation against presumed culprits ensued. More generally, for groups whose society, economy and politics all rest on a base of kinship, the sudden loss of a third or half of a population is catastrophic—perhaps even more destabilizing than was the Black Death in Europe.

Ecological transformation often preceded the European advance as plants and animals introduced by colonists began to spread by themselves. In some cases, these changes were so widespread that is difficult to assess what the natural environment was like in places such as New England before 1500. As the natural world changed, so did the interaction between native peoples and that world. This change often revolutionized both the organization of work and social arrangements built on that organization.

Trade in manufactured goods has dominated the interaction of states and their nonstate neighbors since the time of Mesopotamia, but industrial production puts European expansion in a class by itself. Steel tools, for example, are several times more efficient



tury, colonists offered bounties both to natives and to other colonists for the scalps of enemy natives and Europeans. In addition, all nonnative warring factions in the New World employed native tribes as auxiliaries.

than are stone implements. The acquisition of axes and machetes enabled many Amazonian groups to expand their forest gardens and to begin production of manioc for trade with Brazilian woodsmen.

In most of the New World, metal tools passed along indigenous trade networks far ahead of the Europeans themselves. The passage of large quantities of such valuable items restructured those trade systems, and the exploitative terms imposed by native groups who had a monopoly on the supply of European goods often generated violent disputes. Other items besides steel rapidly became necessities in indigenous societies, in particular guns and ammunition. Guns were not always superior to native arms in the early centuries of contact (as many Europeans learned), but they nonetheless led in many situations to a marked intensification of the killing.

pidemics, ecological change and new technologies can precede face-to-face contact. The actual presence of Europeans adds even more complexity to the tribal zone. One especially complicating factor is the number of states attempting to operate in the same area. The simultaneous presence of English and French colonial agents in 18th-century North America, for example, gave the local population

more political latitude in which to maneuver, but it also embroiled them in foreign rivalries.

The relations between Europeans and natives were also complicated by issues such as the dominant enterprise of a settlement (military, scientific, religious or economic), the degree of administrative control or influence sought by the Europeans, the mix of coercive and seductive measures used to control local peoples and the extent to which natives were incorporated into the colonial society. The interactions of Europeans and local groups—each with their own political hierarchies, group affiliations and factional divisionsgenerated new arrangements of indigenous people, either locked in the divisive opposition of war or joined by common interests of trade or alliance.

Paradoxically, there is strong evidence that much of the tribal structure recorded by Europeans was in fact called into being by their presence. State agents have great difficulty dealing with indigenous people as they are often organized—without authoritative leaders or fixed group identities. So they strive to create both, appointing chiefs and imposing cultural and political boundaries. These artificial boundaries in turn quickly become integrated into the fabric of native society because they are instrumental in the crucial

matter of interacting with state agents.

The direct and indirect effects of European contact combine to foster many kinds of war. Whitehead and I divide these conflicts into three broad types, although in actual practice they often appear in combination. First are wars of resistance or rebellion, in which natives seek to hold back or to push out Europeans.

This type of reaction was by no means automatic: generally Europeans were well received, until their predatory behavior became intolerable. Nor was colonial victory in battle assured, especially in the early centuries. Ultimately, however, the ability of states to reinforce their troops from overseas, skillful use of a divide-and-rule strategy, readiness to violate local conventions of war, and technology and military organization led to the defeat of indigenous forces.

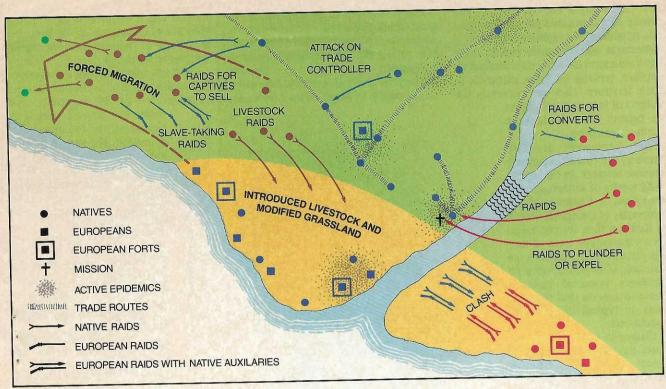
The second type of war pits native against native under European direction. This ethnic soldiering was most prominent in the 16th and 17th centuries, when foreign armies rarely went to war without masses of native auxiliaries. Local people were trained in European combat formations and sometimes equipped with European arms. Even as late as 1883, U.S. forces pursuing Geronimo were made up mostly of recruited Apache scouts.

The third type is internecine warfare waged by sovereign peoples within the tribal zone. Conflict over Western goods is only one cause of such wars. Another is hostility resulting from population displacements: as native peoples fled or were pushed by expanding frontiers, refugees were often forced into territory occupied by others or compelled to compete with similar groups for a shrinking total area. The most devastating wars, however, are those aimed at procuring captives to sell or barter to the Europeans. This type of raiding, combined with the ravages of new diseases, decimated the populations in many parts of the Americas.

These different kinds of war are illustrated in a number of well-studied cases, ranging from shortly after the time of Columbus to the present. The published narrative of Hans Staden. held captive around 1550 by the Tupinamba of the Brazilian coast, titillated Europe with images of savagery. Even by this early date, however, the Tupinamba had been enlisted as allies in wars between the Portuguese and the French, embroiled in raids to capture slaves for the Europeans, impoverished by loss of land to colonialists and deliberately encouraged in factionalism and vengeance by settlers who



CANNIBAL FEAST, portrayed in 1594 by Theodore de Bry, may have reflected an ulterior motive. Once a tribe had been designated as cannibals, Spanish law held that anyone could capture its members and force them into slavery.



TRIBAL ZONE is a region extending outward from state boundaries in which the life of tribal groups is disrupted. It is often marked by war, epidemic and ecological change. This

zone is the scene both of direct conflicts between settlers and natives and of hostilities between native groups fleeing state influence or competing for access to trade groups.

were following a divide-and-rule policy.

Another people made infamous in early reports were the Carib, notorious for cannibalism and slave raiding. Although both practices do appear in the earliest contact reports, as my colleague Neil Whitehead has shown, the Carib reputation for cannibalism was deliberately inflated. The more careful and less self-serving accounts show that cannibalism was a limited ritual practice in which warriors ate small portions of individuals they captured. Because Spanish law made cannibal tribes fair game for immediate enslavement, Europeans employed stories of huge cannibal buffets as a pretext.

Similarly, the limited information about captives not eaten suggests that they were generally well treated and integrated into the captor society. Only after contact with the West was the sporadic taking of captives transformed into a massive and far-reaching industry supplying the colonial markets.

Late in the 19th century the Mundurucu of the Upper Tapajos River had the reputation of being the most warlike tribe in all of Amazonia. It is not coincidental that they also had the reputation of being the greatest friends of the Portuguese. Indeed, their ferocious long-distance raiding was directed by the Portuguese, who paid them to attack more troublesome peoples and encouraged

the warriors to bring back trophy heads.

A few decades later the description of "most warlike" passed to the Jivaro of the Andean foothills, a reflection of their renown for producing shrunken heads. By this time, burgeoning demand in Europe and North America had made the ancient, ritualistic practice of headshrinking a major export business. The standard payment to the Jivaro, one gun for one head, set off a deadly internecine arms race and led to virtually indiscriminate slaughter.

orth America saw similar reorientations of warfare. Probably the best-known case is that of the Great Plains tribes. The introduction of horses and guns transformed their entire way of life, and the subsequent intertribal conflicts were closely linked to this continuing upheaval. Encroaching settlements and the growth of trade in buffalo pelts stimulated competition for buffalo rangeland. Raiding for horses contributed to a constant state of war, and peoples such as the Blackfoot and Cheyenne relied on force to preserve their monopolistic access to Western traders.

In the Pacific Northwest, groups such as the Kwakiutl, Haida and Tsimshian had established a centuries-old pattern in which residents of localities with few resources raided those who controlled

major salmon rivers and other prime fishing grounds. These hostilities subsided after European contact, as epidemics killed a third or more of the native population. The intensity of war, however, increased as the development of a fur trade incited battles to control the trade. In addition, the growing wealth of some successful tribes stimulated a local demand for slaves. Slave raiding intensified as some local groups found slaves to be the only commodity they could barter for the firearms they needed for self-defense.

In the Northeastern woodlands, competition over fur trading sparked longdistance warfare between the Iroquois and the Huron. The tribes fought to obtain access to trading posts and prime beaver-hunting areas, and they plundered each other's trade goods and pelts. The British and the French, meanwhile, encouraged native warfare as a way of advancing their own competing colonial ambitions.

In other parts of North America, particularly the Southeast and the Southwest, a similar pattern manifested itself. In response to the European demand for slaves, the Cherokee raided tribes to their west, the Pima raided the Yavapai and yet other groups raided the Navaho.

The same factors that can be seen in the historical record still influence war in the tribal zone today. Possibly the best case study is the Yanomami, a relatively unacculturated people traditionally inhabiting the highlands separating Venezuela and Brazil. In recent years the Yanomami have been victimized by settlers seeking to mine minerals in their territory. They are currently the

subject of international efforts to protect their lands from further incursions.

The Yanomami are also known for their seemingly chronic warfare. In the widely read works of anthropologist Napoleon A. Chagnon of the University of California at Santa Barbara, they are portrayed as a virtual type case of savage ferocity. Chagnon cites the Yanomami as an exemplar of Hobbes's primeval state of war and asserts that their society is typical of pre-state conditions.

Chagnon's interpretation has been challenged by William J. Smole of the University of Pittsburgh, the Brazilian anthropologist Alcida R. Ramos and others who have conducted field research among the Yanomami. These researchers have found his reports of violence inapplicable to the people they studied.

Others have contested the claim that Yanomami conflicts result from male competition over women. Marvin Harris of the University of Florida at Gainesville, for example, has long argued that the disputes over women are themselves a result of other problems. He contends that the scarcity of nutritionally necessary game animals creates a sexually charged competition among hunters. The resulting violence, Harris asserts, reduces population growth and leads to a closer match between people and available game. Revenge and belief in witchcraft have also been suggested as explanations for chronic war among the Yanomani.

I believe that all these factors are of secondary impor-

tance compared with the continuing effects of "civilized" incursions. Contrary to most scholarly opinion, the Yanomami are not an isolated people. Their location in the rugged Parima highlands appears to be a reaction to slave raids going back to the early 17th century, and their staple food, the plantain, is generally, though not universally, believed to be a European introduction. Slave raids occurred again during the 18th and 19th centuries, and the rubber-tapping industry entered Yanomami territory in force around the turn of the 20th century. The most recent period of direct contact with out-



TSANTSA (shrunken head) is sometimes considered an archetypal symbol of native savagery, but most tsantsas were produced for the European and North American market. As natives bartered tsantsas for rifles, the trade set off an arms race that slowed only when the population had been decimated.

siders is therefore the fourth or fifth wave, not the first.

By examining all available reports of war or peace among all Yanomami from the early 1800s to the 1980s, I have found that in the overwhelming majority of cases, instances of war followed abruptly on some significant change in the Western presence-either a new penetration, a withdrawal or a change in location. Constancy in the presence or absence of Westerners is usually accompanied by peace.

Although many factors are involved in this association, access to Western manufactured goods, especially steel

> tools, has proved critical to explaining the actual patterns of combat. The Yanomami find steel tools roughly 10 times as efficient as stone axes. They rapidly become necessities for many basic subsistence tasks, such as clearing gardens and

gathering firewood.

The Yanomami place extraordinary value on these tools and on other Western manufactured goods used for utilitarian and ornamental purposes. These items are scarce and unequally available. The Yanomami have made hazardous treks and repeatedly relocated villages in their e.fort to obtain better access to suppliers of Western goods.

Although the Yanomami sometimes raided Western settlements or other villages to obtain goods, plundering is a risky, short-term solution. It is far better to establish a position that allows access to a regular source of goods either by moving the village along a trade route or, even better, by settling next to a mission or some other Western outpost. A powerful group in such a location can obtain a relative abundance of new Western trade goods. Furthermore, a group can derive great benefits by acting as monopolistic middlemen in trade to more remote villages.

Such a group often trades Western goods after they have been worn down by use. In return, they receive a wide variety of valuable local products, such as spun cotton, woven hammocks, bows, quivers, curare-tipped arrows, dogs and food. They also gain an advantage in the intermarriage between villages. Remote vil-

lages wishing to establish a trade connection often do so by ceding a wife to the middlemen. In these marriages, middlemen substitute manufactured goods for the years of onerous labor, or bride service, that the groom would normally owe his father-in-law. Those who control access to the Westerners rise in status and in political and military reputation, both because of their control of trade and because of (usually well-armed) Western support.

n this context, collective aggression can accomplish several ends. For Yanomami separated from a source of Western goods, raids or an assault on a trading party can force out a middleman or establish a presence along a trade route. For established middlemen, violence can protect their position by keeping a potential competitor from moving in or by thwarting an attempt to travel around their area of control. Within an existing trade relationship, bellicose confrontations in the form of club fights can alter the direction of trade or the rate of exchange for Western goods.

Almost invariably, force is used soon after some change in the source of the goods. Most commonly a more remote group attacks a village located between them and the source. Whether the distant group is successful in driving out the middlemen or whether the middlemen consolidate their position by successful retaliation, a new power relationship tends to be established quickly. Active raiding between two villages rarely lasts more than two years.

The distribution of sources of Western goods can explain major variations in the pattern of combat, but that is not the whole story. The Yanomami around the confluence of the Orinoco and Mavaca rivers, well described by Chagnon and several others, displayed a greater readiness to resort to aggression in the mid-1960s than they did in the early 1940s, at the start of the current wave of contact. The threshold at which conflict turns to war was lower, and factors in addition to trade antagonism were very much implicated in the increased violence.

These and other aspects of life in the tribal zone—including some suggested as the root cause of Yanomami warfare—fit together to create a war complex that pervades society and makes these Yanomami appear to be "the fierce people." Foremost among them is disease—malaria and measles as well as pulmonary and gastrointestinal illness. A series of epidemics began with the current wave of European contact soon after 1940 and has continued with terrible frequency over subsequent decades. As many as 40 percent of the people in a village may die in a single epidemic. Such a catastrophe disrupts the family-based social system, shattering the carefully crafted balance of marriages that once existed.

Over these same decades, large villages anchored near missions have de-

pleted the local supply of game. This loss has led to a decrease in the communal sharing of meat, a practice that serves as the primary basis of solidarity between families in more mobile villages. Epidemics and the disappearance of plentiful game have combined to undermine social solidarity. In its place is an atomistic and competitive situation in which a disposition to violence plays a key role in daily interactions.

The villages that reconstituted themselves after these disruptions were accommodated to the atmosphere of warfare. They were much larger than more traditional villages and so able to field more fighters. The married men tended to remain with their natal kin, rather than moving in with the wife's family as some other Yanomami do. As a result, they were able to mobilize rapidly to defend their interests. Village leaders were elevated in power by the exigencies of war, by their key role as trade controllers and by the support of local Westerners. Usually unobtrusive in traditional villages, some headmen became almost despotic. In addition, relations among villages were structured by possibilities of trade and took on the character of formal military alliances.

These changes ramified through the Yanomami's system of values and beliefs. Status became a central concern, as any perceived slight could signify the beginning of a disastrous erosion of one's position in war and trade. As a result, the Yanomami encouraged belligerence in the young. Those seeking to persuade others of a course of military action skillfully manipulated the idioms of witchcraft and revenge.

Even mythology was adapted to the social climate. The Orinoco-Mavaca Yanomami have an origin myth in which their violence is explained as a result of the blood of a wounded moon falling to the earth. Yanomami in more pacific areas are unfamiliar with this myth.

Perhaps all societies have their origin myths for war. Western civilization has that of Hobbes. Certainly tribal peoples of the Americas knew war before the arrival of Columbus. Militaristic states such as the Inca and Aztec had their own tribal zone, although these areas were probably less turbulent than those created by European colonialism. Even in the absence of any state, archaeology provides unmistakable evidence of war among sedentary village peoples, sometimes going back thousands of years.

Yet the wild violence noted by Hobbes was not an expression of "man in the state of nature" but a reflection of contact with Hobbes's Leviathan—the states

of western Europe. To take the carnage as revealing the fundamental nature of human existence is to pass through the looking glass.

In addition to reconstructing the modern understanding of warfare among tribal peoples exposed to Western influence, an appreciation of the wargenerating effects of contact may illuminate the mysterious deaths that followed the very first meeting between Europeans and Native Americans. Elements of the events on Hispaniola bear comparison to the Yanomami case: an apparently peaceful local situation turns to war shortly after the establishment of a Western outpost, remote groups raid those closer to the foreigners and the intruders' possessions are looted.

Although the sequence of events can never be known, it is plausible that the men left at Villa de la Navidad, perhaps weakened by disease and internal fights, pressed demands for hospitality on their hosts at the same time that they appeared to have been abandoned and were running short of items to barter. Whether or not Guacanagari's people did all the killing, they unquestionably came to possess many highly desired Western goods. Successful raids against Guacanagari's villages by the traditionally more powerful interior villages would have netted the attackers a share of these precious items and also restored the balance of power that had been upset by Guacanagari's alliance with Columbus.

If this scenario is true—and it has been played out many times in the succeeding five centuries—it would mean that the destabilizing, violence-provoking impact of European contact in the New World began as early as 1493.

FURTHER READING

MILITARIZATION AND INDIGENOUS PEO-PLES: Parts I and II. Cultural Survival Quarterly, Vol. 11, Nos. 3 and 4; 1987. LORDS OF THE TIGER SPIRIT: A HISTORY OF THE CARIBS IN COLONIAL VENEZUELA AND GUYANA, 1498–1820. Neil L. Whitehead. Leiden, Holland, Royal Institute of Linguistics and Anthropology, 1988.

THE ANTHROPOLOGY OF WAR. Edited by Jonathan Haas. Cambridge University Press, 1990.

BLOOD OF THE LEVIATHAN: WESTERN CONTACT AND WARFARE IN AMAZONIA. R. Brian Ferguson in *American Ethnologist*, Vol. 17, No. 2, pages 237–257; May 1990.

WAR IN THE TRIBAL ZONE: EXPANDING STATES AND INDIGENOUS WARFARE. Edited by R. Brian Ferguson and Neil L. Whitehead. Santa Fe, N.M., School of American Research Press, 1992.