

# Aggression: A way of life for the Qolla

An ethnographer suggests that a physiological problem—hypoglycemia may be the basis for a psychological problem—hyperaggressivity

by Robert J. Trotter

The meanest people in the world are probably the Qolla, an Andean subculture inhabiting the area around Lake Titicaca between Peru and Bolivia. Anthropological literature has described the members of this group as the meanest and most unlikable people on earth—the classic example of an extreme personality type dominated by excessive hostility and aggressiveness. In recent years the Qolla have been called everything from anxious and fearful to dishonest and vindictive. But their rancor is hardly a recent discovery; it is almost legendary. In the 16th century a Mercedarian friar, Padre Martín de Murúa, described the Qolla as irrational, cruel, uncivilized, stupid and dull.

Is this stereotype realistic or is it overstated? Ethnographer Ralph Bolton of Pomona College in Claremont, Calif., has spent five years living among the Qolla. He does not subscribe to every negative characteristic attributed to them but he concludes that the Qolla, at a minimum, are a hostile and aggressive people.

Local authorities in the village of Incawatana, where Bolton stayed, keep records of all significant disputes, carefully noting all details of the complaints brought before them. Bolton selected

and recorded the activities that were strictly aggressive—those whose goals were the injury of some person or object. The major complaint category in this conflict file is fights and injuries. Violent encounters are extremely commonplace. The second most common category of aggressive behavior is insults. The Qolla are prone to swaggering, especially when inebriated. At such times they frequently indulge in monologues describing their own ferocity while laughing at the puniness of their enemies. Gesticulating wildly in the air, a Qolla man will shout, "I am a man, dammit! You, you are nothing but a dog, an ass, excrement!"

Stealing (with the intent to injure) ranks just below insulting in frequency, followed by damage to crops, failure to pay debts or fulfill contracts and threats against a person or property. Rape, arson, slander and land ownership disputes are less prominent in Incawatana and are considered more serious. But the most serious and most strongly disapproved behavior is murder.

In the 25-year period since 1945, there were 11 murders among 800 residents—a rate of 55 homicides per year per 100,000 population. The same rate for the United States would amount

to 115,500 murders a year. "Not one country for which data are available," says Bolton, "has a rate as high as the Qolla." National homicide rates range from 0.3 to 34 per 100,000 population in Colombia.

More than 50 percent of all Incawatana adults have had some form of participation in the events surrounding at least one homicide. Bolton calls this rate surprisingly high for a people who do not have an ethic that extols violence or aggressiveness. The Qolla moral code actually demands of them charity, compassion and cooperation with all men. During interviews with the Qolla, Bolton found that they rarely perceived the discrepancy between their own conduct and the conduct called for by the code. When asked why people kill one another, slaughter each other's animals, burn their crops, fight with them, etc., they insisted: "Such behavior is not natural. A rational person could not do things like that."

No matter what the Qolla think, Bolton's case file shows that they are an extremely hostile group. Several hypotheses have been proposed in the past to explain their aggressiveness. The domination hypothesis of Weston La-Barre of Duke University suggests that



*The Qolla spend a lot of time arguing . . .*



*investigating . . .*

the antisocial behavior and attitudes of the Qolla are a result of hundreds of years of domination by Inca, Spanish and, finally, Mestizo rulers.

Other researchers have suggested an environmental-harshness thesis that places emphasis on stresses found in the culture and environment of the Qolla. High altitude, excessive drinking and cocoa chewing, unsanitary homes, inadequate clothing, poor diet and sickness are examples.

Bolton considers these explanations incomplete. Last month at the meeting of the American Anthropological Association in Toronto, he put forward a theory that includes but goes beyond the earlier hypotheses. Bolton calls his proposed explanation of the Qolla personality the hypoglycemia hypothesis. For this research Bolton received the Stirling Award in Culture and Personality Studies at the AAA meeting. A full account of his work will be published as a monograph later this year by National Press of Palo Alto, Calif.

The hypoglycemia hypothesis is not new. Hypoglycemia is an abnormally diminished content of glucose in the blood, and as long ago as 1947 researchers suggested there might be a relationship between glucose levels and aggressivity. Knowing that the level of blood glucose among the Andean Indians is generally low (for a variety of reasons, including poor diet), Bolton decided to test the hypoglycemia hypothesis.

He had local physicians and nurses give a glucose tolerance test to 66 men. The men were taken to a nearby town where they spent the night and fasted for 12 hours. In the morning a blood sample was drawn while the subjects were still fasting. Immediately thereafter they were given orally 50 grams of sugar in solution. Two more blood samples were taken at half-hour intervals and after that every hour for three hours.

The glucose tolerance test indicated that 55 percent of the men in the



Photos: Ralph Bolton

*Bolton (left) documented aggression.*

sample were suffering from mild or severe hypoglycemia. Estimates for the United States range from 2 to 30 percent.

These same 66 men were also rated according to their aggressive actions during the past 10 years. Three village members rated each of the men separately. The raters worked independently and performed the task of rating twice. These subjective ratings were double-checked against Bolton's case file of participation in litigation and accusations of homicide, and found to be accurate.

Bolton found that "the subjects with mild hypoglycemia definitely tend to rank high in aggression." The relationship between hypoglycemia and aggression is curvilinear, he says: severe cases of hypoglycemia rank below average in aggression and mild or moderate cases rank high in aggression. For instance, 11 of the 13 most aggressive men also apparently had mild hypoglycemia. (Persons with severe hypoglycemia, he explains, suffer a reduction in aggressive tendencies due to the diminution of energy available to the body.)

One mechanism by which hypoglycemia might increase aggressivity, suggests Bolton, has to do with the body's attempt to maintain glucose levels at or above normal. Internal metabolic processes usually regulate this. But if

these processes are not functioning properly, then behavioral and emotional means might be sought to produce the same effects. The individual may find that by becoming angry or by expressing aggression the glucose level is raised. Consequently, a person's aggressiveness is reinforced by the psychological feeling of well-being that accompanies aggressive emotions or actions. In fact, says Bolton, the peasants of Incawatana sometimes mention that fighting makes them feel better.

Bolton admits that much of what he says is necessarily speculative and says the work will need replication and controlled experiments. One problem with the hypoglycemia hypothesis is that in recent years hypoglycemia has become a fad disease, and some researchers might be skeptical of Bolton's claims. Sweeping claims have been made about the evils of hypoglycemia and the vast numbers of ailments that can be eliminated by curing it (neurosis, alcoholism, allergy, chronic fatigue and insanity). But Bolton says, "in this village at least, glucose homeostasis problems and high aggressivity do coincide." If there is disagreement about hypoglycemia, he says, it is because there has not been enough good research on the subject. His paper, he feels, should stimulate such research.

Bolton believes his work may have implications outside the Andes. He suggests that further research on the topic be carried out in American ghettos and other poverty areas where there are high levels of stress. Such work, he says, can not only provide a partial understanding of the personality of the Qolla but also advance the theoretical understanding of a problem of considerably broader concern throughout the behavioral sciences—the causes of aggression. Instead of engaging in useless debates over nature versus nurture or instincts versus imperatives, Bolton concludes that anthropologists "must explore the biological bases of cultural behavior and personality." □



*burying . . .*



*. . . and mourning victims of hyperaggressivity.*