

"Respect for the Rights of Others Is Peace": Learning Aggression versus Nonaggression among the Zapotec

This article examines differences in aggression between two Zapotec communities in Oaxaca, Mexico. An ethological study of three- to eight-year-old children (N = 48) reveals statistically significant intercommunity differences in children's serious and play aggression, corresponding to ethnographically observed intercommunity differences in adult behavior. The parallels between adult and children's conduct within the communities support the conclusion that different social learning environments contribute to the maintenance across generations of divergent ideologies, values, and patterns of social interaction related to violence or peacefulness. Social learning and socialization processes also can be viewed as interacting with economic, historical, and ideological influences. The findings suggest that studies of violence that neglect social learning influences may be providing only partial explanations.

ANTHROPOLOGISTS REGULARLY EMPHASIZE that, during socialization, individuals acquire representations of what the world is like, adopt particular sets of values, and gain knowledge as to the cultural meaning of actions and events (Howell 1989). Descriptions of particularly violent or peaceful societies, for example, often include a discussion of how individuals internalize aggressive or peaceful value systems (Draper 1978; Gibson 1989), or how individuals acquire culturally based images of human nature pertaining to aggressiveness and peacefulness (Howell 1989; Robarchek 1980).

Bandura (1983:5) suggests that "the specific forms that aggressive behavior takes, the frequency with which it is expressed, the situations in which it is displayed, and the specific targets selected for attack are largely determined by social learning factors." Social learning models also have been applied to the development of nonaggressive modes of interaction (Eron and Huesmann 1984a; Jorgenson 1985; Montagu 1978).

Huesmann (1988) expands social learning theory beyond modeling, imitation, and reinforcement to include cognitive information processing as well (see also Bandura 1983).

Children are constantly observing others, encoding what they see that seems salient, and integrating these observations into encoded scripts for behavior. Not every aggressive behavior they observe is encoded or stimulates the encoding of an aggressive script. Not every aggressive script is retained or remains accessible for long. The more salient an observed aggressive scene is to the child initially, and the more the child ruminates upon, fantasizes about, and rehearses the observed scene, the more likely it is that an aggressive script based on that scene is recalled and followed in a social problem-solving situation. The more the aggressive scene is consistent with the scripts of behavior that the child has already acquired, the more easily it is integrated into memory. [Huesmann 1988:21]

While some anthropologists discuss the social learning of behaviors such as aggression (Dentan 1978; Mead 1963; Montagu 1978; Whiting and Whiting 1970, 1975), Ross (1986) reviews the anthropological literature and concludes that the emphasis is more on social-structural and ecological explanations for aggression than on psychocultural ex-

DOUGLAS P. FRY is Assistant Professor, Department of Anthropology, Eckerd College, St. Petersburg, FL 33733.

Published as Fry, Douglas P. "'Respect for the Rights of Others Is Peace': Learning Aggression Versus Nonaggression among the Zapotec," *American Anthropologist*, Vol. 94, No. 3 (September 1992): 621-639. Copyright © 1992 by the American Anthropological Association.

planations, such as learning and socialization models. Anthropologists in general also tend to focus on adults, largely ignoring children's behavior. More specifically, very few anthropological studies of children's aggression have been conducted (but see Blurton Jones and Konner 1973; Konner 1972; Sorenson 1978; Whiting and Whiting 1975).

In this study, I provide information on both adult and children's aggressive and peaceful behavior and conclude that social learning perspectives—including the cognitive script concept (Huesmann 1988)—can substantially contribute to our understanding of differences in levels and patterns of aggression in two neighboring Zapotec communities. At the same time, social learning models clearly do not address all aspects of aggressive and peaceful behavior. Therefore, I also attempt to assess which additional variables are *likely*, *possible*, or *unlikely* influences on contrasting levels of violence in these communities.

The plan of this article is as follows. First, I provide an overview of the two Zapotec communities, including information that will be incorporated into a subsequent discussion of the etiology of aggression and peacefulness. Second, I contrast community self images, values, and adult behaviors related to aggression and peacefulness in these communities. Third, I report on an ethological study of children's serious and play aggression. The ethological methods employed entail using precisely defined behavioral elements (e.g., *beats*, *punches*, *intention kicks*) to facilitate quantitative comparisons between the communities regarding children's threats and attacks. Finally, I interpret and discuss the findings for children and adults along two avenues. The first path explores social learning processes and leads to the clear conclusion that divergent learning environments influence children's adoption of particular behaviors, values, and self-images that are maintained into adulthood. Consequently, aggressivity and peacefulness are conveyed across generations. Broadening the perspective, I next turn to the etiology of aggression and peacefulness in these communities by examining several factors—ideological, historical, and economic—which may interrelate with each other and with social learning processes.

The Communities

La Paz and San Andrés are Zapotec communities which lie six to seven kilometers apart in the Valley of Oaxaca, Mexico.¹ I conducted fieldwork in San Andrés and La Paz for 18 months over the period of August 1981 to September 1983 and have revisited the communities three times during 1986 and 1991. Zapotec is spoken in both communities, although most men and some women also speak Spanish. The communities have been in their present locations since at least the 1500s, when, according to local history, a carved wooden image of each town's patron saint miraculously appeared in the nearby hills, providing each community with its Catholic protector and its Spanish name.

Taylor (1972) notes that in comparison to other parts of Mexico, the conquest had less impact on the social and economic organization of Oaxacan peoples. Taylor's (1972:8) statement that "most Indian communities preserved their territorial integrity and economic independence throughout the colonial period" is applicable to San Andrés and La Paz. By the late 1600s, La Paz appears in official records as having taken part in land disputes with neighboring communities, while the first mention of San Andrés engaging in land disputes occurs in the middle of the 1700s (Taylor 1972). Unlike some Zapotec villages (cf. Kearney 1972), neither community was much affected by the Mexican Revolution of 1910-20, although several men from each town left to fight in this struggle. Over the last several decades, the availability of bus and truck transportation gradually has improved to the two villages, expanding in some ways contact with broader Mexican society.

In San Andrés, the mining of lead and other metals, which had been ongoing for many generations, ceased about 20 years ago. At this time, men who had worked in the mines near the village sought periodic work outside the community. The long-standing mining operations were run by foremen and engineers from other parts of Mexico and the United

States. Men from San Andrés contributed hard labor in the mines, sometimes under dangerous conditions, but informants report that relations generally were amiable between the mining company employers and community members. La Paz lacked a comparable long-term association with outsiders.

Over the last several decades, the populations of both communities have been increasing. La Paz has a population approaching 2,000 people, while San Andrés has a population of almost 3,000. Residence patterns in San Andrés and La Paz tend to be patrilocal, and the overwhelming majority of marriages in both locations continues to be endogamous. Currently, most women in La Paz make pottery, a traditional activity, and contribute to the household economy by selling these wares. In San Andrés, many women produce tortillas for sale in the marketplaces of the state capital, Oaxaca City, but they began this economic activity only in recent years with the advent of daily bus transportation to the city. When not engaged in farming, men in both communities seek work in Oaxaca City, Mexico City, and elsewhere.

San Andrés and La Paz have communal and private landholdings, but no *ejidos*. Communal lands are used primarily for grazing and as a source of firewood. Private lands are used for subsistence farming of maize, beans, and squash, and for growing the cash crop *maguey*, which is used to produce the liquor *mescal*. About three-quarters of the farmers in each town plant *maguey*. San Andrés informants report that a typical family from their community owns between one and three hectares, while informants from La Paz report that in their community an average family owns between three and five hectares. These informant estimates are substantiated by data obtained on economic surveys. A sample of La Paz households ($n = 38$) was found to own more land, almost four hectares per family ($M = 3.91$), than a San Andrés sample ($n = 30$), which averaged just over two hectares per family ($M = 2.22$). Furthermore, a substantial number of citizens in San Andrés (37% of the sample) own virtually no land (one hectare or less), while this is much less often the case in La Paz (16% of the sample). Although both communities have roughly the same amount of private landholdings, these differences in landownership per family result principally because San Andrés has a larger population than La Paz. Also, variation in the amount of land owned is slightly larger in La Paz (s.d. = 2.18) than in San Andrés (s.d. = 1.69).

Unlike the rural Mexican communities studied by Friedrich (1972), Greenberg (1981, 1989), Nash (1967), and Ugalde (1973), San Andrés and La Paz lack rival political factions or bosses (*caciques*) (cf. O'Neill 1969:32). There are no mestizo subgroups or firm class structures in either location. La Paz has no barrio divisions, but larger San Andrés is divided into two barrios of approximately equal size. There are no marked social or economic differences between the barrios, however, which are linked with each other by numerous kinship networks (cf. Kearney 1972:23).

As is typical in indigenous Mexican peasant communities, citizens of San Andrés and La Paz are elected to fill positions (*cargos*) in civil and religious hierarchies. San Andrés is a municipality (*municipio*) in and of itself, while La Paz is a subunit of a municipality, an *agencia*. However, La Paz functions very much as if it were a *municipio*, as O'Neill (1972:295), who worked previously in La Paz, also observes.

Children in both communities have ample opportunity to observe the adult social world. Children sometimes accompany their parents on errands, on visits to other households or to the fields, to parties and community fiestas, and to marketplaces in other towns. Family members generally eat together in the kitchen and sleep together in the one-room house. Individuals have little privacy in these communities.

The lifestyles of children are similar in both places. Children arise at daybreak, play or help with chores for awhile, and then eat breakfast. During the school year, most children in the five-to-twelve age range walk to the elementary school. From eight or nine years onward, children are more likely to be absent from school as they increasingly engage in work activities. School begins at 8:30 a.m. and lasts until 1:00 p.m., with a half-hour recess in the midmorning. Children are taught Spanish, arithmetic, history, and

other subjects. When school lets out, most children head directly home to have lunch. Generally, children of eight years or less, as well as some older children, spend the afternoon in and around the family compound. Girls in La Paz often play at making pottery while their teenage sisters and mothers work at this occupation. School-age boys in both locations have greater mobility. Many play in the compound yard or nearby streets, while others take off in small groups to herd goats or to cut alfalfa for the oxen. Children usually eat an evening meal with their family and then go to sleep whenever they are tired.

Children in the two communities engage in many types of play. Boys are likely to "plow" furrows in the ground with small sticks while their fathers are away in the fields actually plowing and planting. Playing rodeo occurs around the time of rodeo fiestas. One child assumes the role of the bull. Sometimes another boy mounts and rides the make-believe bull, but more often, several boys wave shirts at their "bull" to bait it. The boy playing the part of the bull generally holds a stick up near his head to represent horns. When a tossed lasso falls around his "horns," the "bull" kicks, snorts, shakes, and jerks his head. The numerous realistic details the boys employ in their play are impressive.

A popular game of young girls is to make pretend tortillas. A medium-sized stone simulates the grinding *metate*; a smaller stone serves as the hand-held grinding *mano*. The girls grind dirt, sand, fragments of broken bricks, or leaves into "corn dough." In the next stage of the tortilla-making game, large leaves representing tortillas are patted between the hands, pressed in a play tortilla press, and then cooked on a pretend griddle. Several girls usually play this game together as they chat and regularly switch tasks, in much the same way that women cooperatively produce real tortillas. Again, the children's play mimics the adult activity with impressive accuracy and detail.

Children also play pretend marketplace, wherein buyers and sellers barter for goods, and they imitate weddings by holding dances. Toys tend to be simple and homemade, such as carved wooden tops, stick-and-mud houses, and kites made from discarded plastic bags. Usually children play in groups consisting of siblings, cousins, and/or neighbors. Play-fighting behaviors, such as mutual slapping, wrestling, or chasing-fleeing, are sometimes integrated into other playful activities, and at other times they are a central activity in and of themselves.

Besides playing, young girls in both communities assist their mothers by keeping infant siblings out of their mothers' way, fetching items, and performing various minor kitchen tasks. If the father, uncle, or grandfather happens to be working in the compound, young boys may remain nearby to watch and help out with the work as best they can. Sometimes this assistance is useful. Other times such attempts at helping actually create more work for the adults, but even when this is the case, a child's desire to work is praised in both locations. For example, when a four-year-old applied cement to a cracked wall in imitation of his father, the father did not stop the child although he later had to remove and redo the child's "work." Overall, very little work is expected of children younger than eight years in either community.

Children are rarely taught how to accomplish a given task. Rather, they observe and then attempt to imitate the work of the adults. Little by little, they acquire proficiency with a minimum of verbal instruction or special demonstration. I have mentioned how the various activities of adults—from dancing at weddings to making tortillas—are mirrored in children's play. Below, I consider how imitation of adult behavior also occurs in the children's social realm. I suggest that children are very attentive to how their elders interact—for example, whether relations are respectful or aggressive—and that community patterns of adult interaction have parallels in children's behavior.

Contrasting World Views and Community Images

In both San Andrés and La Paz, the social ethics of respect, equality, and cooperation are especially valued (O'Neill 1979, 1981, 1989; Selby 1974). The people believe that ideally they should treat their fellow townspeople with respect (Nader 1969), fulfill their

social obligations, and serve their community when asked to do so. Certain behaviors are incongruous with the maintenance of respect: stealing, destroying another's property, adultery, and physically attacking others. While the citizens of both communities regularly espouse the virtues of respectful conduct, Fry (1986:298-361) provides various examples of how people from San Andrés are generally more likely to argue, insult, lie, cheat, come to blows, and damage another's property than are the people of La Paz. This is not to say that all people from San Andrés lack respect, but, overall, the community patterns are noticeably different. The people of La Paz manage to live in closer correspondence with the ideals of respect and equality than do the citizens of San Andrés.

Fried (1953:286) notes that "there are, besides the ideal norms mentioned by informants, usually alternative patterns or acceptable substitutes, although these may not be so clearly formulated by them as the ideal norms." This seems to be the case in San Andrés. The citizens of San Andrés hold an image of themselves as basically good and respectful, but unlike the Zapotec of La Paz, citizens also lament that some individuals lack proper respect and may act violently. There is a countervailing set of attitudes in San Andrés that holds that sometimes aggression is justified, as voiced in sentiments that avenging a close relative's death may be honorable, that killing a sexual rival is certainly understandable, and that fighting, especially among those who are drunk, is to be expected, because that's just the way people are.

One San Andrés informant on different occasions said: "There are one, or two, or maybe three really bad people in town"; "Men are really jealous here"; "Most people are good, but not all." In the words of another man, people in San Andrés fight, are not religious, commit adultery, and lack respect: "In the old days they had more respect, but not now. Especially when they are drunk, men lack respect. Sometimes feuds or disputes develop between men, and one person may kill the other" (Fry 1986:3-4). In sum, most citizens of San Andrés view their community in a positive light, yet when faced with recurring examples, concede that people are not always respectful and may act violently. Children growing up in San Andrés hear adults voicing ambivalent beliefs and values regarding aggression and perceive that people do not hold a consistently peaceful image of their community.

I recorded the opinions of six persons from San Andrés on the nature of La Paz. They agreed that La Paz is a good and friendly place, some stating that La Paz is just like San Andrés. On the other hand, not a single person from La Paz said that their San Andrés neighbors were just like themselves. To the contrary, they employed the adjectives *quarrelsome*, *dangerous*, *jealous*, *unfriendly*, and *disrespectful* when describing the people of San Andrés. One man voiced concern that by living in San Andrés, I was placing myself in peril. He told me that in San Andrés, "they kill people and then leave the bodies in the street!"

A number of researchers writing about societies with low levels of aggression have discussed the role of internalized values and/or world views that favor nonviolence (see Hollan 1988:52). For example, the Semai "have an image of themselves, developed during enculturation as nurturant, dependent, affiliative, and nonaggressive. . . . Such an image largely precludes aggression as a behavioral alternative" (Robarchek 1980: 113). Like wise, the people of La Paz share a nonviolent self-image. One La Paz informant referred to his own townspeople as peaceful or pacifists (*pacíficos*). Generally, the people of La Paz express a consensus that their community is a friendly, peaceful place. Several men emphasized that in La Paz they do not fight, and one man expressed the sentiment that all of La Paz is like one family. Citizens of La Paz maintain a consistent self-image of themselves as respectful, peaceful, nonjealous, and cooperative. Children overhear verbal expressions of this self-image as adults engage in day-to-day conversations.

Thus, children growing up in these communities encounter social environments where different community images and expectations about the conduct of the citizens are regularly expressed. Children from San Andrés see adults who are more willing to harbor grudges, become involved in personal feuds, and escalate existing disputes than persons

from La Paz, who more faithfully follow the ideal of respect and take greater care to prevent and avoid aggression. In the parlance of Huesmann's (1988) model, cognitive scripts involving avoidance, restraint, and retreat from aggression are modeled by adults in La Paz and imitated and internalized by children to a greater degree than in San Andrés. For example, when an angry, intoxicated La Paz man came looking for a householder at night, the latter simply avoided the angry drunk by pretending not to be at home. The next day, the drunk denied to family members that he had had any angry feelings toward this neighbor the night before, and both parties simply let the matter drop. Adult interactions such as these model for La Paz children scripts involving avoidance and restraint in response to anger and aggression as well as denial that anger or conflict even existed.

Differences in Adult Aggression

Although these neighboring communities are from the same culture, residents of La Paz are notably less aggressive than the residents of San Andrés. During the teenage years, the typical behavior patterns of San Andrés and La Paz youngsters diverge. Roughhousing is a regular occurrence in San Andrés, while it occurs infrequently among La Paz teens. On some occasions, San Andrés teenagers engage in serious fighting, but serious fighting among teenagers was never seen in La Paz. Elsewhere (Fry 1986), I provide several examples of how mock fighting among San Andrés teenage boys nearly escalated into serious fighting, on one occasion with hand-held rocks.

Women tend not to engage in rowdy "horseplay" in either community, but San Andrés men punch or slap each other as a form of greeting or teasing, engage in mock fights, steal and hide each other's hats, swear at each other, and so on. Men from La Paz do not act in this manner, and they condescendingly refer to this type of conduct in their San Andrés neighbors as disrespectful. One man from La Paz who regularly traveled to San Andrés to sell goods called the people there "unfriendly, egotistical barbarians who are always swearing."

During celebrations and parties, some children are always present. When people are intoxicated at such occasions, fighting often breaks out in San Andrés, but in La Paz during such occasions, fighting is much less common (Fry 1986:333-346). Fistfights among drunks in San Andrés regularly result in bruises, scrapes, and cuts before the combatants are pulled apart by other people. In La Paz, however, the less frequently occurring fights tend to end quickly as one participant leaves the altercation of his own accord, again reflecting the reluctance of people from La Paz to participate in physical violence. These points are in agreement with O'Neil's (1979:302) independent observations that while animosities and quarrels arise in La Paz, "relatively few of these problems have led to physical violence." People from San Andrés were seen engaging in physical aggression while sober, but I never saw such occurrences in La Paz. Judicial records in the district archives show a much higher assault rate for San Andrés than for La Paz (Paddock 1982, personal communication, 1986).

I witnessed several wife beatings in San Andrés but saw none in La Paz (Fry 1986). I once asked what caused a woman from San Andrés to limp and was told that her husband had beaten her and broken her hip. The men of San Andrés are exceedingly jealous of their wives. Men and women who are not related do not exchange words. If the husband is not at home, most wives will not talk with a male visitor, other than to call out, "He's not here!" One San Andrés man who was not particularly jealous by community standards explained, "I order my wife, if I am not home and someone comes to the gate, say: 'What do you want?' If the person seems legitimate, say a time when I'll be home. If the person has no reason to be there, just walk away." A young husband whom I subsequently saw beating his wife said to me, "all women are bad because they will have sex with other men." San Andrés men attempt to control their wives and assure fidelity through fear, containment, and sometimes force.

La Paz women are not generally as constrained by the fears of beatings that plague San Andrés women. They are recognized as respectable members of their community, and it

is within a woman's rights, for example, to talk with a male visitor whether her husband is present or not. In La Paz, women are much closer to being equals with men—perhaps, in part, because of women's long-standing economic contribution to the family through pottery-making (K. Fry 1989).

Mutual respect is a valued quality in husband-wife relationships in La Paz. Most men are not possessively jealous of their wives, although a few are said to be jealous. In La Paz, even in cases of infidelity, a circumstance where wife beating might be socially condoned, husbands do not necessarily beat their wives. An informant gave an example of infidelity that resulted in an illegitimate child. When the husband returned to La Paz, rather than becoming violent, he wept and ordered his wife to give the infant up for adoption (Fry 1986:325-326). In La Paz, jealousy is considered inappropriate in grown men (Fry 1986:320-321; 1988). The husband who does express jealousy becomes the subject of disapproving gossip, and children as well as adults hear this type of gossip. This difference between the two communities is highlighted by the fact that citizens of La Paz regularly discuss the "ridiculous" manner in which San Andrés men are prone to jealousy. O'Neil (1969) also reached the conclusion that wife beating was infrequent in La Paz. Like myself, he never saw an actual beating. Hence, the developing child is exposed to gender roles in La Paz that differ in significant ways from the gender roles in San Andrés.

Ideals and practices regarding child training and discipline also contrast sharply in the two communities. The most favored reaction to child misconduct in La Paz is a verbal response. Fathers in La Paz advocate *talking, telling, showing, correcting, and educating* significantly more often than do San Andrés fathers ($z = 3.68, p < .0002$, two-tailed; cf. Fry 1993). As one La Paz father explained, "One must explain to the child with love, with patience, so that little by little the child understands." Some La Paz parents also mention the importance of setting good examples for children. Generally, La Paz parents hold the positive expectation that their children will behave properly, whereas San Andrés parents view their children as mischievous, rambunctious, and unruly and think this is simply the nature of children. Corporal punishment is regularly advocated by San Andrés parents. As one man expresses, "When they do not obey? Well, the idea that we have here. . . is to hit him, give him a blow so that he obeys." Responses to survey questions show that San Andrés fathers favor the use of corporal punishment significantly more often than their La Paz counterparts ($z = 3.73, p < .0002$, two-tailed; cf. Fry 1993).

Observations correspond with these expressed values. I have never observed a parent administering a beating in La Paz, nor did O'Neil (1969:263) in the course of his fieldwork in the 1960s. A La Paz mother explained that she had administered a beating to her 14-year-old son only once in his entire life—for getting into a fight with another boy. Thus, beatings do occur in La Paz, but they are very rare. I have never seen parents throw rocks at children in La Paz, but in San Andrés, I have observed various incidences of rock throwing as well as 11 child beatings administered with sticks, ropes, or belts and numerous incidences of parents striking, kicking, and chasing their children with sticks (Fry 1993).

Turning to lethal disputes, the district archives show San Andrés to have had a higher homicide rate than La Paz for the 41 years where records were available between 1920 and 1968: 18.1 homicides per 100,000 persons per year in San Andrés compared to 3.4 homicides per 100,000 persons per year in La Paz (Paddock 1982, personal communication, 1986). Information regarding the occurrence of homicides gathered from informants in the communities during 1981-83 corresponds with the district archive data. La Paz informants reported no murders within memory, while details of homicides in San Andrés suggest that murders occur every three to five years (Fry 1986:346-354). In 1986, a reliable La Paz informant noted that there still had not been a murder in La Paz for a very long time, while in San Andrés, a man had been ambushed and killed just a couple of days before my return to the field. One account of another recent death attributed it to homicide, while a different version held that the death was an accident. Most of the

recent murders in San Andrés resulted from disputes over women. When a murder does occur, the whole community talks about it for weeks. Children overhear the details of the crime and are privy to discussions of motives and the evaluations of guilt or innocence of particular parties. Thus, a typical childhood in San Andrés includes knowledge of several murders, while most La Paz children pass their childhood without any murders having occurred.

In summary, the frequency and intensity of "horseplay," fistfights, assaults, wife beatings, physical punishment of children, and murders all point to the same conclusion: San Andrés, while not extremely violent, has a substantially higher level of aggression than peaceful La Paz. It is apparent that some, but not all, of the San Andrés aggression has its roots in male jealousy. Having thus far focused on divergent community images, attitudes, values, and behaviors among adults, which result in divergent learning environments for children, I will now examine the agonistic behavior of samples of three- to eight-year-old children from these communities.

An Ethological Approach to Children's Agonistic Behavior

The Samples

A total of 48 three- to eight-year-old children, 24 from each community, were observed between May and September 1983 using focal individual sampling procedures (Altmann 1974). In San Andrés, 13 girls and 11 boys were observed, while in La Paz the focal children consisted of 11 girls and 13 boys. The mean age of the children in San Andrés was 5.5 years (s.d. = 1.7) and in La Paz 5.6 years (s.d. = 1.7), which is not a significant difference by a Mann-Whitney *U* test ($z = .15$, $p = .88$, two-tailed).

Based on my experience in the communities and heeding advice by other Zapotec field researchers (O'Neil, personal communication, 1981; Selby 1974), I concluded that the random sampling of children would result in a logistical nightmare. Instead I strove to attain *comparable* and *typical* samples of focal children from each community. I asked for cooperation from families either personally known by me or from families who were suggested by field assistants. I explained my interests in children's behavior to the parents and requested permission to repeatedly observe their children. All focal children were selected from different families. While the samples may overrepresent cooperative families (and underrepresent suspicious ones), both samples would seem to be comparable in this regard.

The samples were also comparable regarding a number of other characteristics. There were no significant differences regarding mean ages of parents, number of siblings, and age order of the focal children within the family (Fry 1988). Each family was in the middle economic range for their respective community. As mentioned, most families in San Andrés own one to three hectares of land, while the typical La Paz range is three to five hectares, and the focal families were representative of their communities (San Andrés $M = 2.1$ ha, s.d. = 1.1; La Paz $M = 4.0$ ha, s.d. = 2.4).

All parents in both locations were living at the time of the study. Economic activities of fathers were similar in both villages; all were farmers and most also worked periodically outside the community. In San Andrés, eleven mothers regularly produced tortillas to sell in Oaxaca City, two mothers were part-time shopkeepers in the family mini-store, and one was a seamstress. In La Paz, at least seventeen mothers made pottery for sale outside the community.

The focal children were observed for a total of 150 hours, 77.6 hours in San Andrés and 72.4 hours in La Paz. This averages to slightly over three hours for each child (Fry 1988). The slight differences in sampling times are unimportant, because analyses were performed on rates and durations of behavior per hour. In both places, the average observation lasted about 15 minutes. The majority of observations were made within family compounds (86% in San Andrés and 81% in La Paz), while the remainder were recorded either elsewhere in the community or on its outskirts. Observations on focal children were

made, for instance, inside kitchens as they ate; in compound yards as they played "marketplace," rolled baskets back and forth, climbed trees looking for ripe fruit, and so on; in the hills as they herded goats with other children; and at the *placita* or in the streets as they talked or played with other children.

Procedures

Before focal observations began, I spent several months making ad libitum observations of Zapotec children and compiling an *ethogram*, or catalog of precisely defined behaviors. The completed ethogram consisted of 163 behaviors ranging from *eating* to *wrestling*. I visited most focal families several times prior to collecting observational data on the focal children so I could learn who family members were and let the family become accustomed to my presence. After this initial period of accustomization, children did not pay much attention to me. Zapotec field assistants accompanied me on most observation visits and jotted notes as I narrated focal observations into a tape recorder carried in a small backpack or recorded observations on paper using a shorthand system. I recorded a running commentary of the behaviors engaged in by the focal child, using behavioral elements compiled in the ethogram, such as *beat*, *slap*, *burro kick*. Whenever a focal child engaged in any type of agonistic behavior, the specifics of the interaction were noted, including the identities of the interactants and any facial expressions or gestures. One narration, for example, was "focal *intention punch*, *intention punch*, both with *laugh* to 12-year old girl, girl 12 *intention beats* focal with *play face* and then *laugh*." As necessary, my assistant and I moved unobtrusively with the focal child to maintain continuous visual contact.

Analysis

During coding of transcribed narrations, episodes were classified on the basis of the facial expressions and gestures of the participants as either serious or play aggression, and also as *contact* agonism or *noncontact* threatening. *Smiles*, *laughs*, and *playfaces* were utilized as common play signals, while *low frowns*, *bared teeth*, *fixated gazes*, and *crying/weeping* were interpreted as indicating serious intent (Aldis 1975; Blurton Jones 1972; Fry 1987; Smith and Lewis 1985). For example, I classified the following interaction involving a focal three-year-old girl and her one-and-a-half-year-old brother as serious aggression because of the *crying* associated with the *pushes*. "Brother receives a bowl of food from mother. Focal *crouches* nearby, *reaches* her hand to brother's bowl. Brother *pushes* focal away, with *cry*. She *reaches*, *snatches* his bowl. Brother *pushes* focal with start of *cry*." When a mixing of play and aggressive signals occurred (2% of the episodes) or when information on intention signals was missing such as when a child was facing away from the observer (14% of the episodes), episodes were coded as undetermined. The rate of occurrence of undetermined episodes was not significantly different between the communities ($z = 1.73$, $p = .08$, two-tailed). For analysis, episodes coded as undetermined were excluded. Interobserver reliability was 92% using the kappa statistic (Fry 1988:1013).

Ethological Results

Play aggression among Zapotec children in both communities tended to be more varied in content than serious aggression. Play aggression consisted of *beats*, *punches*, *slaps*, *kicks*, *karate chops*, *wrestling*, *pushing*, *pulling*, *rolling* together, among other behaviors, while almost all episodes of serious fighting consisted of *beats*, *punches*, *pushes*, and *kicks* (Fry 1987:293).

The sample from San Andrés averaged significantly more episodes of play aggression per hour than the La Paz sample (binomial test, $z = 7.20$, $p < .0001$, one-tailed; see Table 1). Likewise, the rate of serious aggression was significantly higher in San Andrés than in La Paz (binomial test, $z = 2.81$, $p = .0025$, one-tailed). The rates presented in Table 1 also show that the children in both locations engaged in play aggression about *nine times* more often than in serious aggression (8.8 to 1 in San Andrés and 9.5 to 1 in La Paz; cf. Fry 1987).

Table 1
Rates and durations of play and serious aggression in San Andrés and La Paz.

	San Andrés (n = 24)	La Paz (n = 24)
<i>Rate of play aggression (episodes/hour)</i>		
<i>M</i>	6.90	3.71
<i>s.d.</i>	6.8	4.0
<i>Rate of serious aggression (episodes/hour)</i>		
<i>M</i>	.78	.39
<i>s.d.</i>	1.0	.7
<i>Duration of play aggression (minutes/hour)</i>		
<i>M</i>	2.33	.88
<i>s.d.</i>	3.5	2.1
<i>Duration of serious aggression (minutes/hour)</i>		
<i>M</i>	.04	.03
<i>s.d.</i>	.05	.07

When durations per hour of play aggression are compared using Mann-Whitney *U* tests, the average amount of time per hour that focal children spent engaged in play aggression was found to be significantly greater in San Andrés than in La Paz ($z = 2.00$, $p = .023$, one-tailed). On the average, the San Andrés sample engaged in 2 minutes and 20 seconds of play aggression each hour, while the La Paz sample engaged in only about 53 seconds of play aggression per hour (Table 1). Hence, community differences in duration of play aggression correspond with the differences in rate of play aggression.

Turning to serious aggression, the average durations per hour were short—less than three seconds—for both samples and were not significantly different ($z = 1.24$, $p = .108$, one-tailed; see Table 1). Since the average duration per hour of serious aggression in La Paz was 75% the average duration per hour of the San Andrés sample $[(.03/.04) 100 = 75\%]$, but the rate of occurrence of La Paz aggressive episodes was half the rate of San Andrés aggression $[(.39/.78) 100 = 50\%]$, this indicates that on the average the less frequently occurring La Paz episodes lasted one-third *longer*, or about one-half second longer, than the more frequent San Andrés aggression. Why was this the case?

An answer emerges when patterns of *contact aggression* and *noncontact aggressive threatening* are investigated. Some episodes of serious aggression consisted purely of physical contact aggression (e.g., punches and kicks), while other episodes included noncontact threatening (e.g., intention beats and intention kicks) along with the contact aggression. In San Andrés, only about 10% of the serious aggression simultaneously included threatening $[(.08/.78) 100 = 10.1\%]$. In La Paz, however, 63% of serious aggression simultaneously included threatening $[(.25/.39) 100 = 62.8\%]$. These percentages are significantly different (difference of proportions test, $z = 4.74$, $p < .0001$, two-tailed). Hence, the nature of the aggression was different in the two communities. The San Andrés children almost always directly attacked their opponents physically. However, when the La Paz children resorted to aggression, they were inclined also to employ noncontact threatening, thus slightly increasing the average duration—but not the *severity*—of the aggressive encounter. If anything, the mixing in La Paz of noncontact threatening with physical aggression 63% of the time is another indication—along with their significantly lower rate of aggression to begin with—of the La Paz children's restraint against using physical aggression.

Pertaining to play aggression, an examination of the rates relative to the durations in the two communities did not present the same question as it did for serious aggression. The La Paz rate of play aggression was 54% of the San Andrés rate $[(3.71/6.90) 100 = 53.8\%]$, while the La Paz average duration per hour was only 38% of the San Andrés

average duration per hour $[(.88/2.33) 100 = 37.8\%]$. Play threats did not often co-occur with play aggression in either location [in San Andrés $(1.2/6.9) 100 = 17.5\%$ and in La Paz $(.64/3.71) 100 = 17.3\%$], and the percentages were not significantly different (difference of proportions test, $z = 0.07$, $p = .94$, two-tailed).

Humphreys and Smith (1987) found that when British children received invitations to engage in play aggression, they responded with play only about 30% of the time. These researchers propose for play aggression that

initiation was more in the nature of an invitation to which the recipient was free to respond in any manner or not at all than a challenge which had either to be met or refused. An interaction started in this way would therefore be the result of a *mutual wish* on the part of both participants to be involved. [Humphreys and Smith 1987:208, emphasis added]

Recipients of play aggression responded playfully significantly more often in San Andrés than in La Paz (Mann-Whitney U test, $z = 1.78$, $p = .038$, one-tailed). The average rate of response divided by the overall average rate of play aggression for focal children was 33% in San Andrés and 24% in La Paz. This suggests a more common *mutual wish* among San Andrés participants to engage in play aggression than among La Paz children. In cases of serious aggression, no significant difference existed between the communities regarding recipients' reciprocation of aggressive actions (Mann-Whitney U test; $z = -1.23$, $p = .11$, one-tailed).

The samples of children in each community were split into younger (three to five years) and older (six to eight years) subgroups. Two-way and three-way fixed-effects analysis of variance (ANOVA) tests were employed to examine age, sex, and community membership in relation to rates of play and serious aggression. The only significant ANOVA finding was that, for both communities together, older children engaged in a higher rate of play aggression ($M = 7.26$ episodes/hour) than younger children [$M = 3.18$ episodes/hour; $F(1,47) = 7.80$, $p = .008$].

Mann-Whitney U tests showed this significant relationship between age and play aggression to be stronger in San Andrés than in La Paz. In San Andrés, the older subgroup of children engaged in significantly more play aggression ($M = 10.5$ episodes/hour) than the younger subgroup ($M = 3.65$ episodes/hour; $z = 2.14$, $p = .016$, two-tailed), while in La Paz, considered separately, no significant difference existed between the older ($M = 4.60$ episodes/hour) and younger children ($M = 2.67$ episodes/hour; $z = .61$, $p = .27$, two-tailed). It is noteworthy that the *difference* in rates of play aggression between the San Andrés and La Paz older subgroups ($10.15 - 4.60 = 5.55$ episodes/hour) was more than five times greater than the *difference* between San Andrés and La Paz younger subgroups ($3.65 - 2.67 = .98$ episodes/hour).

Switching to serious aggression, although nonsignificant, it should be noted that in San Andrés the rate was *higher* among the older subgroup ($M = .96$ episodes/hour) than among the younger subgroup ($M = .60$ episodes/hour; $z = .86$, $p = .39$, two-tailed), while, at the same time, the opposite pattern in La Paz was a hair shy of being significant ($z = 1.96$, $p = .056$, two-tailed). That is, the older La Paz subgroup ($M = .29$ episodes/hour) showed a *lower* rate of serious aggression than the younger La Paz children ($M = .51$ episodes/hour). Thus, the nonsignificant pattern among the community/age subgroups for serious aggression tentatively suggests that rates of aggression may increase with age in San Andrés and decrease with age in La Paz.

In summary, focal children from La Paz, while participating in significantly less aggression and play aggression to begin with than their San Andrés counterparts, also were more likely to ignore a playful act (but not necessarily a serious aggressive act) directed at them from another child. Typical aggressive interactions were qualitatively different between the communities. Less severe noncontact threatening was mixed with physical aggression much of the time in La Paz (63%), but only rarely in San Andrés (10%). And, while over the three-to-eight-year age range play aggression significantly increased in San Andrés, the same was not the case in La Paz. Likewise, there is some indication that rates of serious aggression may increase with age in San Andrés and de-

crease with age in La Paz, the latter trend being extremely close to the significance level. These findings viewed together suggest an overall reluctance on the part of La Paz children to participate in play and serious aggression relative to the San Andrés children, an intercommunity difference that appears to strengthen with age and which parallels adult behavior.

Discussion

Before discussing the etiology of aggression and peacefulness in these communities, I will highlight the suitability of a social learning model for accounting for the *maintenance* or *perpetuation* of community-typical behaviors, values, attitudes, and beliefs across generations.

Steinmetz (1977) found evidence of the social learning of conflict-resolution styles within families in the United States. She reports that if parents use *discussion* to resolve conflicts between themselves and with their children, then their children also tend to adopt this approach. She also found that *verbal aggression* and *physical aggression* were adopted by children if these conflict-resolution styles were used by their parents.

Likewise, longitudinal studies show that the aggressive behavior of individuals tends to remain stable through time (Olweus 1979, 1984). Based on data from over 600 persons, Huesmann et al. (1984) report that the 8-year-old children whom they found to be more aggressive at the beginning of their study were also the more aggressive 30-year-olds at the completion of the study. Similarly, an individual's level of prosocial behavior, such as sharing, altruism, and social skills, remained constant over the lifetime. Eron and Huesmann (1984a:209) conclude, "prosocial behavior, like aggressive behavior, is learned early in life, very likely in the context of family interactions and persists, traitlike, into adulthood." I suggest that a corresponding persistence of aggression and nonaggression occurs in San Andrés and La Paz, respectively, at the level of the community as well as within individuals.

The Zapotec children of San Andrés and La Paz imitate the behaviors of their elders, especially their parents. They increasingly engage in behavioral patterns that are accepted, expected, and/or rewarded by other community members. The children of San Andrés witness adults fighting at parties and at other times, observe teenagers fighting and roughhousing on the street corners, see their siblings, cousins, and other children being beaten with sticks, and come to know the feel of a beating themselves. Relevant here are empirical observations by psychologists that when a parent or other adult regularly employs physical punishment on a child, the child may use the adult as a behavioral model for aggression and in turn become more aggressive (Bandura 1973; Eron and Huesmann 1984b; Huesmann 1988). Furthermore, Huesmann proposes that

a generalized disinhibition of aggression could occur when a child forms a general aggressive behavior script on the basis of his or her observation of numerous scenes of specific aggressive behaviors. If the aggressive script becomes associated with successful social problem solving, new aggressive behaviors may emerge that are unrelated to the original observed behaviors. [1988:21-22]

In La Paz, however, the models that children observe hardly ever use physical punishment and rarely exchange blows with other adults, even in play. If they should become involved in a physical confrontation, they are likely to separate of their own accord. Husbands in La Paz tend not to beat their wives. La Paz men treat women with greater respect and are not nearly as jealous or possessive as San Andrés men. In short, the children of La Paz are not normally exposed to the types of serious and mock aggressive behavior that the children of San Andrés regularly witness.

In La Paz, the cultural meaning of play aggression is more closely linked to real aggression: both types of agonism are devalued and discouraged. On several other occasions, I heard La Paz parents telling children to cease play-fighting. O'Neill (1969:251) notes that out of 21 La Paz fathers he questioned, only four said that they approved of play aggression.

sion, and the majority disapproved of both play and real fighting. In La Paz, both real and play aggression are seen as being within the realm of parental influence and control. When asked how he would respond if his children were fighting, a La Paz man answered, "Advise them. Tell them not to do it, that it is bad for brothers and sisters to fight."

Parents in San Andrés also say that they disapprove of children's aggression, but simultaneously express the view that a certain amount of fighting and play-fighting is just part of the nature of children. Observations show that citizens from San Andrés do not necessarily break up or discourage fights among children when they see them. San Andrés parents hold an attitude that little or nothing can be done about such behavior, a point that is illustrated by a mother's idle remark as her sons threw rocks at each other: "the boys are always fighting." Another man explained that the boys are "little men" and hence they fight. Parents assume that should their young sons leave the compound and play in the streets, older boys will beat them up. I once heard a father encouraging his daughter to strike her older brother. Thus paralleling the community ambivalence toward adult aggression, San Andrés parents also express ambivalence toward children's behavior. Consequently, San Andrés children learn that fighting and play-fighting are expected of them—that these activities are viewed as part of their nature. In La Paz, children learn that serious aggression, especially, and also play aggression should be avoided—that the people of La Paz are *pacíficos*. Robarchek's comments are apropos:

The mirror in which the child sees himself reflected is the response of others to him, and these responses are guided by the fundamental assumptions and values in the society. . . . The child, then, comes to evaluate himself in terms of these cultural values and they become incorporated as aspects of his self-image. [1980:112]

Prevalent attitudes and values regarding what constitutes acceptable behavior, shared expectations about the nature of the citizenry, and overall images of the community's aggressiveness and peacefulness are all elements of a child's learning environment. The findings that La Paz children engage in less play and serious aggression than San Andrés children is in accordance with a social learning interpretation. I propose that individuals in La Paz, beginning at an early age and persisting through adulthood, more consistently internalize attitudes and images of themselves that countermand the expression of aggression. Unlike the people of San Andrés, the citizens of La Paz do not talk of the presence of disrespectful or violent persons in their community, and unlike San Andrés, La Paz lacks a widely held countervailing belief or value system that condones violence. The La Paz Zapotec have ideals, values, and beliefs that run more consistently counter to the expression of aggression than do the people of San Andrés. As Huesmann (1988: 19) points out, children are more likely to internalize cognitive scripts as guides for behavior that are in accordance with social norms.

Besides the social learning and internalization of different values, attitudes, images, and behaviors, what other factors contribute to differences in peacefulness between San Andrés and La Paz? Although further research may elucidate more definitive answers, I can offer several ideas at this time, and also suggest that some frequent explanations seem not to apply in this circumstance. In approaching etiological questions, I agree with Washburn's (1977) suggestion that conclusions should be stated as *probabilities* rather than certainties, for, as in paleontological studies of human origins, direct evidence on the *origin* of aggressive and nonaggressive patterns among the Zapotec has been obscured by time. Second, I advocate a multidimensional perspective on aggression and nonaggression, wherein various conditions (i.e., social learning, economics, history, and social structure, etc.) are seen as existing and operating in combination.

While anthropologists have paid a great deal of attention to political and economic variables in relation to rural violence in Mexico, they have largely ignored social learning and socialization processes. Nash (1967) provides a multifaceted explanation for the violence in a Maya community in southern Mexico. Among contributing factors to increased violence, she discusses increased competition brought on by the introduction of new economic enterprises, increased political rivalry among curers (*curanderos*), a weakening of

traditional modes of social control, and an increasing acceptance of violence. Nash (1967:465) suggests that "homicide occurring as a direct result of economic and political competition represents a new strategy in the community," wherein killings are not viewed as crimes, but rather as *responses* to crimes such as cattle theft.

Friedrich (1972) proposes that rivalry between political factions results in a high rate of homicide and other violence in a Tarascan community. He suggests that the people see themselves as belonging to political families, a perception that helps to fractionalize the town. In Friedrich's view, competition between rival political bosses lies at the core of the Machiavellian-style violence in this community. He argues that even when motives for killing involve thefts or disputes over women, such homicides can be viewed in a framework of political competition that pervades the community's social life.

Greenberg convincingly links a high murder rate in a Chatino community with interbarrio feuding over land.

The economic basis for the feuds accounting for virtually all of these murders appears to have been the division of coffee lands between the two *barrios*. While corn lands are fairly evenly divided between them the same is not true of coffee. The *barrio abajo* with 45 percent of the households in the community possesses 72 percent of the coffee lands, which means simply that the *barrio arriba* with 55 percent of the households has title to only 28 percent of the coffee lands in the village. [Greenberg 1981:196]

Romanucci-Ross (1973:134) sees the patterns of homicide in a mestizo village in central Mexico as "unrelated to stable or persistent conflicts." In her interpretation, killings result from drunken quarrels, in which the ethic of *machismo* plays a prominent part.

Some interpretations that shed light on aggression in other settings do not fit the present circumstances. Explanations based on political factions (Friedrich 1972; Ugalde 1973), disputes between barrios (Greenberg 1981, 1989), rivalries between curers (Nash 1967), *machismo* (Romanucci-Ross 1973), inequities in wealth (Greenberg 1981; Nash 1967), social stratification and interethnic tensions (Flanet 1977) contribute little or nothing to our understanding of why La Paz is more peaceful than San Andrés, because both communities lack political factions, political bosses, rivalries among curers, multiple ethnic groups, *machismo*, and marked social stratification or substantial inequities. The political authority structures also are nearly identical in the communities.

Additionally, while La Paz has only one barrio, the two San Andrés barrios do not split the community; the relations among people from the different barrios are not different from the interpersonal relations within barrios. Furthermore, land is distributed more or less evenly between the barrios. San Andrés informants consistently reflect the belief that everyone is about equal regarding landholdings: "We all have the same amount of land, almost nothing." Interestingly, as mentioned earlier, La Paz actually has the larger standard deviation for size of landholdings than San Andrés. Thus, different patterns of *equity* in land distribution do not explain intercommunity differences in peacefulness. If *inequities* in landownership were an important contributor to violence, we might expect more aggression in La Paz than in San Andrés. However, in neither community do some individuals have markedly greater access to resources, as occurred in the communities studied by Greenberg (1981, 1989) and Nash (1967).

Likewise, greater religious strife cannot be used to account for differences between San Andrés and La Paz. While San Andrés is homogeneously Catholic, La Paz is not. A conflict between the Catholic majority and a small group of Evangelists has been smoldering with periodic eruptions for the last couple of decades in La Paz, but these tensions over religion have not resulted in the loss of lives (O'Neil 1979:302).

While the various factors just discussed are *unlikely* contributors to the differential peacefulness between these two communities, other variables have *possible* or even *probable* influences. Access to sufficient land to support a family, relations between the sexes, including the degree of jealousy, and the impact of external influences merit further consideration.

I previously noted that the citizens of La Paz have more land on the average than do the people of San Andrés; about one-third of San Andrés families own one hectare or less, in contrast to La Paz, where only about one-sixth of the families own one hectare of land or less. Consequently, more pervasive shortages of land in San Andrés, especially over recent generations, may have contributed to—and may continue to contribute to—greater tensions and competition than in La Paz, tensions that sometimes shatter the peace. However, I should reiterate that when disputes over land do occur in San Andrés, they are between individuals, not larger community factions as described by Friedrich (1972) and Greenberg (1981, 1989). Furthermore, while indicating that land disputes occasionally are motives for homicide in San Andrés, an informant discounted the idea that killing is generally viewed as a viable strategy for attaining land: "One man kills another over the land and then he has to flee or is put in jail. Both feuding men are gone, but the land remains!"

Relations between the sexes also can be linked to aggression in various ways. Men in La Paz treat women with greater respect and with less violence than in San Andrés. Might the origin of this difference relate to domestic economic factors, which in turn were reinforced by divergent gender role ideologies? Recall that for generations the women of La Paz have produced and sold pottery, thus contributing substantially to the household income, while in San Andrés women have contributed little or no income to the household while their husbands have had access to income from working in the mines (K. Fry 1989). In La Paz, men value and are somewhat in awe of women's pottery-making skills, a phenomenon that is without parallel in San Andrés. These economic-historical-ideological factors may interrelate in accounting for less wife beating in La Paz than in San Andrés.

Also consider that jealousy contributes to violence in San Andrés in a way that rarely occurs in La Paz. First, jealousy contributes to wife beating. Second, many fights and most of the recent murders in San Andrés involved disputes among men over women. For instance, one man was killed after publicly declaring his affection for another man's wife, a mistake he committed while quite inebriated. In La Paz, by contrast, jealousy is considered an emotion of youth and does not usually result in aggression. While the origins of differences in patterns of male jealousy in these two neighboring communities, as well as the divergent interaction patterns between the sexes generally, remain unclear, there can be little doubt that social learning processes continue to perpetuate these differences from one generation to the next as children learn community-appropriate gender role behavior and ideologies (Fry 1988). Again we see an interaction through time of several probable contributors to aggression.

In many respects the histories of these communities are similar. Both were little influenced by the hacienda system and have maintained control over their agricultural lands, both have participated in land disputes with various neighboring communities on and off for centuries, and both were relatively unaffected by the Mexican Revolution. On the other hand, for many generations, outsiders have controlled the mining operations near San Andrés, and this situation is without a parallel in La Paz. What influence on aggression, if any, did the outsiders' long-standing association with people from San Andrés have? While the outsiders were not viewed with hostility by the people of San Andrés, could their presence have influenced the development of the now well established pattern and ideology of jealousy? Satisfactory answers to such questions are probably lost to time.

In conclusion, the significant intercommunity differences in the behavior of three- to eight-year-old Zapotec children, viewed in light of the divergent learning environments in these two communities, support a social learning model. It would be simplistic to propose, however, that the peacefulness of La Paz in comparison to San Andrés can be accounted for by any single variable. In all likelihood, La Paz is more tranquil than San Andrés, not solely because of social learning processes, but because of an interaction of social learning with various other influences. I have pointed out that some factors, often seen as causes of violence, can be judged to be *unlikely* determinants of the intercommunity differences in this case. However, the patterns of interaction between men and

women, including the levels of respect and expressions of jealousy, differ markedly between San Andrés and La Paz, and such differences *almost certainly* are linked to variations in aggression. In my estimation, another *possible* contributing factor is land. While aggression in San Andrés usually does not stem directly from contests over land, it is *possible* that shortages of this crucial resource contribute to frustration and competition within the community and may also lie behind the greater ideological acceptance of aggression in San Andrés than in La Paz. Ross (1986) suggests that an *integration* of ecological, socialstructural, and psychocultural factors, including social learning processes, provides a more satisfactory account of conflict behavior than any single approach alone. The challenge in this Zapotec context, as well as in other situations, remains one of assessing how various factors have *synergistically interacted* in the past and continue to do so in the present as contributors to violence or peace.

Notes

Acknowledgments. The quoted phrase in the title of this article is from the Zapotec leader, Benito Juárez, who was president of Mexico in the mid-1800s. In Spanish: "El respeto al derecho ajeno es la paz" (Dublan and Lozano 1876:27).

I would like to thank M. Melissa McCormick, Richard N. Henderson, James B. Greenberg, and Jim Welch for thoughtful discussions and insightful comments on earlier drafts of this article. I also am most grateful to Kathy M. Fry and Carl W. O'Neil for facilitating the field research in numerous ways, and to John Paddock for sharing archival findings on homicide rates. I wish to thank the people of San Andrés and La Paz for welcoming me into their communities and am especially grateful to the parents who allowed me to observe their children on many occasions. The research and analysis were supported by the National Science Foundation (81-17478), the Wenner-Gren Foundation for Anthropological Research (4117), the Bureau of Applied Research in Anthropology at the University of Arizona, and the Department of Anthropology at Indiana University. I gratefully thank these institutions for their assistance. Finally, I am most appreciative of Janet Dixon Keller's skills as Editor-in-Chief and thank her and the anonymous reviewers for their helpful comments.

¹San Andrés and La Paz are pseudonyms. Further ethnographic descriptions of one or both of these communities can be found in Fry (1986, 1987, 1988, 1990), K. Fry (1989), and O'Neil (1972, 1975, 1979, 1981, 1989).

References Cited

- Aldis, Owen
1975 *Play Fighting*. New York: Academic Press.
- Altmann, J.
1974 Observational Study of Behaviour: Sampling Methods. *Behaviour* 49:227-267.
- Bandura, Albert
1973 *Aggression: A Social Learning Analysis*. Englewood Cliffs, NJ: Prentice-Hall.
1983 Psychological Mechanisms of Aggression. *In Aggression: Theoretical and Empirical Reviews*. R. Geen and E. Donnerstein, eds. Pp. 1-35. New York: Academic Press.
- Blurton Jones, N.
1972 Categories of Child-Child Interaction. *In Ethological Studies of Child Behaviour*. Pp. 97-127. Cambridge: Cambridge University Press.
- Blurton Jones, N. G., and Melvin J. Konner
1973 Sex Differences in Behaviour of London and Bushman Children. *In Comparative Ecology and Behaviour of Primates*. Pp. 690-750. New York: Academic Press.
- Dentan, Robert
1978 Notes on Childhood in a Nonviolent Context: The Semai Case (Malaysia). *In Learning Non-Aggression: The Experience of Non-Literate Societies*. Ashley Montagu, ed. Pp. 94-143. Oxford: Oxford University Press.
- Draper, Patricia
1978 The Learning Environment for Aggression and Anti-Social Behavior among the !Kung (Kalahari Desert, Botswana, Africa). *In Learning Non-Aggression: The Experience of Non-Literate Societies*. Ashley Montagu, ed. Pp. 31-53. Oxford: Oxford University Press.

- Dublan, Manuel, and Jose Maria Lozano, eds.
1876-1904 *Legislación Mexicana o, colección completa de las disposiciones legislativas expedidas desde la independencia de la republica*. 34 vols. Mexico City: Imprenta del Comercio de Dublan y Chávez, et al.
- Eron, Leonard D., and L. Rowell Huesmann
1984a The Relation of Prosocial Behavior to the Development of Aggression and Psychopathology. *Aggressive Behavior* 10:201-211.
1984b The Control of Aggressive Behavior by Changes in Attitudes, Values, and the Conditions of Learning. *In Advances in the Study of Aggression, Volume I*. Robert Blanchard and D. C. Blanchard, eds. Pp. 139-171. Orlando, FL: Academic Press.
- Flanet, Veronique
1977 *Viveré si Dios quiere: Un estudio de la violencia en la Mixteca de la Costa*. Mexico City: Instituto Nacional Indigenista.
- Fried, Jacob
1953 The Relation of Ideal Norms to Actual Behavior in Tarahumara Society. *Southwestern Journal of Anthropology* 9:286-295.
- Friedrich, Paul
1972 Political Homicide in Rural Mexico. *In Anger, Violence, and Politics*. I. K. Feierabend, R. L. Feierabend, and Ted R. Gurr, eds. Pp. 269-282. Englewood Cliffs, NJ: Prentice-Hall.
- Fry, Douglas P.
1986 An Ethological Study of Aggression and Aggression Socialization among Zapotec Children of Oaxaca, Mexico. Ph.D. dissertation, Department of Anthropology, Indiana University. Ann Arbor, MI: University Microfilms.
1987 Differences between Playfighting and Serious Fighting among Zapotec Children. *Ethology and Sociobiology* 8:285-306.
1988 Intercommunity Differences in Aggression among Zapotec Children. *Child Development* 59:1008-1019.
1990 Play Aggression among Zapotec Children: Implications for the Practice Hypothesis. *Aggressive Behavior* 16:321-340.
1993 Intergenerational Transmission of Disciplinary Practices and Approaches to Conflict. *Human Organization*. (In press.)
- Fry, Kathy M.
1989 Women's Status and Their Contribution to the Household Economy: A Study of Two Zapotec Communities. M.A. thesis, Department of Anthropology, Indiana University.
- Gibson, Thomas
1989 Symbolic Representations of Tranquility of Aggression among the Buid. *In Societies at Peace: Anthropological Perspectives*. Signe Howell and Roy Willis, eds. Pp. 60-78. London: Routledge.
- Greenberg, James B.
1981 *Santiago's Sword: Chatino Peasant Religion and Economics*. Berkeley: University of California Press.
1989 *Blood Ties: Life and Violence in Rural Mexico*. Tucson: University of Arizona Press.
- Hollan, Douglas
1988 Staying "Cool" in Toraja: Informal Strategies for the Management of Anger and Hostility in a Nonviolent Society. *Ethos* 16:52-72.
- Howell, Signe
1989 "To Be Angry Is Not To Be Human, But To Be Fearful Is": Chewong Concepts of Human Nature. *In Societies at Peace: Anthropological Perspectives*. Signe Howell and Roy Willis, eds. Pp. 45-59. London: Routledge.
- Huesmann, L. Rowell
1988 An Information Processing Model for the Development of Aggression. *Aggressive Behavior* 14:13-24.
- Huesmann, L. Rowell, L. Eron, M. Lefkowitz, and L. Walder
1984 Stability of Aggression Over Time and Generations. *Developmental Psychology* 20: 1120-1134.
- Humphreys, Anne P., and Peter K. Smith
1987 Rough and Tumble, Friendship, and Dominance in School Children: Evidence for Continuity and Change with Age. *Child Development* 58:201-212.

- Jorgenson, D.
1985 Transmitting Methods of Conflict Resolution from Parents to Children: A Replication and Comparison of Blacks and Whites, Males and Females. *Social Behavior and Personality* 13(2):109-117.
- Kearney, Michael
1972 *The Winds of Ixtepeji: World View and Society in a Zapotec Town*. New York: Holt, Rinehart and Winston.
- Konner, Melvin J.
1972 Aspects of the Developmental Ethology of a Foraging People. *In Ethological Studies of Child Behaviour*. N. Blurton Jones, ed. Pp. 285-304. Cambridge: Cambridge University Press.
- Mead, Margaret
1963 *Sex and Temperament in Three Primitive Societies*. New York: William Morrow.
- Montagu, Ashley
1978 Introduction. *In Learning Non-Aggression: The Experience of Non-Literate Societies*. Ashley Montagu, ed. Pp. 3-11. Oxford: Oxford University Press.
- Nader, Laura
1969 Styles of Court Procedure: To Make the Balance. *In Law and Culture in Society*. Laura Nader, ed. Pp. 69-91. Chicago: Aldine.
- Nash, June
1967 Death as a Way of Life: The Increasing Resort to Homicide in a Mexican Indian Town. *American Anthropologist* 69:455-470.
- Olweus, Dan
1979 Stability of Aggressive Reaction Patterns in Males: A Review. *Psychological Bulletin* 86:852-875.
1984 Development of Stable Aggressive Reaction Patterns in Males. *In Advances in the Study of Aggression, Volume 1*. Robert Blanchard and D. C. Blanchard, eds. Pp. 103-137. Orlando, FL: Academic Press.
- O'Neil, Carl W.
1969 Human Development in a Zapotec Community with an Emphasis on Aggression Control and Its Study in Dreams. Ph.D. dissertation, Department of Anthropology, University of Chicago.
1972 Aging in a Zapotec Community. *Human Development* 15:294-309.
1975 An Investigation of Reported "Fright" or a Factor in the Etiology of *Susto*, "Magical Fright." *Ethos* 3:41-63.
1979 Nonviolence and Personality Dispositions among the Zapotec. *Journal of Psychological Anthropology* 2:301-322.
1981 Hostility Management and the Control of Aggression in a Zapotec Community. *Aggressive Behavior* 7:351-366.
1989 The Non-Violent Zapotec. *In Societies at Peace: Anthropological Perspectives*. Signe Howell and Roy Willis, eds. Pp. 117-132. New York: Routledge.
- Paddock, John
1982 Antiviolence in Oaxaca, Mexico: Archive Research. Paper presented at the meeting of the American Society for Ethnohistory, Nashville, Tennessee.
- Robarchek, Clayton A.
1980 The Image of Nonviolence: World View of the Semai Senoi. *Federated Museums Journal (Malaysia)* 25:103-117.
- Romanucci-Ross, Lola
1973 *Conflict, Violence, and Morality in a Mexican Village*. Palo Alto, CA: National Press Books.
- Ross, Mark Howard
1986 The Limits of Social Structure: Social Structural and Psychological Explanations for Political Conflict and Violence. *Anthropology Quarterly* 59:171-176.
- Selby, Henry A.
1974 *Zapotec Deviance: The Convergence of Folk and Modern Sociology*. Austin: University of Texas Press.
- Smith, Peter K., and K. Lewis
1985 Rough-and-Tumble Play, Fighting, and Chasing in Nursery School Children. *Ethology and Sociobiology* 6:175-181.

- Sorenson, E. Richard
1978 Cooperation and Freedom among the Fore of New Guinea. *In* Learning Non-Aggression: The Experience of Non-Literate Societies. Ashley Montagu, ed. Pp. 12-30. Oxford: Oxford University Press.
- Steinmetz, Suzanne
1977 The Use of Force for Resolving Family Conflict: The Training Ground for Abuse. *Family Coordinator* 26: 19-26.
- Taylor, William B.
1972 Landlord and Peasant in Colonial Oaxaca. Stanford, CA: Stanford University Press.
- Ugalde, Antonio
1973 Contemporary Mexico: From Hacienda to PRI, Political Leadership in a Zapotec Village. *In* The Caciques. Robert Kern, ed. Pp. 119-134. Albuquerque: University of New Mexico Press.
- Washburn, Sherwood
1977 The Evolution Game. *In* Adventures in Anthropology. William J. Kennedy, ed. Pp. 20-23. St. Paul, MN: West Publishing.
- Whiting, Beatrice, and John Whiting
1970 Methods for Observing and Recording Behavior. *In* A Handbook of Method in Cultural Anthropology. R. Naroll and Ronald Cohen, eds. Pp. 282-315. Garden City, NY: Natural History Press.
- 1975 Children of Six Cultures: A Psycho-Cultural Analysis. Cambridge, MA: Harvard University Press.