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POST DISASTER CONSENSUS AND CONFLICT IN A TRADITIONAL SOCIETY: THE 1970 AVALANCHE OF YUNGAY, PERU [1]

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When disaster strikes, a community caught up in the crisis may undergo severe individual and collective stress both during and after impact. In coping with that stress and adapting to the conditions of crisis and hardship, people display distinctive patterns of social organization. These social organizational patterns are functions of the adaptive strategies developed to cope with the problems facing both individuals and society in general in the various stages of the disaster and its aftermath. The focus and mechanisms used to identify people socially for individual and collective action are crucial in understanding the nature of specific adaptations developed to cope with the problems of natural disaster.

For many years one of the more consistent findings in social research in human adaptation to natural disasters has been the emergence of approximate time-stage linked patterns of social cooperation and conflict in stricken communities. In a recent article, Quarentelli and Dynes attempt to isolate the conditions under which conflict and co-operation appear during and after major natural disasters in the United States (1976). Within this American context, the authors observe that their conclusions regarding the frequency of community cooperation in early emergency stages are cross-culturally consistent, while later stage post-disaster conflicts involve more variation due to specific socio-cultural conditions. The purpose of the present effort is to consider the immediate events and long term processes of a non-American natural disaster, the Yungay, Peru avalanche of May 31, 1970, and examine from a social organizational perspective the emergence of patterns of consensus and conflict in the crisis. This examination reveals both considerable cross-cultural consistency as well as some variation from the patterns of consensus and conflict seen in American disasters.

While generalization must be attempted wherever possible, it must also be recognized that natural disasters, as historical events, particularly in some areas of the world, present unique conditions which may require unusual or unique responses. Certainly, the amount of anticipation or preparation time is important in determining the nature of initial responses to the crisis of disaster. The kind and degree of anticipation, however, varies considerably with the context and nature of the event. There are some natural disasters, hurricanes, for example, that may be considered "anticipated" hazards because of predictable environmental factors; and internal adjustments and arrangements can be made to minimize their ability to create severe crisis in a society. In complex societies, agen-

cies and institutions are created to cope with the stresses occasioned by such crises. There are as well institutionalized means of systematically calculating the risk involved in occupation of a specific area which include means of mitigating the effect of recurring environmental dangers (Greaves, 1973).

However, it has been tragically proved, particularly in the last decade, that the problems of disaster impact and aftermath are compounded by the conditions of underdevelopment. A disaster can obliterate the fragile results of slow, tortuous efforts taken over many years toward infrastructural development. From an institutional standpoint, many Third and Fourth World nations, in their concentration on pressing development needs, have no disaster contingency plans and no specific institutions designed to take responsibility in the event of natural catastrophe [2]. Response to such an event, as happened in Peru in 1970, tends to be of an ad hoc nature. However, in a similar vein, Sjoberg has spoken of conditions of chronic crisis in reference to Third and Fourth World social structures as adaptations to "a continual reign of terror" (1962:361). Upon viewing the massive destruction after impact in Peru, many people spoke of the seismic events of May 31, 1970 as the culmination of "a four hundred year earthquake" (presumably beginning with the Spanish conquest of the area in 1533). In this context, there are some disasters anticipated or unanticipated, whose scale simply confounds preliminary adaptive strategies within the society's current assessment of risk.

The 1970 Peruvian earthquake which devastated the north central coastal and Andean regions of Peru was a disaster of precisely these proportions. The disaster took place in an area of the world all too accustomed to earthquakes and avalanches of considerable scale. The location of Andean settlements high above valley floors has been spoken of as one possible pre-Columbian adaptation to the geologic hazard of avalanche. Certain other adaptive strategies have been traditionally undertaken in the historic era, such as locating cities behind hills to protect them from avalanches from the unstable glaciated peaks. However, often economic necessity requires locating cities near the glacier-fed rivers which flow down from the mountains and are the natural paths followed by landslides. Other forms of earthquake mitigation, such as antiseismic construction methods and/or materials were developed long after construction of traditional highland cities or were too expensive for all but the most wealthy to adopt.

THE PRE-DISASTER SYSTEM

Yungay was the capital of the province of the same name in the department of Ancash in north central Peru. Yungay province is one of six located in the narrow intermontane valley known as the Callejon de Huaylas. The callejon (corridor) is in effect one of the valleys of the Santa River which bisects it on its northward course before turning sharply west to the sea. The western slopes of the valley rise abruptly to the arid heights of the Cordillera Negra (black chain), a range of rugged blunt peaked mountains reaching as high as 16,000 feet. Although the rise is more gradual, the green foothills of the eastern slopes eventually give way to much steeper inclines which culminate in the perpetually glaciated snow peaks of the Cordillera Blanca (white chain). The highest peak of the range is Huascaran, a twin peaked colussus whose northern summit reaches 21,860 feet and whose southern peak attains 22,190 feet, both of which overlooked the city of Yungay. Many of the other peaks in the Cordillera Blanca are over 18,000 feet and virtually the entire 125 mile range is snow and ice-capped. The upper reaches of the Cordillera Blanca peaks are very sharply angled, ranging from 45° to nearly 90°, and many of them are dangerously unstable. The north peak of

Huascaran is probably the most unstable ice-capped zone of the entire range. The city of Yungay with its 4,500 inhabitants nestled in the curve of a hill which had protected it from a landslide from the north peak of Huascaran which had buried the neighboring town of Ranrahirca in 1962.

Although Yungay was slightly north of the geographic midpoint of the valley, it was traditionally considered to be a central place for the region. In addition, as capital of its province, the city was the seat of most of the important institutions for the province. The vast majority of the province's educational, economic, political and religious institutions were located in the city. The population of the province, indeed of the entire region, is composed primarily of a small, powerful urban elite of land, commercial and professional interests, a small urban service and economic sector and a vast rural peasant population engaged in traditional agriculture.

Land and society in the province were dominated by the largely urban dwelling wealthy class while the vast peasant population was involved in the labor intensive, small scale agriculture of hacienda lands or minifundia holdings. Yungay agriculture was predominantly subsistence oriented with some small surplus available for exchange, usually in the market of the city. The Indian sector of the peasantry, by far the largest, was composed of monolingual Quechua speakers whose culture differed markedly in many respects from that of the dominant local version of the national society. However, a small percentage of the peasant agriculturalist population was composed of an upwardly mobile, western oriented group often referred to as *Cholos* who occasionally combined agriculture with small commercial ventures or artisan skills. In many respects this group directed much of their attention and ambitions as much toward the city, as toward the internal life of their community of residence.

Thus, the city of Yungay serviced not only an urban population, but was also a regional center for a large rural population. A peasantry four to five times the size of the urban population depended on the city for marketing purposes, as the ritual center for a complex politico-religious authority system, and as the locus of political and administrative power for the province. The peasants of Yungay province were tied to the city by social and ritual ties of peonage and *compadrazgo* (ritual co-parenthood), by the religious links of the church and the fiesta system, by the political links of district and provincial government and by economic participation in the large and thriving land and labor factor as well as commodity markets. The city, in turn, exploited the peasantry for their agricultural produce and labor services and as consumers for the economic, religious and administrative services of the urban institutions.

THE DISASTER

On May 31, 1970, a massive earthquake rocked the coast and Andean regions of north-central Peru. It registered 7.7 on the Richter scale and unleashed such devastation that it has been referred to as the worst natural disaster in the history of the western hemisphere. While incredible damage occurred in the coastal areas, the most catastrophic effects of the earthquake were felt in the Callejon de Huaylas. Almost all of the urban areas in the traditional highland valley were reduced to piles of adobe rubble and suffered extremely high mortality [3]. The center of the destruction was the city of Yungay, which was obliterated by an immense avalanche loosed from the north peak of Huascaran by the tremors of the earthquake.

The thirty-first of May is the feast of Corpus Christi. The day had been clear and warm and the town of Yungay was crowded with peasants, in town for Mass and marketing, and tourists, visiting the highland city so well known for its picturesque traditional

highland atmosphere. The plaza of Yungay was one of the best vantage points in the entire valley from which to view and photograph the imposing presence of Huascaran as well. Yungay on this particular Sunday was enjoying all the normal bustle of its market and church activities. There was an air of expectancy among the children and younger people because the Verolina Circus would be giving an afternoon performance in the soccer stadium at the edge of the city. As the afternoon wore on, the town was calm and quiet. With many of the children enjoying the circus in the stadium, the adults were sitting in the sun in the palm shaded plaza or relaxing at home. Many had tuned in their radios to the World Cup soccer matches being broadcast from Mexico City.

The earthquake began at 3:23 p.m. with a gentle swaying motion for a few seconds followed by violent lateral tremors for about 45 seconds, making it difficult to walk or run. The adobe buildings of Yungay began to crumble after about 15 seconds of the heavy tremors. Red roof tiles rained dangerously to the ground as the whitewashed walls of Yungay's homes trembled violently in the quake, some crashing into the narrow streets, and others collapsing inward upon their residents. People were thrown to the ground and were quickly enveloped in debris and clouds of thick dust thrown up by the shaking earth and the falling buildings. The movement of the quake then began a vertical motion and the rain of debris and destruction increased. Many people in Yungay sought shelter in the church, the largest building in town. Others ran from their collapsing houses to the main plaza hoping to avoid the rain of tiles from the high roofs in the center of town. Some, all too few, sensed a further danger after the final tremors and began to climb the hills surrounding the doomed city. Still others, who had not been trapped by fallen structures, ran to cemetery hill, the only high ground in the vicinity of the central area of the town.

The new and greater threat soon became apparent in the form of a deafening roar of wind, and a lashing hail of tiny stones, hurled by the force of displaced air from the mass of an oncoming avalanche. The violent tremors of the quake had shaken loose a gigantic slab of ice and rock about 800 meters wide and more than a kilometer long from the sheer northwest face of Huascaran at an estimated altitude of between 5,500 and 6,500 meters. This immense mass, constituting more than 25 million cubic meters of ice and rock at its source, dropped almost a vertical mile before colliding with a lower glacier and careening down the valley at a velocity which reached a top speed of 435 kilometers per hour, picking up in its way huge masses of morainal material and hurling literally thousands of boulders, some weighing thousands of tons, down into the valley. The momentum of the slide carried it the 16 kilometers from its origin on Huascaran to the valley floor and the city of Yungay in less than four minutes. It was due primarily to the extreme velocity of the avalanche that Yungay was buried. The Yungay lobe of the avalanche was formed when the mass of ice, rock and mud hurtled over a ridge some 200 meters high which separated Yungay from the main lobe of the avalanche which followed its original course over Ranrahirca. Eyewitnesses report seeing a "wall of debris as high as a ten story building" loom suddenly over the ridge and then crash down upon the town, enveloping it totally, consuming everything in its path on its descent to the river below the town. All that remained of Yungay some four minutes after the quake had ceased its tremors were four palm trees (of the approximate forty-eight) where the main plaza had been, a group of survivors huddled at the base of the statue of Christ on the top of the destroyed cemetery hill, some 200 terrified children and a few adults in the half destroyed stadium and an immense mass of dull grey, viscous mud, interrupted by

chunks of ice from the glacier and huge granidiorite boulders. The total volume of ice, mud and rock which descended that day from Huascaran upon Yungay, Ranrahirca and the Santa River is estimated to be approximately 50 million cubic meters (Erickson, Plafker and Fernandez Concha, 1970:1–12).

While it is difficult to establish any specific pattern of behavior of the people caught up in this horror, the accounts of survivors provide a general idea of what occurred. In general, three kinds of responses were elicited by the onset of the quake and avalanche. Many people said that they felt that the day of judgment had arrived. Friends and families knelt, embracing each other, amidst the fury of the destruction and resigned themselves to death. A few of these people survived the initial destruction of their homes and were able to escape the oncoming avalanche by running to high ground after the earthquake had stopped. The second pattern which emerges from survivor accounts consists of those who attempted to aid other people. Some perished in their efforts and some survived. For example, one individual who was in his car at the moment of impact began picking people up as he drove toward the outskirts of town. The third general behavioral response consisted of flight, plain and simple. The danger of avalanche was well known to Yungainos since the neighboring town of Ranrahirca had been buried by a similar landslide in 1962. Many people, including those who had been with their families, simply began to run towards high ground. Others were awakened to the danger of avalanche by the warnings of other people and began their flight, either toward the high ground of the cemetery or to the slopes of the surrounding hills. One phrase in particular stands out in the narrations of those who simply fled; the loss of "my sense of compassion, of pity" (Zabaleta Figueroa, 1970:37).

In this moment of crisis of extreme severity, those who had resigned themselves to die, did so in the context of their families. Those who helped, or thought to help, concerned themselves first with their families. Many died in the futile attempt to extract their loved ones from the rubble before the arrival of the avalanche. Other people who aided their fellows did so largely in the progress of their own escape. The primary social focus in these moments of extreme crisis seemed to be on the self and family. During many initial emergency situations, according to Quarantelli and Dynes, "... while there is considerable anxiety about the welfare of family members and other relatives, much rescue activity is directed toward those whose social tie is simply that of another human being in trouble" (1976:143). The relatively scant data we have for this kind of altruism during the Yungay impact should not lead us to any conclusions regarding cultural differences. The lack of preparation (none), the speed of onset (elapsed time from first tremor to total obliteration was approximately four minutes), the difficulty of rescue conditions (most of the population was trapped in the rubble of their homes) and the overwhelmingly destructive power of the disaster agent demonstrate clearly that the only rational response in such a situation was flight. There is also the likely possibility that the evidence for greater altruism was buried with those who engaged in it. Again, from the standpoint of rational behavior this lack of evidence for greater altruism is understandable in that there was little hope for the community and role obligations beyond those associated with family (and even those in many circumstances) shrank to insignificance in the face of the oncoming holocaust.

THE IMMEDIATE POST-IMPACT PERIOD

The moments following the death of Yungay are described by survivors as a ghastly silence, disturbed only by the distant and receding rumble of the avalanche swollen river

proceeding northward to further destruction. While some survivors were immobilized by the shock, within minutes others had turned to aiding the injured and searching for wounded in the viscous mud of the avalanche. A small number of people, less than a dozen, miraculously survived the full impact of the avalanche and were saved from suffocation by the rapid action of other survivors.

As evening descended, the entire earthquake zone of north central Peru continued to shudder under the impact of numerous and violent aftershocks. In the shattered valley of the Callejon de Huaylas, survivors dispersed into the hills surrounding their destroyed cities. Near Yungay, the survivors began clustering in two groups, in Aura just to the south and in Pashulpampa, just to the north of the buried city. The subprefect, the maximum political authority of the province, and one of the town's five physicians had escaped the avalanche and had taken shelter in the lee of a large hill in Pashulpampa. The subprefect assumed immediate responsibility. A number of committees were formed among the able-bodied survivors, for the acquisition of meat, the acquisition of vegetables, a commission for the construction of shelter and a commission to nurse the wounded. The subprefect ordered all the animals in the area divided in two groups: those with surviving owners and those without owners, and therefore, immediately available for use. Food was scavenged from the destroyed houses in peasant communities and Indian peasants descended from their hillside hamlets with offerings of food from their own meager surpluses.

Over in Aura, the mayor of Yungay, who had also survived, assumed responsibility for obtaining adequate water and food supplies for the survivors grouped in that location. In addition to conserving, boiling and bottling water, and prohibiting sales and price hikes in the few stores left in that suburban settlement, the mayor organized seven committees of four persons each who were in charge of the communal cooking in the five different sectors of Aura. Each of these committees was given the responsibility of obtaining and cooking food for everyone in that particular zone of the town. Both in Aura and in Pashulpampa owners of crops or animals readily donated them for food for all survivors.

Both Aura and Pashulpampa within hours of the disaster began attracting scores and soon hundreds of victims from both the urban and rural sectors. However, the fate of Yungay and the suffering of the survivors was unknown to the outside world. The entire area of the Callejon de Huaylas was so enveloped by massive clouds of dust raised by the earthquake that it took four days for the outside world to ascertain the fate of Yungay and send the first assistance. All roads to the valley had been destroyed by the earthquake and the dense clouds of dust obscured any aerial view of Yungay's fate. In the interim period the growing number of refugees in both Aura and Pashulpampa huddled in the frigid Andean nights, protected only by makeshift cornstalk shelters and any blankets which could be found in the peasant communities nearby. During the days the survivors busied themselves in the tasks of collecting food and water, building more shelters, and tending the wounded. The subprefect also ordered clear areas not far from Pashulpampa to be marked by strips of red and white colored paper to designate a landing area for the helicopters which could be heard, but not seen, passing overhead.

In short, the immediate post-impact period in the Yungay area was characterized by considerable social solidarity and cooperation. The crisis had an immediate status-leveling effect on the nacent community of survivors which it had created. A sense of brotherhood, cutting across both class and

ethnic lines, prevailed as Indian and *Mestizo,* lower and upper class, collaborated in the collective efforts to obtain immediate necessities. Both the subprefect and the mayor stated that in this initial period of two to three days there was a great respect for their offices and a heightened spirit of unity and common identity. "We are all brothers," was the characteristic phrase during this time and the degree of organized, purposeful activity on behalf of the community was ample demonstration of the survivors' adherence to such an attitude. People implicitly felt the need for unity and cooperation of all people if they were to solve the problems which faced them in the immediate aftermath. The individual faced problems which could not be solved by the individual alone. In fact, since virtually all individuals faced the problems of shelter, warmth, clothing and food, they became community wide problems with solutions backed by community consensus and effort. Such behavior is not at all atypical of disaster victims in many cultural contexts. According to Turner, this all-encompassing sense of brotherhood constitutes both an ideological confirmation and a strong motivation that all individuals in the community will contribute their efforts to the tasks necessary for the survival of all (1967:62). Often, much, if not most, of the immediate work of rescue and relief operations are dealt with in an informal fashion by the victims themselves before outside assistance arrives (Fritz, 1968: 205).

As time wore on in the days prior to any communication or aid from the outside world, the stress began to tell on the past-impact solidarity of the survivors. More and more people, urban survivors from the cemetery and hillside refugees, and rural people whose homes had been demolished in the earthquake began gravitating toward Pashulpampa where the subprefect and the doctor were in charge. When the first helicopter landed some four days after the avalanche, there were more than three hundred people gathered in Pashulpampa, including wounded and many children from the half buried stadium where they had been watching the circus. With the advent of such a large number of people, more and more animals had to be slaughtered to feed them. Some animals whose owners had survived in Pashulpampa were being used to feed the population. One violent confrontation occurred when one of the authorities ordered the slaughter of a steer whose owner was not only alive and present but had not given his permission. Concepts of personal private property, which had literally disappeared right after the impact, began to be asserted again. This violent exchange between the authority and the owner signaled the beginning of the end of the post-impact solidarity.

The leaders of the growing camp also perceived that urban survivors were being quickly outnumbered by rural refugees. Consequently, the leaders undertook a project to identify and classify each individual in the camp. Included in this list and considered as *sobrevivientes* (survivors) were all peasants whose homes and communities had been destroyed by the avalanche as it coursed its way down the valley toward Yungay and Ranrahirca. Thus, in Pashulpampa everyone acquired a disaster identity and victims of the avalanche were differentiated from victims of the earthquake only. This differentiation was to take on increasing importance in the social organization of the various adaptive strategies of the survivors in subsequent months. In short, an in-group, out-group perception in terms of suffering and deservedness of aid appeared within the camp.

THE EMERGENCY AID PERIOD

The scope of the Yungay disaster was not known to the outside world for several days. Finally on the fourth day, the dust had cleared sufficiently for helicopters and other aircraft to get a view of the area around Yungay and

begin landing. The helicopters landed with food and blankets and ferried out the wounded and small children. By June 5, 70 tons of emergency supplies had been parachuted into the entire valley by the Peruvian air force and over 400 injured people had been evacuated (AID, 1970:263). However, the problem of food supplies was scarcely alleviated for the growing number of people in Pashulpampa. For about two weeks after impact the peasants from the Yungay hinterland continued to bring in their scant surpluses and give them to the survivors, but this soon terminated as the amount of aid increased. About a month after the disaster approximately 5,000 family camping tents were distributed throughout the valley. With the arrival of substantive forms of aid, the last of the spirit of interclass and ethnic group unity and brotherhood which had characterized early self-help efforts disappeared. The distribution of aid, as well as being divisive between the contingents of survivors in Aura and Pashulpampa also reawakened the sharp lines of social and ethnic differentiation between the Indian peasants and the middle and upper class townspeople. Essentially, the problem in the emergency aid period was first to make sure that one's own needs were properly taken care of and second to see that the interests of one's social group were being attended to or secured. Conflicts tended to be class or individual-oriented.

The argument that "the Indians never had anything to begin with, so why should they get help now?" was frequently heard among middle and upper class survivors. A DESCO preliminary report by Montoya, filed a month after the disaster, quotes an urban survivor:

> The Indians are those that are benefiting most from the aid. We, the decent people of Yungay, are only about 100 persons. The rest are all Indians. They ought to give more to us, the Yungainos who have lost everything. The Indians have everything they need, and besides, they are accustomed to live as they do (1970:8) [4].

According to Montoya and other witnesses, most of the aid was in fact going to the middle and upper sectors of Yungay Norte rather than to the rural Indians. Montoya's report quotes an individual from the neighboring village of Punyan:

> We from Punyan went to the subprefect to ask him for some aid and he told us to eat dirt, to eat shit, because there was no food for us, because they say there is not enough for the peasants (1970:8).

Efforts to ascertain the origin of everyone in Pashumpampa were resumed in order to be able to differentiate in the distribution of aid between *sobrevivientes* (survivors) and *damnificados* (damaged or injured in the earthquake only). Immediately after the formulation of these categories, an additional referent became attached to these concepts – that of relative deservedness of aid in the eyes of the community or urban survivors or those who ultimately manipulated the distribution of aid. Urban survivors, who had lost "everything" in the avalanche, saw themselves as far more deserving of aid than the peasants who suffered only the effects of the earthquake. In the eyes of the urbanites, there were very few survivors of the city in the camp at Pashulpampa. Most who claimed urban origin were considered imposters. In fact, many rural people had hastened to adopt Yungaino urban identity when possible since they felt, with some reason, that they might be discriminated against in the distribution of aid due to rural origins and non-*sobreviviente* status. In a stratified society, such as highland Peru, aid which is perceived to be distributed along egalitarian lines runs against the purposes of the middle and upper classes, which is ultimately the maintenance of relative class position (Barton, 1970:308–315). Any aid that rural people received was therefore not only undeserved, but dishonestly

accepted in the eyes of urban survivors and any aid that townspeople received was the result of graft and influence in the eyes of the humbler people. However, even within the same class, differential impact and equal aid gave rise to conflict. Verbal and occasionally physical expression of these hostile attitudes did not go unexpressed in the context of camp life in its first six months.

Much of this pattern of post-disaster conflict conforms to patterns of similar phenomena as described in the literature on immediate post-disaster behavior. In the immediate post-disaster situation, there tends to be a heightened degree of social cooperation and unity in initial emergency activities. Groups which would otherwise maintain strict social distance close ranks and cooperate for the good of the totality (Sjoberg, 1962:369). However, once the major crisis has passed, it is common for conflicts within the system to reappear, often in exaggerated form, which may ultimately be symptomatic of incipient change brought about by the disaster (Bates et al., 1963: 113). The disaster has thrown the system of status relationships out of balance as is illustrated in eloquent fashion by the *sobreviviente* woman who complained: "The people of the heights, the Indians, never had anything, so why should they get help? On the other hand, we, the real Yungainos, have lost everything, so we should get more."

The initial efforts of the emergency aid period and many of the continuing efforts for rehabilitation and recovery were in partial violation of the traditional status arrangements and produced and exaggerated tensions and frictions which had already existed within the system. The internal social conflict in which individual and class interests sharply split Yungay society increased throughout the distribution of food, clothing and household articles, finally reaching its pinnacle during the distribution of the two-year provisional housing program. Although there was no clear demarcation between the emergency aid and rehabilitative stages, the rehabilitative system was firmly established when the housing program was implemented some six months after the disaster. The conflict generated by this project represents the final flaring of paramount individual and class interests before the entire population coalesced once again in confronting a further threat to the entire community.

The Peruvian Ministry of Housing organized a plan for two-year provisional dwelling units, measuring 6 by 30 meters, divided into 8 to 10 "I" or "L" shaped rooms for a maximum of 60 residents per unit. The shelters consisted of waterproof composition board walls attached to metal frames with interior dividing walls of ¼ inch plywood. The registration and assignment of the provisional housing caused great dissension in the community. The social workers assigned to the project distributed the housing on an egalitarian first-come, first served basis which immediately conflicted with traditional patterns of social stratification and status preferenciality. The issue was brought to a crisis when a local official of some importance informed the social workers that he did not want any peasants in the encampment and that he himself wished to choose the location of his housing. He was told that he would receive a house where there was a vacancy and that all those people with documents certifying their refugee status would receive a house in similar fashion, whether they were peasants or not. "We are all equal in the eyes of God," he was told by one of the social workers. Whereupon he responded with finality, "We are not equal!" Whenever the social workers indicated the essential equality of all human beings in response to complaints of being located next to people of humbler social origin, the response by urban survivors was invariable. "No somos iguales" (We are not equal) repeated again and again adamantly.

Notwithstanding the uproar and conflict over the housing question, possession and

occupation of a housing unit came to signify the concrete substance of one's identity as a Yungaino. And, despite the bitter protests, a form of housing integration eventually became operative in the camp. The dispute over housing was indeed the last overt expression of serious internal conflict which was to flare in the refugee camp at Pashulpampa for a considerable period of time. The social conflicts and the focus on individual and narrower class interests which had appeared in the period of emergency aid became submerged, if by no means resolved, in confronting the problems which threatened the growing community in the establishment of the rehabilitative system.

THE REHABILITATIVE SYSTEM

The first immediate demographic effect of the disaster, apart from the massive mortality, was to split the surviving population of Yungay into two different camps, Pashulpampa and Aura. With the advent of aid, a sense of competition for these scarce resources developed between the two settlements. When Pashulpampa became known as the aid center for the province, rural refugees flooded the area, threatening to overwhelm the resources that the national government had established there in the emergency period. Consequently, a group of about two hundred people was moved over to a tract of land about one kilometer to the south of Aura. Shortly thereafter another group of survivors were further relocated at a location called Tingua, some 15 kilometers south of Yungay. Thus, there were within weeks of the disaster four separate populations, all eventually claiming the name of Yungay in one way or another. The conflict soon became sharpest between Pashulpampa, by then known as Yungay Norte, and Tingua, whose residents claimed that the government had promised them that the new capital of the province would be established there. The people of Yungay Norte maintained that since they had the majority of urban survivors as well as greater proximity to the old city, they were entitled to be the new provincial capital. Indeed, the survivors, urban and rural alike, were rapidly acquiring a deeply felt allegiance to the site at Yungay Norte. The disaster and the site's proximity to their buried city were important factors in the rapid resurgence of strong community identity. Yungainos were more than aware of the centrality their tragedy had acquired in the general phenomenon of the holocaust. They knew that the name Yungay had become famous, appearing in the major newspapers and magazines of the world after the disaster. The avalanche had made Yungay of all the stricken cities significant in a world context and the uniqueness of their tragedy, for all its horror and pain, created a deep collective consciousness among the survivors in Yungay Norte. The new community carried old Yungay and the disaster, always referred to by them as "*la tragedia*," at its cultural core. The strong community identity, closely linked to their status as victims of a tragically lost community, places the Yungainos along with survivors of other disasters in a pattern of behavior which appears to be cross-cultural (Quarentelli and Dynes, 1976:143).

Ultimately, it was in Yungay Norte that the only major efforts at providing a concrete rehabilitative system were attempted. However, the survivors faced a continuing ordeal in that the rehabilitative system at that time did not guarantee stability or permanence for the settlement. Yungay Norte offered protection from further landslides from Huascaran, immediately to the south, and from Huandoy, immediately to the north. However, the triangular area formed between the avalanche from Huascaran and the steep-sided canyon descending from Huandoy, the site of an avalanche in 1725, was not large; and the authorities speculated that if the capital were established there, it would soon

outgrow the safe area and spill over into dangerous zones.

Eventually, it was projected by the authorities that the new capital of Yungay would be relocated at Tingua. The reaction to this project was immediate and definite rejection on the part of the urban survivors residing in Yungay. Almost immediately within notification of these intentions, a variety of hand-painted signs proclaiming "Yungay Stays Here!" and "Yungay is Reborn Here" appeared on the road leading into camp. Aid personnel attempted to explain at length the need for such a step and declared that all services and institutions of the old city would be fully reconstituted in Tingua, but to little avail. As Quarentelli and Dynes indicate, the community identity resulting from a further exterior threat led to a concomitant hostility toward outsiders (1976:144). Although these outsiders came to assist the survivors, they were seen as insensitive to the practical and emotional issues of the disaster and the relocation problem. The Yungay Norte survivors exhibited a sense of moral outrage that they would be forced to abandon the site of their lost city. Community leaders exhorted the people with warnings of the dangers of abandoning the dead and of faithlessness to the traditions of their city if they allowed it to be relocated elsewhere. "The glorious tradition of Yungay must be carried on here in Yungay Norte or the dead shall have been betrayed. It is our duty as survivors to realize the continuity of Yungay here!" Survivors made common cause with the dead and the past in the creation of an in-group consciousness which could not be shared by outsiders no matter how well-meaning their intentions.

Resistance which began with the core of urban survivors quickly spread to the new peasant immigrants, and ultimately to the peasant hinterlands of Yungay, forming an almost monolithic bloc of opposition to the government relocation plans. Indeed, the mobilization of the immigrant masses in support of the Yungay Norte location became instrumental in the re-assumption of power by traditional elites. Survival as a socio-cultural entity and as the paramount urban center of the province became the *raison d'etre* of the population. The first organized response, apart from the hastily painted signs, took the form of a town meeting which acquired such a threatening tone that the subprefect called in outside police forces to disband it. From that point on, Yungaino leaders, both formal and informal, began to marshall their arguments and activate the formal and informal channels to influence and power to resist relocation. Yungainos who had reached prominent positions in the public and private sector in the national capital were visited by formally elected delegations of survivors to enlist their support against relocation. Delegations visited at their own expense the offices of the president and numerous ministers in Lima. Within the province the support of the district mayors was solicited and the peasantry was warned that their church and their market were to be taken from them. Public events such as dances, pageants, and kermesses (an outdoor party with food and dancing), were carried out in the dismal environs of the survivor camp to raise money for the cause. The relocation project clearly constituted a challenge and a threat to Yungaino identity and united the badly fractionated population in a common cause to resist resettlement. There was a concerted effort on the part of all the Yungaino leaders to recover all the administrative, educational, economic, religious, and governmental institutions of the old city before the relocation project could be activated.

The general population of the camp, particularly the surviving leaders of the old urban elite, threw themselves into the reconstruction effort with great determination. Meetings were held, responsibilities were delegated and the reconstitution of institutions and services in Yungay Norte was begun almost imme-

diately after the disaster. Such things as market activity, civil authority, religious services, educational institutions and potable water were all operating in the camp within three months of the tragedy. Within a year's time, the camp at Yungay Norte had achieved through their own efforts or through circumstances the establishment of all but one of the major institutions and functions which the destroyed provincial capital of Yungay had possessed. In one year Yungay Norte had become a city of approximately 1,800 people, with a fully functioning local and provincial governmental structure; an active economic life; renewed, if somewhat altered, rural-urban relationships with the peasantry; a ceremonial center for two faiths; an educational center with a high school, two primary schools, and a night school; and a marked sense of purpose and community.

The government, in proposing relocation, had become the new adversary, the new disaster, in the perception of the community. The relocation project, as well as the confusion and administrative difficulties of the aid distribution in the first year in Yungay spawned the bitter refrain, "First the earthquake, then the avalanche... and then the disaster." In effect, the crisis of the disaster had been extended on into the rehabilitation period by the new threat to the integrity of the community. While initially this perceived governmental hostility was attributed to the reconstruction authorities' insensitivity to the Yungainos' plight, many of the more politically sophisticated survivors began to feel that Yungay's traditional association with APRA and its anti-military stance was responsible for the relocation policy [5]. The injection of an ideological component to post-disaster conflict is also a common occurrence in the context of American disasters (Quarentelli and Dynes, 1976:149). The perceived ideological conflict tended to increase the sense of isolation and abandonment which plagued the survivors as well. It must be noted, however, that the hostility almost uniformly expressed toward Peruvian nationals, with the exception of local representatives in assistance and reconstruction work, was not apparent in attitudes toward the many foreign individuals and agencies working in the disaster zone. Expressions of gratitude and praise for foreign assistance, regardless of the ideology of the donor nation, were commonly heard throughout the area. In the American context, gratitude and praise is also the reward of local workers while state and national disaster aid organizations are often criticized for their efforts (Quarentelli and Dynes, 1976: 148). However, the sense of international brotherhood engendered by the massive foreign aid after the Peruvian disaster is not likely to find an American parallel. In the international disaster aid network, the United States is always and exclusively a donor nation.

In no sense would it be unreasonable to attribute the rapid growth and recovery at least in part to the threat posed by resettlement. The threat of relocation by governmental entities, definitely perceived as outsiders, stimulated a remarkable sense of common purpose which was demonstrated time and again in solidarity and cooperation on projects relating to reconstruction and reinstitutionalization of the provincial capital of Yungay. The goal was to confront the government's resettlement project with the *fait accomplis* of a re-established and firmly rooted provincial capital with an equally rooted and determined population. Although it took them more than two years, they succeeded.

RE-ESTABLISHMENT OF A REGULARIZED COPING SYSTEM

Once the battle against relocation had been won, the population of Yungay Norte, now known simply as Yungay, was assured of survival as a socio-cultural entity. However, even though this societal goal has been achieved,

the sense of a common destiny and fate because of the tragedy of the disaster, still inspires considerable social unity in support of community projects. The call for a glorious future to match the glorious past of Yungay will still awaken considerable cooperative efforts on behalf of the community. However, with the assurance of survival of the community, the individual and interest group concerns of daily living have become the major motifs of social interaction and organization. The community is by no means a normal highland city and perhaps it never will be because of the unique tragedy which it has suffered. The city is still struggling to reconstruct itself some eight years after the disaster, but it struggles with the assurance that it will persist through time as a city. It suffers perhaps more severely than others from serious internal problems relating to processes of social change put in motion or exaggerated by the disaster. New permanent housing programs have aggravated social relations once again and land and commercial interests are also riddled with conflict as an essentially new and untried population attempts to cope with realms of experience made available by mortality induced rapid social mobility. This rapid mobility has stimulated new and bitter competition with the interests of traditional elites and has sharpened individual expressions of class differences. The focus of social identification has returned again to the individual as he attempts to reconstitute and rebuild his own personal community and future. In short, once the community was assured of survival, people could attend to individual interests again.

The Yungay experience, while unique in many respects, confirms the finding of other students of the social aspects of natural disasters that the time phases of a disaster and its aftermath, although difficult to demarcate accurately, are characterized by varying patterns of social identification and interaction (Wallace 1957). The patterns alter in relation to the problems facing both individuals and society during the lengthy processes of recovery and reconstruction. During the immediate and long-term contexts of the crisis the population of Yungay fragmented and coelesced a number of times around specific problems crucial to the survival of both individual and society. The separation and coincidence of individual and societal concerns at different times became crucial to the survival of both. The Yungay case demonstrates the importance of understanding the shifting foci and modes of social identification for the study of individual and societal adaptation to the severe crisis of natural disaster, both at impact and in aftermath.

NOTES

1 This article is a version of a paper presented at the 76th Annual Meetings of the American Anthropological Association on December 2, 1977 in Houston, Texas. The collection of data on which this article is based was carried out with the survivors of the Yungay avalanche and rural refugees in 1970–71, 1974 and 1975. The author resided in the tent encampment and later barracks city from October of 1970 to September of 1971. In addition, another trip was made to Yungay in November–December of 1971 while working for the Peru Earthquake Relief Committee. The methods used in gathering the materials for this study included the traditionally anthropological approach of participant observation supplemented by a number of other techniques. Open-ended, rather free form interviews were held with several hundreds of the Yungay camp residents. A formal questionnaire was administered to 68 (of a total 447) heads of households. Another questionnaire on community organization was undertaken throughout the entire province with 43 of the approximate 70 communities. In addition, a basic census of the Yungay camp was carried out in April of 1971 as well as a brief census of the Yungay market participant community. Subsequent research of a follow-up nature was undertaken in the summers of 1974 and 1975. Support for the initial research period was provided by the Midwestern Consortium for International Activities. Support for the subsequent research trips came from the University of Florida and the Society for Health and Human Values respectively.

2 In fairness, it must be pointed out that since the great earthquake of 1970, "the Peruvian government has developed one of the best organized prevention, prepared-

ness and relief systems in Latin America." (Jean-Paul Levy, Chief, Prevention and Planning Section, United Nations Office of Disaster Relief Coordination: Personal Communication, 1975).

3 For additional social and behavioral science material on the great Peruvian disaster of 1970, see Bode (1974, 1977), Doughty (1971). Dudasik (1976, 1978), Janney, Masuda and Holmes (1977), and Oliver-Smith (1974, 1977a, 1977b, 1979).

4 DESCO, Centro de Estudios y Promocion del Desarrollo, Avenida Republica de Chile 741, Lima, Peru.

5 APRA, *Alianza Popular Revolucionaria Americana*, The American Popular Revolutionary Alliance, a Peruvian political party which enjoyed some support among certain sectors of the Yungay elite.

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