Patterns of Death: Descriptions of Geographic and Temporal Patterns of Rural State Terror in Guatemala 1978-1985

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Three types of state terror activity in Guatemala for the years 1978 through 1985 are analyzed spatially and temporally in order to discover their patterns. Analyses of inter- and intraregional patterns found that patterns exist and are location specific. These patterns generally conform to the explanations offered by the social science literature about this period in Guatemala's history, and are thus believed to demonstrate state behavior. Further support for suggested explanations of these patterns, as well as new hypotheses, are achieved by analyzing the spatial relationships between cases of state terror and geographic attributes with a Geographic Information System (GIS). For example, the relationship between terror and agro-export regions supports the view that farm labor in the agricultural export sector was a major concern for state security forces. GIS promises to be of further use to aid in explaining patterns of state terror. [PSRQ 1993;3:67-78]

INTRODUCTION

Prelude to State Terror

The Central American country of Guatemala has the most unequal land and wealth distribution in the western hemisphere. In a country where two-thirds of its 7 million citizens worked the land in 1979, 2% of the farms contain 80% of the arable land, whereas 54% of the farms, the smallest and poorest, are established on only 4% of the land [1]. Not surprisingly, 55% of the population could not afford the minimum daily protein and calorie requirements [2]. The situation today is the same, if not worse, and the failure of governments in Guatemala to address these and other inequities fuels public protests for socio-economic change. Since the Spanish conquest of Mayan Indians in 1524, Guatemalan rulers have violently repressed such protests [3-5]. Systematic and

1051-2438/1993/0302-0067$03.00/0

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A version of this paper was contributed to the International Symposium on Torture in Guatemala, November 13-15, 1992, sponsored by the Guatemala Human Rights Commission/USA and held at The Catholic University of America, Washington, D.C.

widespread state terror did not start, however, until after the 1954 CIA-organized coup against the reformist president Jacobo Arbenz [6]. Over 38 consecutive years of repressive, military-dominated regimes followed, and all regimes were supported by U.S. economic or military aid, or both, and private U.S. investment [7-10]. The latest government, presided over by Ramiro de León Carpio, confronts a long, repressive tradition.

The National Crises and the Reaction of the State

State terror was at its most active from 1978 through 1985, during which time demands from civilian labor, peasant, religious, and student movements to resolve socio-economic inequities reached their zenith [11-13]. The growth of a revolutionary guerrilla movement also peaked during these years in the western half of Guatemala, where guerrillas based their strategy on organizing the indigenous population in the highlands and the wage laborers on coastal agro-export farms. Both movements, the organizing efforts and the demands to resolve socio-economic inequities, were perceived by the government, military, and powerful business and banking interests as communist threats to national security [1,10,14]. State security forces were charged with suppressing these movements and as a consequence, from 1978 through 1985, these forces killed about 130,000 of the movements' supporters or suspected supporters [15]. Terrified of being victimized next, supporters withdrew or distanced themselves from the movements. Today, security forces continue to kill citizens who attempt to resolve socio-economic inequities and defend human rights.

The Nature of State Terror

State terror tactics used in Guatemala from 1978 through 1985 are still used today. They included violent murders and "disappearances" (kidnappings whose victims never reappear) and cadaver "drop-offs" (discarding the bodies of kidnapped victims) [11,16-19]. Approximately 80% of these activities were committed at night by groups of men who wore civilian clothes or uniforms of a branch of state security, such as the Army or National Police [15]. Participants in these "death-squads" were state security personnel and private individuals whose terror activities were tolerated by the highest ranking state authorities and very often carried out under their direct supervision [11, 20-24]. Witnesses to these activities rarely intervened or made public denouncements on behalf of the victims for fear of reprisals, since participants enjoyed complete legal immunity [25-27]. This paper describes major variations of spatial and temporal patterns of rural state terror in Guatemala. It introduces the application of Geographic Information System (GIS) technology to spatial analyses of state terror activities, thus generating spatial and temporal patterns that suggest new hypotheses to explain state terror behavior.

METHODS

The Data and Sources

Data from the Guatemala Geo-Violence Information System (GVIS) were used in this analysis. The GVIS is the largest computerized data base of its kind, composed of virtually all recorded cases of murder, disappearance, and cadaver drop-off committed by Guatemalan security forces from 1978 through 1985, outside the country's capital, Guatemala City. Documented cases that occurred within the capital city were too numerous, given the time constraints of the data collector, and therefore are not part of the data base.

Fifteen thousand cases of state terror were collected over three years. These data came from all human rights organizations, popular groups, and news agencies that housed major archives of such information, including the Guatemalan Human Rights Commission in Mexico, Center for Informative Reports about Guatemala in Mexico, Pro-Justice and Peace Committee in Mexico, Guatemalan Church in Exile in Nicaragua, Committee for Farm Worker's Unity in Guatemala, the Mutual Support Group in Guatemala, and the Farmer's Committee of the Highlands in Guatemala. Although access to some archives was freely granted, access to others was granted only after explaining this research to the organization's leadership and winning its trust.

Data Collecting Guidelines

The GVIS only includes cases that possess at least one characteristic of state involvement. These characteristics include, but are not limited to 1) uniformed assailants, 2) groups of two or more assailants, 3) the use of polarized-windowed vehicles without license plates, 4) assailants using the same - not mixed - types of heavy calibre weapons, and 5) the open circumstances in which the activity sometimes occurred (e.g., a victim murdered in broad daylight in front of a police station). Characteristics of common crime that led to a case being excluded from the data base

included 1) a single assailant, 2) robbery, 3) the identification of assailants, and 4) the mention of personal motives for the crime (e.g., a fight over a woman or debts).

Cadavers that were found dropped off were usually disappeared victims of state terror [19]. All such found bodies were included in the GVIS unless the causes of death were traceable to an accident. For example, the body of a person that had no signs of torture and who was previously seen bathing, but later noticed floating down a river, would not be included in the GVIS since drowning could have been accidental. Cadavers that displayed torture were always included in the data base since security forces used torture to spread terror and to force information from and to punish people [11,28]. According to an informant who helped document cadaver discoveries for legal processing, even dropped-off cadavers without signs of torture, alone or in groups, were products of state terror and thus were included in the data base. Usually, only state personnel could easily kidnap victims, transport their cadavers, then drop the cadavers off. Only they possessed enough logistical and physical support and legal immunity to accomplish these activities.

The GVIS is not complete since many cases were recorded only by human memory, not in archives. The 15,000 cases in the GVIS correspond to about 55,000 victims (49,000 confirmed dead and 6,000 disappeared) for 1978-1985. Each case corresponds to one incident: the number of victims murdered, kidnapped, or found dead per case ranged from one to 1,000 victims. (Note: Some of the disappeared may be included in the "dead" category since their cadavers frequently were recovered. See discussion about cadavers below.) On the basis of the GVIS, interviews of witnesses to state terror, and confidential surveys of state terrorism, it is estimated that the number of state terror cases that actually occurred outside Guatemala City during this period is about 45,000 corresponding to about 115,000 victims (95,000 confirmed dead, 20,000 disappeared). The GVIS continues to grow as newly discovered cases are added to the data base.

Data Collecting Methodology

Data collecting required going through the various records kept by the various groups and news agencies mentioned above, identifying cases of state terror by the criteria described, and disaggregating their selected characteristics in a D-Base III-Plus data base format. Data were collected on the characteristics of each case that would reveal patterns such as the date of occurrence, type of case, number of victims, branch of state security involved, and way in which victims were killed. Patterns of these characteristics varied over time and through geographic space, and are key to understanding state terror behavior. In addition, a summary of what occurred in each case was recorded in the original Spanish text in order to give subsequent researchers a sense of the violence and an enhanced understanding of the statistical patterns.

DESCRIPTIONS OF THE CASES

Approximately 95% of the murder and disappearance cases in the GVIS were witnessed by people who notified the local police, the press, or sometimes human rights organizations. The other 5% were cases that were 1) recorded as secondhand stories, 2) discoveries of victims killed *in situ* in an incident where screams or other sounds of struggle were heard, but where nobody actually witnessed the crime, or 3) missing people who never returned home from their daily activities. Murders and disappearances usually occurred at the victim's home, along a road, or at work. On the average, groups of seven death-squad members were sent on murder missions, and groups of 10, on kidnapping missions. Both groups usually used vehicles, very frequently pickup trucks, with polarized windows and missing, covered, or stolen license plates.

Cases of discarded cadavers were the most difficult to interpret. Victims were often kidnapped, tortured, killed, and dropped off in different places, and since archives only mentioned the drop-off location, the locations of activities prior to the drop-off were virtually impossible to ascertain. Many cadavers were placed openly on road sides or in towns or on farms to evoke terror in the local population. Others were placed in deep gullies, clandestine graves, or rivers. Single bodies were usually found, though frequently groupings were discovered. Local people were often unable to identify the bodies because victims were not from the area. In addition, it is understood that many bodies could be identified by local people but were not for fear of "guilt by association" and consequent reprisals from the state. These bodies were usually buried as "unidentified."

Approximately 50% of all cadavers recorded in the GVIS were described as having signs of torture, though the real percentage is higher since reports did

not always fully describe the condition of the bodies. Cadavers that were designated as being tortured were usually described as exhibiting one or more of the following signs: fire or acid burns, stake insertions, knife slices, signs of beating, barbed wire around the throat, gouged or burned-out eyes, peeled skin, mutilated genitals and body parts, signs of rape, and amputations of body parts; or they were simply described as being *torturado* (tortured), having *señales de tortura* (signs of torture), or showing *señales de violencia* (signs of violence). Cadavers sometimes displayed signs that were associated with political crimes but do not necessarily result from torture. These signs include 1) bound hands or feet or both, 2) lacking clothes or missing personal identification documents, 3) a face mutilated beyond recognition, 4) killed with the *tiro de gracia* (coup de grace), 5) a rope tied around the throat, and 6) a blindfold. The descriptions of 25% of the recorded cadavers in the GVIS mention only combinations of the last six signs and lack any mention of specific tortures.

In addition to the 50% of the cadavers that had signs of torture, another 25% had characteristics associated with torture and political crimes. The remaining 25% of the cadavers were not described as possessing signs associated with political violence, though many are probably incompletely described. Given this situation, all cadavers were assumed to be related to state terrorist activities, including the 40 cadavers whose descriptions noted the absence of physical violence and known cause of death.

Separate cases of cadavers may correspond to separate cases of kidnapping victims in the GVIS. This work, however, treats disappearances and cadavers as separate cases, even though some disappeared victims may correspond to cadavers, in order to show patterns of relationships between the two cases. The data base does include about 950 victims of kidnapping who match the identity of cadavers found in different locales. Nevertheless, it is difficult to estimate accurately the overlap between separate cadaver and kidnapping cases in the data base because almost 70% of the cadavers were unidentified. In addition to fear of reprisals, this high percentage unidentified could be explained by: 1) the difficulty of notifying families of the disappeared about discovered cadavers; 2) or the families lack of time to travel and identify a cadaver before its burial as an "unknown"; and 3) facial mutilations and decomposition, which rendered cadavers unrecognizable.

RESULTS

Interdepartmental Patterns: Murder, Kidnapping, and Cadavers

The Table lists the total number of all murder and kidnapping victims, and cadavers for each department (i.e., province) during each year from 1978 through 1985. In the area of Guatemala west of the departments of Izabal, Zacapa, El Progreso, Guatemala, and Santa Rosa (Fig 1), the numbers of murders, disappeared, and cadavers were low in 1978, then peaked during 1981 and 1982. The numbers began to decrease in 1983 but remained high through 1984, after which the numbers approached those of 1978. This pattern indicates that the level of state terror steadily increased during the regime of General Fernando Romeo Lucas Garcia (July 1978-March 1982), and remained high in most western departments during the regime of General Efraín Rios Montt (March 1982-August 1983). State terrorism was concentrated in the western half of the country.

Murders. From 1978 through 1985, more people were killed in El Quiché (8,247 or 0.02% of El Quiché's population) than in any other department in Guatemala. Huehuetenango, Chimaltenango, Baja Verapaz, and Alta Verapaz follow with 4,223 (0.008%), 2,522 (0.01%), 1,330 (0.009%), and 1,198 (0.0035%) victims respectively. State security forces were active in searching for guerrillas and their suspected supporters during the early 1980s [17,29,30].

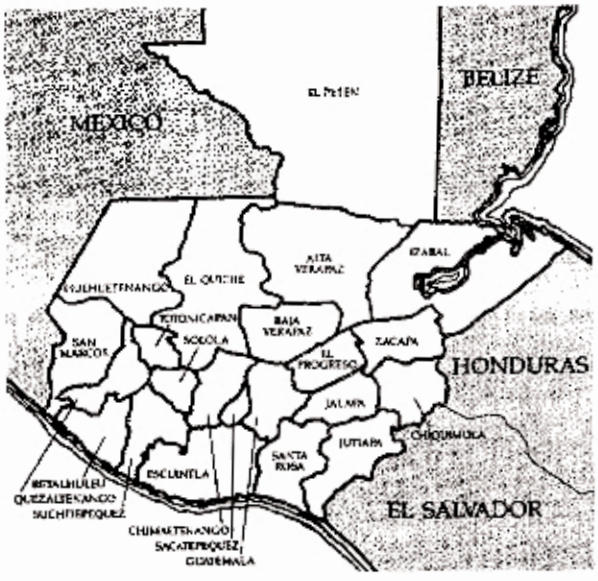

FIGURE 1. Map of the 22 departments of Guatemala. Map reprinted from Jonas S, McCaughan E, Sutherland-Martinez E, eds, trans. *Guatemala: Tyranny on Trial.* Testimony of the Permanent People's Tribunal. San Francisco: Synthesis Publications, 1984.

Disappearances. The Table shows that Escuintla had the highest number of disappeared victims (1,053), followed closely by Chimaltenango (1,022), and El Quiché (721). Escuintla was the site of widespread organizing efforts by farm labor organizations. Chimaltenango and El Quiché were areas where many self-help groups and cooperatives emerged during the 1970s [12,13,31].

Cadavers. The largest number of cadavers were discovered in Guatemala (1,423), Escuintla (1,275), and Suchitepequez (777). A large number of cadavers were discovered in Suchitepequez relative to the number of disappearances in the department (272). During the 1970s there were strong efforts to unionize south coast farm laborers in Escuintla and Suchitepequez and there was increased terror against union members [12,13].

Regional Patterns

Eastern and Western Guatemala. The temporal patterns of terror victims in western Guatemala differed sharply from patterns in the east portion, as shown in the Table. First, the number of victims in eastern departments (Izabal, Zacapa, El Progreso, Jalapa, Chiquimula, Santa Rosa and Jutiapa) never approached the statistics from areas to the west. Second, victim levels peaked in the east during 1980-1981, whereas they peaked in the west during 1981-1982.

South Coast and the Western Highlands. The average number of victims per case in the southern coastal departments of Retalhuleu, Suchitepequez, and Escuintla differed greatly from most of the highlands. Less than two people per case were murdered on the south coast, whereas Huehuetenango, Baja Verapaz, El Quiché and Alta Verapaz sustained 18, 15, 12, and 7 victims respectively per case. The murders in the highlands can be characterized as large-scale murders (massacres), while those in the south coast were more selective operations.

DISCUSSION: PATTERNS OF DEATH

Interdepartmental Patterns

The concentration of state terrorism in the western half of the country can be explained by state security forces working to suppress the high levels of civilian organizing and guerrilla activity from 1981 through 1982.

Murders. The high murder rate is not surprising since state security forces were active in these departments searching for guerrillas and their supporters during the early 1980s [17,29,30].

Disappearances. High numbers of victims in Escuintla probably reflect the repression against labor union members and small farmer organizations. The high numbers of disappeared victims in Chimaltenango and El Quiché can be explained in part by the repression against the many cooperatives and popular, self-help groups that emerged during the 1970s [31]. This repression was closely associated with the Army's fierce counterinsurgency sweeps from 1981 to 1983 that targeted guerrillas and members of grass-roots organizations [12,13] suspected of supporting them.

Cadavers. Guatemala's large number of cadavers (1,423) was probably a function of disappearances within the city of Guatemala. The many cadavers found in Escuintla and Suchitepequez were probably the result of terror on large, agro-export farms. During the 1970s there were strong efforts to unionize south coast farm laborers in Escuintla and Suchitepequez and there was increased terror against union members [12,13]. The large number of cadavers discovered in Suchitepequez (777) relative to the number of disappearances in the department (272) may also be related to its common borders with departments that have high incidences of terror and thus being convenient as a cadaver dumping ground (see Figure 1 and Table).

Comparisons Between Eastern and Western Guatemala

The greater concentration of guerrilla and civilian organizing in western rather than eastern Guatemala during the latter 1970s can partially explain the greater numbers of terror victims in western departments. However, nothing in the literature suggests why the number of victims peaked in the two regions during different years. There are two plausible explanations: 1) Perhaps civilian organizations in the east were perceived by security forces to have reached their zenith before organizations in the west, and therefore experienced relatively high levels of state terror one year earlier; and 2) Security forces may have wanted to remind eastern inhabitants of the terror they experienced during the 1960s to insure that they would remain docile, before focusing terror on the west [32,33].

Comparisons Between the Southern Coast and Western Highlands

Why were the highlands characterized by large-scale, indiscriminate murders, while the south coast

Table. Number of Victims by Department

Department	T	1978	1979	1980	1981	1982	1983	1984	1985	TOTAL
	M	24	36	85	96	364	104	86	38	833
San Marcos	C	55	73	116	221	142	49	51	24	731
	K	8	30	64	99	76	172	232	37	718
	M	3	7	7	747	2735	718	4	2	4223
Huehuetenango	C	6	3	43	57	66	18	11	0	204
	K	2	8	8	57	23	0	18	5	121
	M	15	28	387	1359	5566	707	150	35	8247
El Quiche	C	10	16	78	373	168	38	22	2	707
	K	46	21	29	136	215	228	41	5	721
	M	0	0	2	7	16	8	4	4	41
Tontonicapan	C	1	1	22	65	28	7	5	2	131
	K	1	0	3	8	4	36	38	1	91
	M	13	13	130	131	52	51	60	9	459
Quetzaltenango	C	28	56	158	181	143	28	20	18	632
	K	17	17	64	137	84	261	80	25	685
	M	4	10	25	52	44	9	7	8	159
Retalhuleu	C	22	28	67	156	118	42	24	12	469
	K	4	2	14	25	12	28	6	4	95
	M	21	18	50	106	138	17	17	22	389
Suchitepequez	C	37	70	124	195	220	58	56	17	777
	K	24	6	10	76	74	35	31	16	272
	M	1	0	13	126	146	0	3	8	297
Solola	C	5	9	32	154	15	4	5	7	231
	K	0	1	27	35	159	12	14	19	267
	M	1	13	31	794	1220	53	17	393	2522
Chimaltenango	C	2	9	82	252	57	5	14	31	452
	K	1	3	30	293	467	43	101	84	1022
	M	0	0	4	13	6	3	6	5	37
Sacatepequez	C	10	22	41	94	36	8	1	10	222
	K	0	2	6	31	116	10	4	12	181
	M	32	38	105	136	160	42	63	60	636
Escuintla	C	99	116	208	336	235	99	124	58	1275
	K	11	23	173	584	73	99	60	30	1053
	M	10	21	31	58	67	17	39	30	273
Guatemala	C	102	163	267	325	186	151	145	84	1423
	K	3	5	136	49	45	36	64	37	375
	M	5	1	10	264	925	107	7	11	1330
Baja Verapaz	C	3	4	6	102	19	1	5	4	144
	K	0	5	7	54	6	2	1	2	77
	M	110	10	18	117	759	170	11	3	1198
Alta Verapaz	C	11	8	11	112	133	25	8	1	309
	K	10	7	10	13	82	30	6	10	168
	M	3	11	38	180	1254	3	57	29	1575
El Peten	C	14	11	35	32	14	9	4	4	123
	K	5	5	8	139	37	18	29	30	271
	M	11	17	31	59	21	17	10	7	173
Izabal	C	39	34	32	27	12	27	11	6	188
	K	13	5	5	33	7	6	31	4	104
	M	13	15	25	10	3	2	5	5	78
Zacapa	C	20	28	50	38	5	17	7	10	175
	K	3	1	8	6	2	2	2	1	25
	M	11	3	18	16	23	3	2	3	79
El Progreso	C	48	39	51	115	57	9	17	4	340
	K	0	0	4	4	8	2	14	2	34
	M	18	18	17	22	8	7	8	3	101
Jalapa	C	5	26	13	6	6	0	8	2	66
	K	4	5	0	15	0	3	7	3	37
	M	47	32	23	49	23	28	32	9	243
Chiquimula	C	17	28	44	19	30	9	23	15	185
	K	18	8	7	4	3	9	5	2	56
	M	11	20	29	30	38	11	33	38	210
Santa Rosa	C	48	41	52	89	28	21	54	37	370
	K	3	2	2	10	5	19	18	8	67
	M	11	27	37	16	16	6	22	17	152
Jutiapa	C	20	50	61	22	23	15	15	10	216
	K	4	1	6	3	3	11	5	4	37

Number of victims: M = Murdered, C = Cadavers, K = Kidnapped

suffered more selective operations? The choice of terror used by security forces in the two regions may have been determined by racism. Since colonial times, *ladinos* (culturally non-Indian Guatemalans) have controlled the state, including the security forces. *Ladinos* consider Indians to be inferior and a threat to *ladino* dominance, and have abused, massacred and attempted to eliminate them culturally [21,34-36]. Since the vast majority of the highland population is indigenous and the vast majority of the coastal population is *ladino*, the apparent relationship between "careful" terror and *ladinos*, and between wanton terror and Indians may not be coincidental.

Another possibility is that the open south coast terrain, with relatively widespread transportation and telecommunications resources [37], left security forces more vulnerable to public scrutiny than in the highlands, forcing them to operate with greater discretion. Furthermore, the state could hardly massacre villages and burn crops on the south coast without disrupting export agribusinesses and alienating landowners. Such tactics were only possible in the isolation of the highlands where "low value" subsistance crops of corn and beans were produced.

State security may also have thought mass murders were more effective (than selective killing) in terrorizing highland people. Isolated and loosely organized highland families made killing or kidnapping individuals less efficient in spreading terror. Moreover, south coast labor unions were perhaps better organized and their members in better communication with each other, making mass murders unnecessary. Individual murders, disappearances, and cadaver drop-offs could have sufficed to terrorize the members.

Finally, there were substantially more cadavers than disappeared victims in Escuintla, Retalhuleu, and Suchitepequez. This may partially be due to disappearances that were not included in the GVIS - fearful people are less inclined to report such incidents. However, such an explanation would apply throughout all departments. Since there were more disappeared victims than cadavers in many highland departments, it seems likely that the south coast could have been a dumping ground for cadavers of disappeared highland victims.

Intradepartmental Patterns of Disappeared and Cadavers

The pattern of more cadavers than disappeared victims can be explained partially by the fear that prevented people from denouncing disappearances. El Quiché, Escuintla, Suchitepequez, and Retalhuleu suffered high levels of state terror, which, as mentioned above, rendered people silent. Lingering memories of state terror during the late 1960s could have stifled denouncements of kidnapping in the eastern departments of Izabal, Zacapa, El Progreso, Jalapa, Chiquimula, Santa Rosa, and Jutiapa. However, it was probably the low level of guerrilla and civilian organizing in the east, relative to the west, that accounts for the low numbers of disappeared victims compared to numbers of cadavers. The latter may have been victims from elsewhere, used to evoke terror or just simply discarded. In the department of Guatemala, cadavers surpassed the number of disappeared because disappearances in Guatemala City were not included in the GVIS. The fact that cadavers outnumbered disappearances in several departments until 1982, when the relationship was reversed, may indicate a policy change regarding how security forces dealt with kidnapped victims. According to a well-placed informant, around 1982 a policy change occurred whose purpose was to obfuscate patterns of death-squad activity and foil national and international human rights investigations. Different squads were used over a wide area, transferring disappeared victims from the place of kidnapping to a place of torture and to where the victim was killed. Since this policy required dropping cadavers far from original kidnapping sites, this may have increased the number of disappearances relative to the number of cadavers. Another possibility, which at this time is not supported by documentation, is that security forces needed tortured bodies to evoke terror in places other than from where the victims disappeared. If true, it is unclear why they did not simply kidnap people from those places and discard their cadavers nearby, instead of "importing" cadavers from afar.

Although major temporal and geographic patterns of state terror and some literature-based explanations for these patterns have been described, it is difficult to demonstrate that aggregate statistics of terror for departments are the result of relationships between state terror and subdepartmental variables. We lack a bridge between statistical generalities and hypotheses about their causes. Computerized mapping analysis can help construct this bridge. State terror events have been mapped and spatially analyzed over a geographic sample of Guatemala. An attempt is made to generate evidence to support the literature-based interpretations and to create new hypothetical expla-

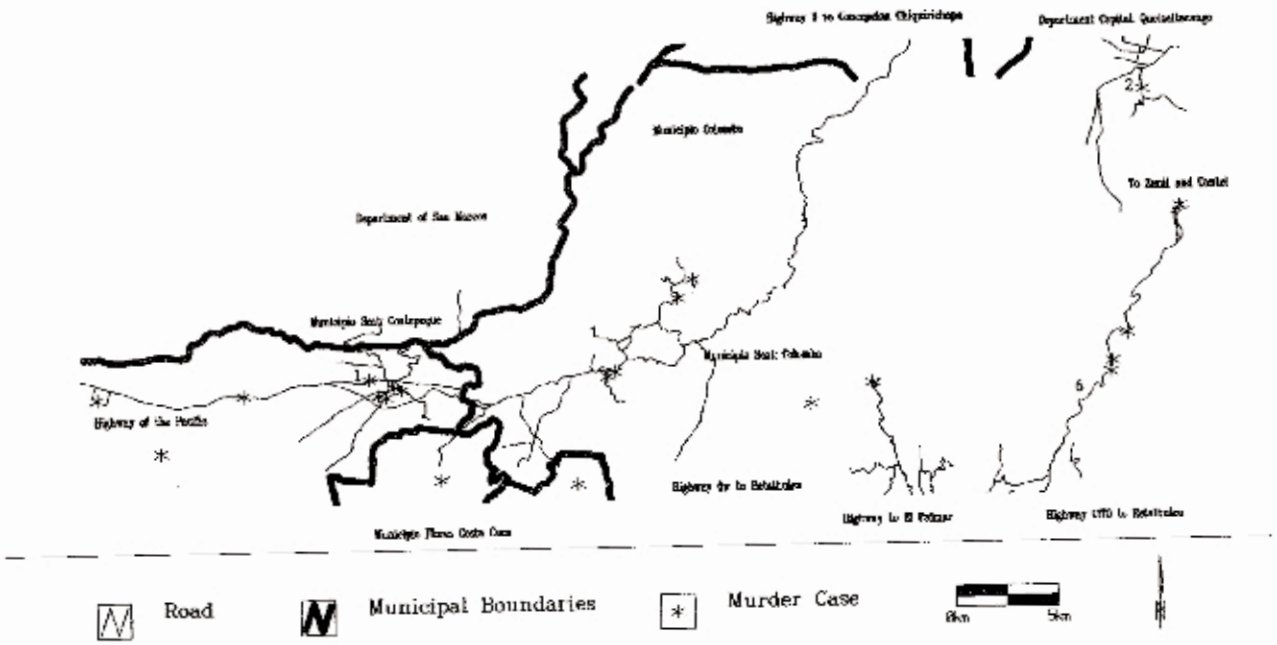

FIGURE 2. The location of murder cases in the department of Quetzaltenango and nodes 1, 2, and 6.

nations on the basis of how and where state terror is spatially concentrated.

COMPUTERIZED MAP ANALYSIS: AN INTRODUCTION

A computerized mapping program (a Geographic Information System or GIS) is used to analyze patterns of state terror in relation to geographic attributes (farms, towns, and roads). The assumptions are 1) the closer an activity is to a geographic location, the more related it is to that location in some way; and 2), geographic concentrations of activities within a specific area indicate that some attribute of the area aggregates the activities. Two central questions are "Why does a terror tactic occur in an area, and what does its timing indicate about its relationships with other events?" Tentative hypotheses for the counties of Coatepeque, Colomba, Flores Costa Cuca, El Palmar, Zunil, and Quetzaltenango, all of which are located in the department of Quetzaltenango, are based on the interpretations of patterns of terror within their respective jurisdiction. This region was chosen because a computerized map of the area was readily available at the time of this writing. Only some municipal boundaries and major roads were included to avoid cluttering the actual patterns.

The maps display the distributions of different cases of terror aggregated for the years 1978 through 1985. The eight-year aggregation was necessary to reveal patterns since relatively few cases occurred during each individual year in this region. The cases of state terror (Figs 2-4) were described in previous discussions. Figure 5 displays antiguerrilla cases in which state security forces were reported to have attacked guerrillas. Figure 6 displays guerrilla actions such as occupations of farms (to disseminate propaganda) and attacks against state security forces. "Nodes of violence" (the patterns) are numbered on the maps and interpreted below. Their explanations are tentative since other geo-referenced attributes with explanatory power, such as locations of Army bases, occupational groups, and different agro-export production areas need to be mapped.

Nodes 1 and 2

The county seat of Coatepeque and the departmental capital of Quetzaltenango were urban areas that experienced much state terror over the eight years. Notice the concentrations of murders and kidnappings inside Coatepeque and Quetzaltenango. Much of it was directed at students and teachers. Guerrillas were active also, though cases where state security openly attacked or pursued guerrilla forces were less frequent within urban areas.

Nodes 3, 4, and 5

Notice the consistent cadaver, antiguerrilla, and guerrilla cases in a region occupied by large farms

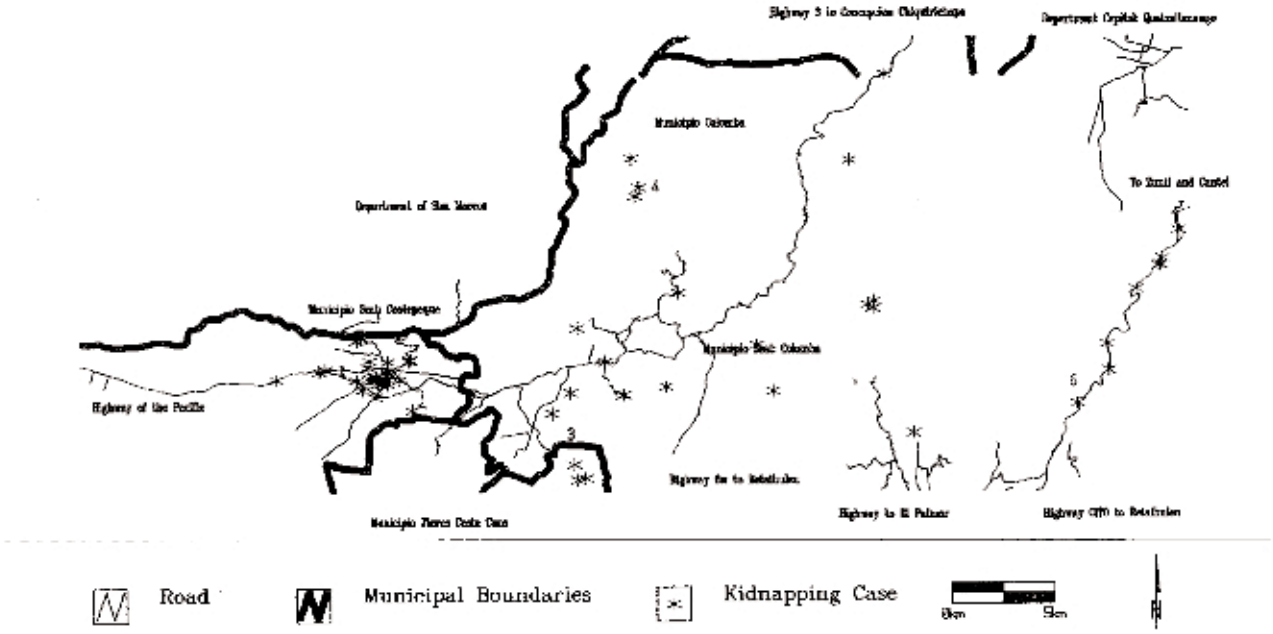

FIGURE 3. The location of kidnapping cases in the department of Quetzaltenango and nodes 1, 3, 4, and 6.

(see Figs 4-6). Guerrillas occupied farms to sabotage them, rally farm laborers against farm owners, explain their motives, and to gain local support. Labor organizing by unions was also likely there. Figures 2 and 3 show, however, there were few murders or disappearances that occurred in reaction to this activity where such organizing took place. Security forces may have either "imported" the cadavers shown in Figure 4 from distant departments, or kidnapped union members or guerrilla sympathizers in local urban areas and later dropped off their cadavers on the farms where they worked. Both tactics would have evoked terror in union members and guerrilla supporters in the area. San Francisco Miramar may be one of these targeted farms since it is in node 3. This interpretation is rea-

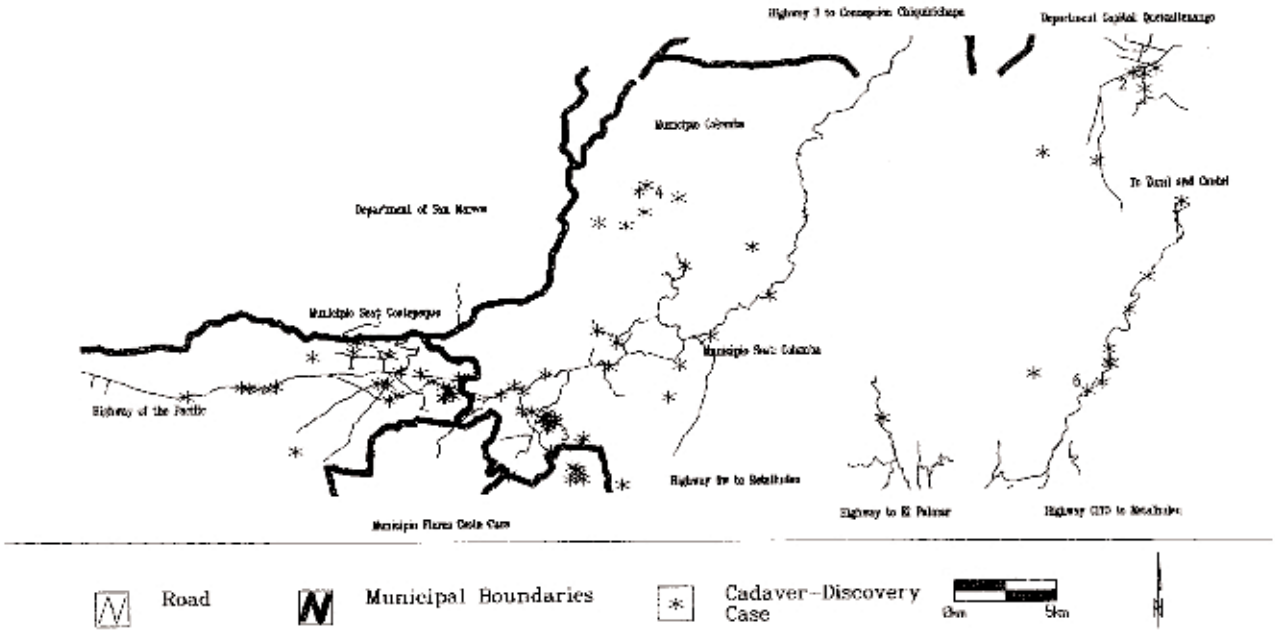

FIGURE 4. The location of discovered cadavers in the department of Quetzaltenango and nodes 1–4 and 6.

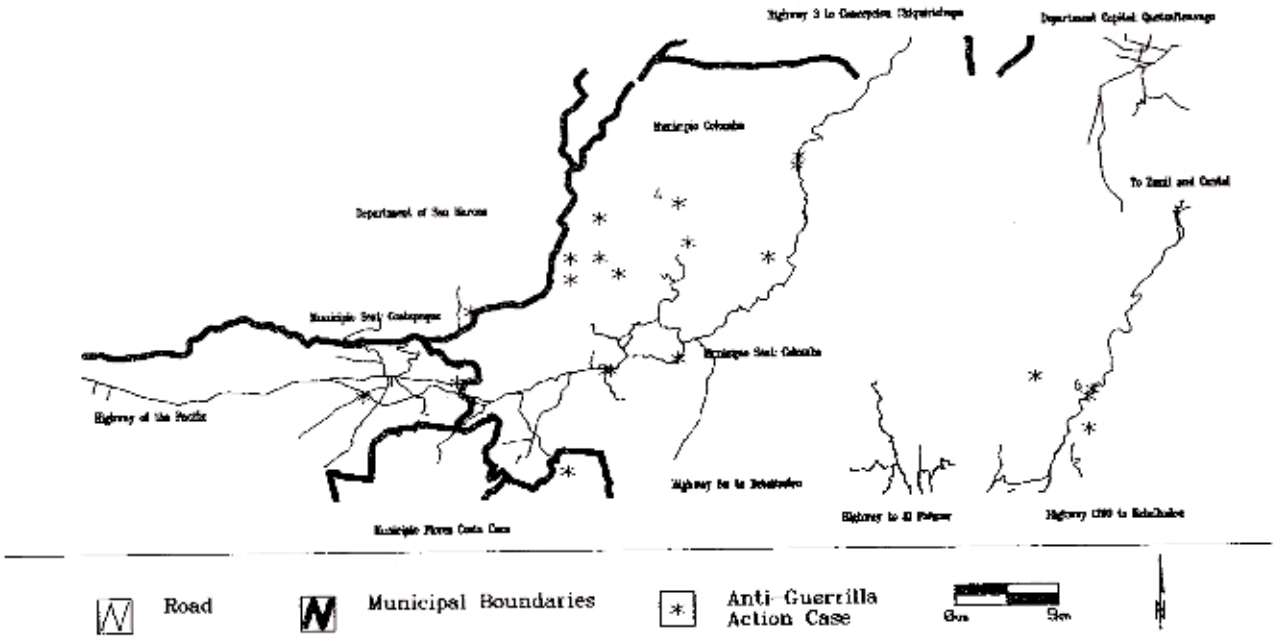

FIGURE 5. The location of antiguerrilla action in the department of Quetzaltenango and nodes 4 and 6.

sonable since labor unions were considered a threat to the state as were local guerrilla sympathizers who often gave the guerrillas logistical and material support [38,39]. In contrast, Figure 6 shows several guerrilla occupations of large farms in node 5, but almost no reaction by the state in Figure 5. Why security forces allowed guerrilla activity there, but not in node 4 is unclear. Perhaps some farmers requested assistance from state security, while others tolerated guerrilla and union activity.

Node 6

This paved highway was close to large farms, and was a major route for death squads as shown in Figures 2-4. There are three suggested explanations for this concentration of state terrorist:

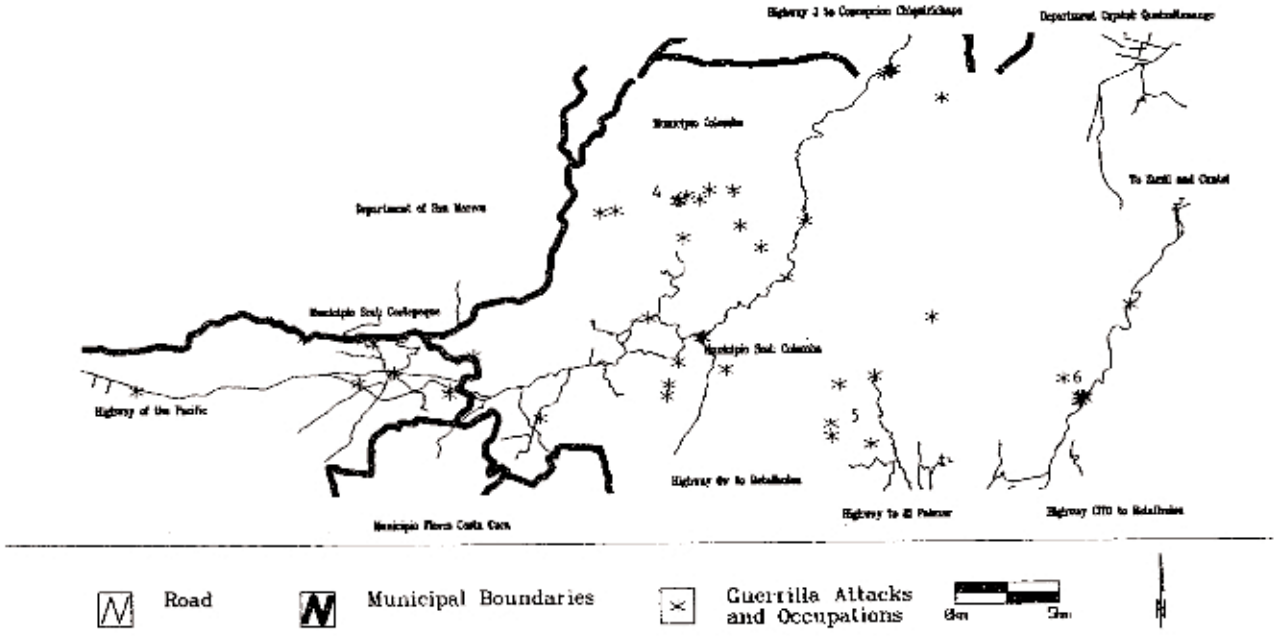

FIGURE 6. The location of guerrilla action in the department of Quetzaltenango and nodes 4 - 6.

1) The road links regions in the north (Cantel, Zunil, and Quetzaltenango, the department capital) to the south (Retalhuleu), which were relatively hard hit by state terror. It was convenient for death squads travelling between these locations to discard cadavers or to prey on victims originating from other regions.

2) The highway CITO within node 6 bordered almost twice the number of farms as highway 3 to Concepción Chiquirichapa, which means there could have been more labor unions to terrorize and thus more state terror along its length.

3) The guerrillas often attacked military personnel on this road as seen in Figure 6. Therefore, state security's efforts to eliminate suspected guerrilla supporters may partially explain node 6 terror.

CONCLUSIONS

Cumulative and systematic recording of cases of state terror in Guatemala between 1978 and 1985 yield geographical and temporal patterns. State terror did not randomly occur, but was regionally specific. The patterns show clear quantitative and qualitative differences between eastern and western Guatemala, and between the highlands and the south coast. In addition, patterns of state terror activities differed not only cross-regionally, but within regions and within departments themselves. Clearer internal patterns exist in the western, rather than the eastern departments of Guatemala. Intradepartmental patterns, both quantitative and qualitative, suggest relationships among different state terror activities within the same department, and within the same region. Finally, patterns of terror are not static but change over time and geographic space.

These patterns of state terror do not in themselves provide a sufficient basis for explaining what caused them. Nevertheless, a more micro-analysis of spatial distributions of state terror activities, using the methods of a GIS, provides detailed spatial and temporal associations that suggest explanations and raise new questions. Based on the fundamental assumption that state terror behavior occurs in geographic areas because of some attribute within those areas, spatial analysis can be seen to contribute to the study of state terror, human rights violations, and socio-political processes in general.

Many more possible factors that influence activities of state terror need to be analyzed with the data base from a geographic perspective. Within the regions described above, factors such as military bases, army encampments, and troop movements need to be georeferenced. Analyzing state terror activities against the background of these factors could further our understanding of state terrorism and assist investigations of human rights violations in Guatemala and in other parts of the world. ❧

ACKNOWLEDGMENT

Thanks to Dr. Herbert Spirer for making this article possible

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