

## Mapping massacres: GIS and state terror in Guatemala

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### Abstract

This paper employs GIS (geographic information systems) technology to visually display the locations of massacres associated with Guatemala's civil war. While there have been other, more general maps published depicting the spatial dimensions of violence in Guatemala, few other maps depict this information at the department level, nor have they included information on indigenous populations and physical geography.

These maps are part of the emerging field of human rights GIS. For example, over the past two decades, maps have become tools of empowerment in Central America and elsewhere, maps usually made with GIS technology. Indigenous groups in many countries in particular have embraced GIS technology and have begun to use maps as tools in their fight for land and marine resources, as well as greater political autonomy. In the case of massacres in Guatemala, displaying exactly where violent acts took place is one way to educate the Guatemalan public regarding the terrible violence of the recent past. Knowing the name of a specific town where a massacre took place is more concrete, potentially leading to perception of place and people, rather than simply being aware of violence in the countryside.

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### 1. Introduction

During the last half of the 20th century, Guatemala experienced a violent and tumultuous past. The statistics are grim: 200,000 murdered and disappeared; 150,000 Guatemalans sought refuge outside of their homeland; 1.5 million internally displaced Guatemalans escaping violence; countless orphans and widows; indelible scars of horror deeply ingrained in the minds of victims and perpetrators alike. While the war was formally ended in 1996 with a United Nations' brokered peace agreement, given the fact that so few perpetrators of violence

have been brought to justice, it would be premature to say that Guatemala as a whole has had any sort of closure related to the violence. Among some sectors of Guatemalan society, there is still wholesale denial and rejection of past violent events. Thus, there remains a critical need to unravel and explain this past by various means, including the mapping of violent events.

Displaying spatial and temporal data via maps is an obviously important characteristic of our discipline. Even information that is easily comprehensible without maps takes on new meaning when it is portrayed spatially. This is one of the few common, bonding traits among geographers; a discipline so diverse and broad that at times there seems to be few commonalities among our various specialty groups. This innate need to map data and other information was eloquently described by Sauer:

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The most primitive and persistent trait (of a geographer) is liking maps and thinking by means of them. We are empty handed without them in the lecture room, in the study, in the field.... Maps break down our inhibitions, stimulate our glands, stir our imaginations, and loosen our tongues. The map speaks across the barriers of language; it is sometimes claimed as the language of geography. The conveying of ideas by means of maps is attributed to us as our common vocation and passion. Sauer (1956).

Indeed maps are our discipline's language. They often separate geography from other, similar disciplines such as anthropology. How many times have we, as geographers, lamented the lack of maps in publications written by non-geographers?

Even information that is well known and generally understood can take on new meaning when displayed spatially. This is the case with the subject of this essay—massacre sights in Guatemala. There have been numerous studies concerned with and books written about the Guatemalan civil war and the human toll of its violence. Anthropologists have been at the forefront of research that examines the impact of the civil war on indigenous populations in the western highlands (Carlsen, 1997; Carmack, 1988; Manz, 1988; Lovell, 1990, 1991, 1992, 2000; Smith, 1990; Perera, 1993; Stoll, 1993; Falla, 1992, 2001; Schirmer, 1998). Fewer studies have focused directly on agricultural changes (Annis, 1987; Watanabe, 1992). However, few maps have been produced to spatially display this tragic data. The maps found in David Stoll's publication "Between Two Armies" is one of the few attempts to illustrate where, exactly massacres occurred (Stoll, 1993). There is no mystery as to where most massacres occurred—the western highlands, the region that is dominated by indigenous Maya Indians. Anyone who has conducted research in or read any recent publication about Guatemala knows in general terms where the violence took place—in a general sense. However, knowing in a general sense where the violence took place is not enough. If we fail to accurately display such information spatially, we fail to fully understand where and especially why these events took place. Massacres were not random events in Guatemala. Instead, they took place in very specific cultural landscapes (Lovell, 1992, 2000; Stoll, 1993). By using some basic geographic information systems' technologies, relationships between ethnicity, location, physical environment, and violence become much clearer.

Mapping these tragic events is critical because these maps also serve as another type of memorial for victims and their families. Many Guatemalans have yet to come to grips with the violence of the past. Maps, more so than words can help deconstruct violent events by pro-

viding a mental image of a location and event in the onlookers mind. Culturally, rural indigenous Guatemala remains worlds apart from urban, Ladino Guatemala (mainly Guatemala City). I have had many conversations with urban *Guatemaltecos* in which they express disbelief concerning the levels of violence of the 1980s and the early 1990s. Often, they claim stories concerning the war are propaganda generated by foreign academics or indigenous activists such as Rigoberto Menchu. Displaying exactly where violent acts took place is one way to educate the Guatemalan public regarding the terrible violence of the recent past. Knowing the name of a specific town where a massacre took place is more concrete, potentially leading to perception of place and people, rather than simply being aware of violence in the countryside. While there have been other, more general maps published depicting the spatial dimensions of violence in Guatemala, few other maps depict this information at the department level, nor have they included information on indigenous populations and physical geography.

In the past two decades, maps have become tools of empowerment in Central America and elsewhere. Indigenous groups have begun to use maps as tools in their fight for land and marine resources, as well as greater political autonomy. For example, indigenous rights' groups such as Native Lands (along with the National Geographic Society) recently published an impressive large-scale map indicating indigenous territory in southern Mexico and Central America ("*Pueblos Indigenas y Ecosystem Naturales en Central America y el sur de Mexico*," 2002). Also, the late geographer, Barney Nietschmann played an instrumental role in the production and publishing of the Maya Atlas, based on ethno-mapping among the Maya Indians in Belize (Maya Atlas, 2002). Nietschmann was one of the early pioneers regarding participatory mapping in Central America, beginning with his work among the Miskito Indians in coastal Nicaragua. In addition to these projects, participatory mapping research has become a more popular line of investigation within geography in the past decade. For example, a recent issue of *Human Organization*, edited by Herlihy and Knapp, was dedicated to "Maps of, by, and for the Peoples of Latin America" (Vol. 62, No. 4). While this paper does not purport to conduct participatory mapping in the same vain as the aforementioned volume (the participants being mapped were silenced years ago), it falls under a similar genera of maps with a purpose.

Failing to acknowledge past violence indicates that both politically and culturally, Guatemala has failed to make a complete transition from military dominated dictatorship to open democracy. Politically motivated murders and "disappearances" continue to take place throughout Guatemala—albeit not on the same level as during the height of the violence in the early 1980s.

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