Chapter 5

The United Nations Mission for the Verification of Human Rights in Guatemala: Database Representation

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Introduction

The United Nations Mission for the Verification of Human Rights in Guatemala (MINUGUA) was created within the framework of the peace negotiations between the government of Guatemala and the National Revolutionary Union of Guatemala (URNG). In the Comprehensive Agreement on Human Rights signed on March 29, 1994, the parties asked the Secretary General of the United Nations to establish a mission for the verification of the status of human rights and compliance with the commitments of the agreement.

On September 20, 1994, one day after the UN General Assembly approved the establishment of MINUGUA, a technical team was sent to Guatemala to work out the logistical arrangements for the mission's installment. This included drafting a handbook on verification methods and the designing training seminars for the international monitors who were to verify the human rights situation in the country. MINUGUA was formally installed on November 20 and its first regional office was opened three days later in Guatemala City.

MINUGUA's mandate was to cooperate with national institutions and entities for the effective protection and promotion of human rights, sponsor technical cooperation programs, carry out institution building, and support the judiciary, the prosecutor's office and governmental human rights offices. Thus, its central role was monitoring and reporting on human rights violations.

By the time its first report was issued in March 1995, MINUGUA had eight regional offices and five sub-regional offices and a staff of 211 international members, including 72 UN Volunteers and 30 civilian police observers almost exclusively involved in human rights monitoring. By time the peace accords were signed and the mandate of the mission expanded to include other aspects of the accords, approximately 150 members of the mission were involved directly in monitoring human rights.

In addition to simply monitoring human rights violations, officials in the field offices worked to prevent human rights violations or intervened to prevent additional violations.

Methods for Recording and Processing Violations Data

The first step for monitoring human rights involved interviewing deponents either in the field or in a field office and recording the information gathered in the interview on a standard format sheet. This format included information on the human rights violation event (called a *case*), such as unique case number, when and where the violation occurred, name of the deponent or deponents, and description of the event. A second sheet allowed for the recording of personal information of the victim such as name, birth date, home address, occupation, and ethnicity. A third sheet allowed for the coding of the violations alleged to have occurred and one perpetrating institution. The coding sheet allowed for up to three violations to be recorded. Thus, it was left to the office coordinator to determine which violation would be considered the primary or "most serious" violation.

If there were more then one victim in a given event, the office would determine which victims suffered serious violations and then open a case file for each victim. Victims of lesser violations in an event would be noted in the description of the case. For example, if an event involved the arbitrary execution of four individuals, the office would open four separate cases. If the event involved the attempted execution of one victim and threats against another, it is possible that only one case would be opened for the attempted execution and the threats would simply be mentioned in the case summary.

¹ The terms *case* and *event* are not used synonymously. Several cases might be generated by one event. This was 1992, early in the development of the AAAS methodology and definitions were not in a state of development. Some of this growth in understanding is evident in this paper and others.

Each office used a list control sheet to monitor the status of their cases. It consisted of a basic table with each row containing the event number, event location, victim name, primary violation, perpetrator, and the status of the verification.

Methodological Problems

By limiting recording of an event to its "primary" violation (that is, the violation deemed to be most serious), only one violation will be recorded for a victim suffering several. This is a gross understatement of the nature of the victimization of the individual and leads to a false view of the events and distortion of trends. To illustrate this latter problem, consider Table 1, below, representing the recording of counts of violations in this "one victim-one most serious violation" schema.

Table 1. Example of the recording of counts and violations in the "one victim-one most
serious violation" schema

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Violation	June	July			
Arbitrary Detention	2	0			
Torture	1	0			
Arbitrary Execution	1	3			

From this table, it would seem that the number of victims of Arbitrary Detention declined from two in June to zero in July. But given the three cases of arbitrary execution that happened in July, we cannot be sure that this decrease is real. The executed people may have been detained and tortured before they were killed, in which case detention and torture went up in July. Once data have been coded and represented in this way there is no way to find out what happened in each event.

Also, by separating victims of the same event into different case files, the relationship of the victims to the same event can be confused or lost. If an event involves many victims, many different violations and/or multiple perpetrators, important information on individuals and acts will be disassociated, hidden in text, or lost altogether.

Thus, when trying to analyze what happened, there is confusion as to what exactly was recorded. When the mission talked about human rights "cases," it was not clear whether a case referred to a single human rights violation against one victim, an event with many violations with only one violation having been recorded or one victim in an event where there were many victims. All of these interpretations are equally possible.

A second problem with recording only a primary violation involves information management. Since the functions of the field offices include prevention and intervention, in depth knowledge of the human rights situation in a particular region is essential for effective results. However, for any one person to understand the case history of an office that person would need either personal knowledge of the caseload or knowledge gained by extensive reading of individual files. For a new member of the human rights team to determine if a perpetrator had a history of committing violations or to determine if an individual had suffered previous attacks, it would be necessary to consult individual office members or review each case file from memory or individual notes, a time-consuming and arduous task.

Thus, the primary source of information about the connections between cases and events was the *individual employee*, who depended on memory or personal notes. At best, this is a poor solution to the problem. However, at MINUGUA, it was compounded by the continuing rotation of personnel in the regional offices. Police observers were usually assigned to the mission for only six months. UN volunteers rotated from one office to another after six months to a year.

Analysis of trends and patterns of violations were equally difficult without personal knowledge of each case. This problem was even more pronounced in the main office where verification officers worked from case summaries and lists sent from the regional offices. The consolidation of cases from several regional offices increased the workload for the individual verification officers at MINUGUA's headquarters and made it harder for them to extract hidden details of cases.

A Report Example

In March 1995 MINUGUA presented its first report to the Secretary General of the United Nations on human rights in Guatemala, including anecdotal cases of human rights violations and a table representing 288 cases of reported human rights violations admitted for verification, classified by violation.

A footnote in the table explained that when there was more then one violation per case, only the "most serious" was considered although "most serious" was not defined. See for example, Appendix 1, Table 1.

The table of the number of cases gave a possibly misleading impression of relative importance of each violation (as measured by rate of occurrence). For example: cases where the violation against the right to life (extra judicial killings, tentative killings, and death threats) was the primary violation represented 37% of all cases accepted. Cases where the primary violation was reported as violations against physical integrity represented only 23% and cases of personal liberty only 12%. There may have been a great many cases of personal liberty violations that were not deemed "primary violations" occurring in cases where right to life was the only recorded violation. A ranking based on the primary violation of the case might then lead to distorted understanding of the human rights situation.²

Implementation of the Database System

During the initial setup mission when the verification manual was designed and for its first year of use, no systematic methodology to structure all information relating to violation events was used. Nor did the project management make any plans for such systematization. Some team members present during that first year reported that the concept of creating a database for systematic processing, analyzing, and monitoring of the human rights violations was discussed but there was no follow-up.

With the support of the head of the human rights division, many division members, and apparently the head of the mission, preliminary steps were taken to hire a database designer to design such a system. However, the head of administration of MINUGUA opposed the hiring of a database designer, arguing that MINUGUA's Electronic Processing Department (EDP) was capable of implementing the necessary database system as an administrative function, rather than as a central issue for substantive work. Unfortunately, at that time the staff of EDP was fully loaded in the work of maintaining the mission's computer systems in headquarters and in the field, and lacked experienced programmers.

In October 1995, almost one year into the mission, the first steps were taken to design and implement a human rights violation database. These steps came about casually after it was learned that I had a computer programming background, and had expressed interest in creating a violations database for my regional office. I was then a United Nations volunteer working as a human rights observer.

At the insistence of the Human Rights Division, the volunteer (myself) was transferred by the Volunteer's Office from the field to the headquarters office to create a violations database for the mission. Since the mission had never seriously considered implementing a database, they gave me full responsibility for the structural design of the database. The Human Rights Division wanted to do more accurate and sophisticated analyses and made the rapid creation of the database a priority. Working 16-18 hour days seven days a week, I designed, coded and tested the system in less than one month.

The final product was a database system based on the following two principles (Ball, et. al., 1994):

- A human rights event is a collection of violations, victims, and perpetrators, all of which are related.
- 2. A person's role in an event is independent of his/her identity.

² The mission's periodic human rights report continued this format until its November 1996 report. In May 1995, Patrick Ball was employed as a consultant to MINUGUA and helped to change the ways in which these data were recorded and reported.

³ I was not fully informed of the managerial decision-making process.

The simplified model used for the first year and a half could not represent this complexity; it reduced a case to one violation, one victim, and one perpetrator. However, most human rights cases or events are complex collections of one or more violations or acts, suffered by one or more victims, possibly at the hands of one or more perpetrators. In addition, it is possible that in each event not every victim suffers the same series of violations and not every perpetrator commits each violent act. I designed the new database to represent this complex structure of human rights cases and preserve information relating to the number of victims, acts and perpetrators. By using this structure, it would later be possible to recreate exactly who suffered what violation and who committed that violation.

In addition, a person's role at the time of a violation (victim, witness, or perpetrator) is not part of who that person is; rather, it reflects his/her place in a violation at a specific time. This was possible even though a person could be a victim in one human rights violation event, a witness in a subsequent event and a perpetrator in another. Therefore, the database represented individuals not as victims or perpetrators but rather as members of the list of all people who are in some way associated with human rights cases. Personal information on each individual was stored in the person's record, such as name, date of birth, ethnicity, etc. References linked the individuals to the roles played in each event. This structure allowed for accurately counting exactly how many victims of violations there were and permitted the analysis of patterns of behavior, for example, of a public prosecutor that is repeatedly involved in obstruction of justice cases.

User Interface Considerations

The lack of a formal database team, the frequent movement of personnel, and the wide distribution of the regional offices required that the system be designed with a strong emphasis towards the end user.

In truth commissions and tribunals the function of a database is to store large amounts of information on violations to be processed at some later date, usually near or at the end of the commission. In contrast, MINUGUA's primary functions were reporting on human rights violations and prevention and intervention. Hence, it was essential that the system provide quick access to extensive information on events. Such information included the actual state of verification, number and types of violations, the names of victims and perpetrators and their association with other events, relations among events, and results of interventions on behalf of the victims.

I did the initial training of field office members in the use of the system but in the long run, the system had to be as intuitive as possible so that subsequent training of new members could be delegated to the offices. Also, since there was minimal pre-coding of the interview formats prior to their entry into the system, the interface relied heavily on input controls, some custom made, to assure that input was quick and restricted to predefined parameters.

Although the unit of analysis for the system was the violation or the act, the interface followed the established logic of recording acts as being grouped into cases. Thus, the main entry point for the user to the system was a case list. Selecting a control for a new case would open up a *Case Window*.

- After the user entered initial event information (i.e., event location, date of event, text summary of case, etc.) the user could specify the deponent or deponents by selecting a button control for deponents. The mission could investigate cases on its own initiative without someone reporting it. In such cases no deponents were specified.
- If the deponent button was selected, a *Person Window* was laid over the Case Window with the title "deponent." Personal information about an individual (first and last name, birth date, occupation, ethnicity, etc.) was added on this form. A lookup list consisting of all persons who had previously been associated with cases in some role was displayed as part of the window. This feature allowed users to first search the list of names and compare individual information to determine if the person to be added was already part of the system. It they were already in the system, they could then be selected without having to re-enter their information. This would also assure that the same person would not be counted twice in later analysis.
- In keeping with our differentiation of *individual* versus *role* identity, there was not a field in the person window to mark this person as a deponent. The connection between this individual and their role as deponent in this specific event was automatically created when

the user finished entering the personal information and selected an *Accept* button closing this window and revealing the overlaid Case Window.

- The user selected a button for acts to add victims, their associated violations and alleged perpetrators.
- The same Person Window was then superimposed on the Case Window, but this time the title would specify that a victim was being added. Again, individuals could first be searched for in the persons lookup list or the user entered their information if they were new to the system. Selecting Accept created the relationship between this individual and their role as victim in this event.
- Since an act requires a victim, a violation, and a perpetrator, the following step would not return to the Case window but lead the user to a third window where a perpetrator (or perpetrators) and a violation (or violations) could be selected. Adding perpetrator(s) followed the same process as before and an individual or an institution (only possible in this case) is defined or selected. Once again, when the user accepted the perpetrator(s), their role in the event is established. Violations were selected from a control lookup list of possible violations. After specifying all pertinent information, the user selected the Accept button and the system created the relationships among victims, violations and perpetrators.
- Additional fields on the main case window allowed the users to add text for qualitative case follow up and analysis.

We completed the design of the database in November 1995, and users started installation and training in each of the 13 field offices. By the end of January 1996, every office had incorporated its prior caseload (created since the beginning of the mission) and added new cases as they arrived. Once a month at first, and later, every two weeks, the information was transmitted to the head office using electronic mail. There it would be consolidated with that of the other regional offices. To assure confidentiality the information was encrypted prior to transmission using Pretty Good Privacy (PGP) public key encryption software with keys of 1024 bits.

In December 1996, the mission hired a UN volunteer to work full time on maintaining and modifying the database system. This person was also in charge of producing statistical tables and lists used by the verification officers in the Human Rights Division and other areas for analysis, creating a standard list of statistical reports and performing *ad hoc* queries for data. These results were produced as hard copy and given to the requesting party.

Introducing a New Methodology

The effect of the ability to quantify human rights violations information was first seen in MINUGUA's fourth report to the Secretary General March 1996. In the fifth report released in November 1996, the change in the statistical table was explained as follows:

In the Comprehensive Agreement, the parties requested the Mission to receive, consider and verify complaints of human rights violations and to determine whether or not such violations had occurred. In previous reports, the Mission included statistics on the complaints admitted, classified by the right affected in each case, with a proviso as to the extent which they formed the basis for its conclusions. (United Nations, 1996)

Taking only one complaint per case as a statistical reference made it hard to shed light on the full range of victims and human rights violations covered. To overcome that limitation and to provide a more representative assessment, the Mission modified its methodology for recording and systematizing the data from the verification process. The Mission designed and set up a database for recording complete information on all the victims and human rights affected in each case reported. Thereafter, when the report refers to violations, these were understood to mean each violation of each victim. This new methodology made it difficult to draw comparisons with previous periods because of the differences in the data structures.

The fifth report introduced a statistical table based on MINUGUA's new methodology. While maintaining the numbers of cases admitted which were classified by primary violation as in previous reports, it also included new columns for the number of individual reported violations, verified violations and confirmed violations (violations in which the state was determined to be responsible), all classified by type. In this table *admitted cases* of extra-judicial killings account for 61 cases where it is the primary or "most serious" violation, as opposed to arbitrary detention which &-

counts for only 14 cases, a greater than four to one ratio of killings to detention. But if we look at the number of *reported violations* of extra-judicial killings compared to the number of reported violations of arbitrary detention we see the ratio is almost one to one (69 to 66). If we look at *confirmed violations*, arbitrary detention out ranks extra-judicial killings by three to one (18 to 6).

From my preceding review of the developmental process, it is clear how different database representations may lead to different views of reality. I feel that the original approach of counting only one violation per case presented a misleadingly simplistic view of the human rights situation in Guatemala. It is important to carry out the database structuring correctly, as the findings are dramatically affected by the nature of the system. Of course, in human rights situations it is hard to know exactly what the nature of reality is until data collection has been in process. Ideally, the database designers will create a design that is flexible and robust so that it can deal with changes as the project proceeds.

Effects of Quantitative Analysis on Reporting

During its first year and a half of operation, MINUGUA was not able to report information on trends and patterns of human rights violations. However, after the design and implementation of the systematized database, MINUGUA could use its easy access to a rich dataset to perform sophisticated analyses.

In its fourth report to the UN Secretary-General, MINUGUA concluded that during the period of the report, 44.8% of the violations of ill treatment occurred while an individual was being arbitrarily detained and that the National Police were responsible for the ill treatment 44.2% of the time (United Nations, 1996). There is no such statement in any of the three previous reports.

In the sixth report (United Nations, 1997), MINUGUA concluded that in 1995, nearly 45% of violations were attributed to the main institutional protagonists of the armed conflict (the armed forces, including military commissioners and Voluntary Civilian Defense Committees and the URNG—the coalition guerrilla organization).⁴ This percentage declined steadily in 1996 to about 34%. Accordingly, violations attributed to the National Police, the Public Prosecutor's Office and the judiciary become a larger proportion; these three institutions, which in 1995 accounted for 32% of the violations reported, rose to 44% in 1996. Hence, the analysis of the data revealed a shift away from the attribution of responsibility for violations committed in the context of the armed conflict by institutions under the direct control of the parties to State institutions over which the Go vernment has no direct control, except in the case of the National Police.

Using the new database, MINUGUA now regularly cites the percentage of violations committed by the different state institutions as part of its quantitative analysis of the human rights situation.

In addition to providing reliable statistics, the creation of a database has permitted quick &ccess to case information allowing the mission to perform timely evaluation of compliance. The Peace Accords call for the creation of a new police force of a civilian nature, to be created from new recruits and "recycled" members of the old police force who have been evaluated to weed out those previously involved in the repressive actions of the past. Comparing a list of National Police members enrolled in the National Civilian Police Academy with confirmed cases involving police agents as perpetrators, MINUGUA was able to establish that the government had allowed the incorporation of almost 20 members of the National Police to the Academy who had previously been involved in human rights violations including several involved in extra-judicial killings.

The systematization of information has also allowed for the cross-referencing of information between offices. For example, where case histories of perpetrators from one office can be requested by another office in the event that the individual is transferred into its region as is often the case with police agents, public prosecutors and judges.

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⁴ When Ríos Montt took power, he expanded the civic action aspects of the counterinsurgency efforts, including the peasant militias, under the name "civilian self-defense patrols." During the subsequent transition to civilian government, the army changed the name to "Voluntary Civilian Defense Committees" and renamed local *comandantes* as "committee presidents."

Lessons Learned

Table 2. Summary of lessons learned and recommendations

Entity, Function	Lesson	Recommendation	Issues
Carrying out full analysis of large- scale human rights violations	A relational database is needed.	The establishment of such a database into the mission should be an essential part of the commission's activities.	Will the initial planning, often dominated by legal and political parties, have the knowledge and understanding of the need for and requirements of such a database?
Design and implementation of database	Without the self-directed proposal of a volunteer, it is uncertain whether or when the database would have been ready.	Incorporate database needs into the initial planning for the project. Do not depend on chance events, such as the possibility that someone on the staff will have the skills and volunteer to do the work.	Does achieving this recommendation depend on the presence on the commission of an advocate for such a database? If no knowledgeable persons are part of the managerial and administrative structure, can this recommendation be achieved?
Data structure and unit of analysis	Don't use the structure, "one victim- one most serious violation."	Follow the guidance in Ball (1994) for the data structures based on who did what to whom.	Database designers need to be familiar with the rationale discussed in these proceedings. Will they? Law enforcement often uses the "one victim-one most serious violation" method; users may not realize the implications in a human rights situation.

Conclusions

For the year and a half prior to the implementation of a violations database MINUGUA had only the capacity to draw broad conclusions about the human rights situation in Guatemala. Reports to the Secretary General of the United Nations — MINUGUA's official evaluation of the human rights situation in the country —relied almost exclusively on anecdotal evidence. The design and implementation of a large-scale relational database has changed that situation.

The implementation of a database allowed the mission to present a more profound analysis of trends and patterns of violations. The violations database has also allowed the mission to concretely signal government noncompliance of its commitments as in the case with the National Civil Police Academy and has allowed the fluid interchange of information between previously isolated regional offices.

A final note: As shown in this paper, the implementation of MINUGUA's violation database was *ad hoc*. Such a database was not incorporated into initial planning and apparently its importance was not understood by decision-makers until after a year and a half of operational experience. Even then, but for the availability and willingness of a skilled volunteer on the staff, we can only guess how much longer it would have taken to undertake a design and implementation project. MINUGUA could have made better-supported, stronger arguments at a much earlier time, exploiting the wealth of information collected by a large team if a relational database system had been planned and implemented from the start of the project.

Appendix I

Table 1. Second Report to the Secretary General of the United Nations, August 1995, Complaints admitted by category of presumed violations*

Right to Life	
Extrajudicial execution or death in violation of judicial guarantees	54
Tentative extrajudicial execution	25
Death threat	146
Total	225
Total	223
Right to Physical Integrity Security	
Torture	10
Cruel, inhuman or degrading treatment	3
Physical abuse	4
Excessive use of force	6
Other threats	117
Total	140
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Right to Personal Liberty	
Arbitrary detention	14
Detention in violation of judicial guarantees	20
Kidnapping	3
Taking of hostages	-
Forced disappearance	6
Forced, unjust or racist military recruitment	7
Total	50
Legal Due Process	
Procedural guarantees	20
Right to habeas corpus	2
Right to access to justice	54
Total	76
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Political Rights	2
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Right to Free Expression	0
Tright to the Emphasism	
Right to Free Association	35
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Right to Freedom of Movement	8
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Other Violations Relating to the Internal Armed Conflict	
Harm or suffering caused to civilians	20
Attacks against civilian property	7
Attacks against goods and services indispensable for the survival of the civilian population	1
Terrorist acts	4
Failing to protect health or religious workers	
Participation of minors 15 years and under in the internal armed conflict	2
Total	34
Total	570

^(*) The number of complaints by right violated may change during the verification process

Table 2. Fifth Report to the Secretary General of the United Nations, September 1996				
Dight to Life	Complaints admitted*	Number of violations	Violations verified	Violations proven
Right to Life Extrajudicial execution or death in violation of judicial guarantees	61	69	13	6
Tentative extrajudicial execution	19	54	42	39
Death threat	101	267	91	53
Total	181	390	146	98
Right to Physical Integrity Security				
Torture	4	8	2	0
Cruel, inhuman or degrading treatment	7	10	9	5
Physical abuse	39	73	27	21
Excessive use of force	12	116	103	96
Other threats	78	1060	1010	973
Total	140	1267	1151	1095
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Right to Personal Liberty				
Arbitrary detention	14	66	23	18
Detention in violation of judicial guarantees	7	21	14	13
Kidnapping	9	16	7	2
Taking of hostages	0	0	0	0
Forced disappearance	1	4	4	0
Forced, unjust or racist military recruitment	2	6	2	1
Total	33	113	50	34
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Legal Due Process				
Procedural guarantees				
Presumption of innocence	0	0	**	**
Right to judgement by an independent, impartial and competent authority	1	1	**	**
Right to be tried within a reasonable period	2	7	**	**
Right to a defense and assistance by a lawyer	2	5	**	**
Right to an interpreter	2	3	**	**
Right against self incrimination	0	0	**	**
Right to all legal recourses	0	0	**	**
Right of habeas corpus	0	0	**	**
Access to justice			**	**
Interfering with the National Police, Prosecutors office, of Judiciary	7	512	**	**
Obligation of the State to investigate and punish	55	590	**	**
Right to compensation	0	2	**	**
Total	69	1120	**	**
Political Rights	3	4	3	2
Right to Free Expression	1	4	2	0
Right to Free Association	7	64	43	36
Right to Freedom of Movement	5	882	879	873

Other Violations Relating to the Internal Armed Conflict				
Harm or suffering caused to civilians	28	648	634	100
Attacks against civilian property	1	2	1	1
Attacks against goods and services indispensable for the survival of the civilian population	0	0	0	0
Terrorist acts	0	1	1	0
Failing to protect health or religious workers	0	0	0	0
Participation of minors 15 years and under in the internal armed conflict	0	0	0	0
Failure to protect and assist wounded and captured	0	0	0	0
Total	29	651	636	101
Total	468	4495	2910	2239

^(*) The number of complaints by right violated may change during the verification process (**) Verified and confirmed violations of due process are not quantified while the verification of the legal process continues

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