

AHP CONFLICT RESOLUTION IN ACTION: THE PERUVIAN HOSTAGE CRISIS OF 1996-1997 RE-VISITED

Enrique Mu
Carlow University
Business Administration
3333 Fifth Ave, Pittsburgh, PA 15213
emu@carlow.edu

ABSTRACT

The AHP analysis of the Peruvian hostage crisis of 1996-1997 is particularly significant because it was the first, and to my knowledge, only time that an AHP analysis of a hostage situation was done while the events were unfolding (Saaty and Mu, 1997). It shows the power of hierarchical thinking in terms of summarizing a complex crisis into two simple hierarchies of 3 to 4 criteria and 4 alternatives. Also, this study shows the power of sensitivity analysis to compensate for the lack of experts to estimate the true criteria weights of the parties and, finally, the analysis was completed within the five-week period of the crisis duration and on time to potentially influence the outcome.

Keywords: conflict resolution; hostage crisis; negotiation; AHP conflict; AHP crisis

1. Introduction

I still recall the morning of December 18, 1996, when following my daily routine of stopping by Tom's office to chat prior to beginning my work as program director at the University, I asked him, "Have you read the news? Do you know what has happened in Peru?" He told me he had not and I proceeded to tell him that the night before, 22 members of the revolutionary movement Tupac Amaru (MRTA) had stormed a diplomatic reception at the Japanese ambassador's residence in Lima, Peru. They had taken hundreds of hostages and, among them, cabinet members and even a close relative of the president at the time, Alberto Fujimori. They were asking for the release of their jailed comrades, in particular their jailed leader Victor Polay. Next, I made the comment that would change my life. "I bet the president would welcome an analysis about what to do using your famous AHP methodology", I said with a smile. Tom jumped off his chair and said, "You are right. Let's do it!" I must confess, I was caught off guard, but managed to react. I said, "Tom, I just know that you are the creator of the AHP method, but I have never either studied or used it. I am not the research partner you need." I thought I was safe, but this was not possible with Tom. He replied, "You are right." I felt relieved for a moment, but then he added, while handing me a book, "Here is my book '*Decision Making for Leaders*' that explains all there is to know about the method (Saaty, 1980). Read it and let's meet tomorrow at 9 am to start working on this conflict analysis". He added, "Don't fail me. I need you because the news on this crisis is all in Spanish (my native language)". I realized I had enrolled un-voluntarily into a crash course on AHP and its applications. I did not know at the time that this event would drastically change my professional life. This paper summarizes the study we did, emphasizing the

methodology and lessons learned in the process, which I believe, may be useful to many readers facing the task of analyzing similar conflicts (Saaty and Mu, 1997).

2. Literature review

From the onset, we decided to develop two hierarchies reflecting the points of view of the two parties in conflict: the government and the MRTA guerrillas. This approach was consistent with previous AHP studies on conflict resolution (Bennett and Saaty, 1979). How could we know their objectives? The MRTA members were talking to the press and asking for the release of their 400 hundred or so jailed comrades as well as their leader Victor Polay. The government was unresponsive; however, the press in both Peru and the rest of the world were speculating about the government's possible objectives and actions. Therefore, I started collecting all the news from the major publications in Peru and the U.S. that were dealing with the crisis and I used three colors of markers to highlight: possible government objectives (green), possible MRTA objectives (yellow) and possible alternatives or actions (blue). Given that the MRTA guerrilla had stated what they wanted (release of their jailed comrades) and were waiting, then the immediate action or alternative would be that of the government.

Development of Objectives

Our review of the press clips provided several dozen of the government's objectives and a few of MRTA's; however, it became evident after a while that the government's objectives being discussed could be categorized mainly into three major themes: saving hostage lives, keeping the government's image (the current government had been elected based on its iron hand policy toward rebel guerrillas and terrorism) and the obvious police action of preventing terrorism ("Peru terror", 1996; Caretas, 1997). Similarly, an identification of the proposed objectives for the MRTA guerrillas as reported by the media yielded the following: release of jailed comrades, publicizing their cause, destabilizing the government and escaping unharmed ("Peru stalemate", 1997a; "Peru- a month gone", 1997b). Concerning this last objective, there had not been any suicide attack in spite of the long history of violence, so it was reasonable to assume that the MRTA members expected to escape unharmed (Oviedo, 1989).

Development of Alternatives

The development of alternatives required not only reading newspapers and listening to expert opinions in the media but also obtaining some from key literature on previous hostage crisis. In effect, two famous former hostage crises had been the Munich Olympics where all the Israeli Olympic delegation had been kidnapped and killed and the Entebbe Rescue where Israeli commandos had successfully rescued kidnapped passengers from an Air France flight (Miller, 1980). From this review of the literature, we concluded the following: first, it was possible to categorize the possible government actions on a continuum that ranged from not negotiating to storming the place to accepting all the MRTA demands. Second, the expert literature indicated that rescuing about 70 hostages (the MRTA guerrillas had released the remaining ones due to the physical impossibility of keeping hundreds of hostages in the building) would most likely translate into great loss of life, mainly among the hostages (Miller, 1980).

The result of the literature review allowed us to diagram the two hierarchies for the government and MRTA respectively as shown in Table 1.

Table 1
Government and MRTA's Objectives*

GOVERNMENT'S GOAL

Defuse crisis

KEY OBJECTIVES

- 1 - Keep government image
- 2 - Prevent terrorism
- 3 - Save hostage lives

GOVERNMENT ALTERNATIVES

- 1 - Do not negotiate
- 2 - Negotiate

POSSIBLE GOVERNMENT ACTIONS

- (1) Police action - storm the building
- (2) Isolate terrorists and demand unconditional surrender
- (3) Request Terrorists release hostages assuring them safe passage to leave the country
- (4) Request Terrorists release hostages granting them safe passage out of the country, and other concessions such access to media, money, political recognition, etc.
- (5) Safe passage, money and releasing key MRTA leaders out of the country
- (6) Safe passage, money and releasing key MRTA leaders and other members (not involved in bloody actions) out of the country
- (7) Safe passage, money and releasing all MRTA leaders out of the country
- (8) Safe passage, money and releasing key MRTA leaders in the country
- (9) Safe passage, money and releasing key MRTA leaders and other members (not involved in bloody actions) in the country
- (10) Safe passage, money and releasing key MRTA leaders (not involved in bloody actions) in the country and becoming a political party
- (11) Safe passage, money and releasing all MRTA leaders and other members in the country
- (12) Safe passage, money and releasing all MRTA leaders in the country and making MRTA a political party.

* Source: Saaty and Mu (1997).

A review of the alternatives in Table 1 suggests that we can further categorize them into four different types: storm the building (1), demand unconditional surrender (2), provide concessions without releasing MRTA jailed members (3-4) and finally, release jailed MRTA prisoners (5-12). Based on this and our previous discussion in this section we proposed the hierarchies below to analyze the conflict (Figures 1 and 2).

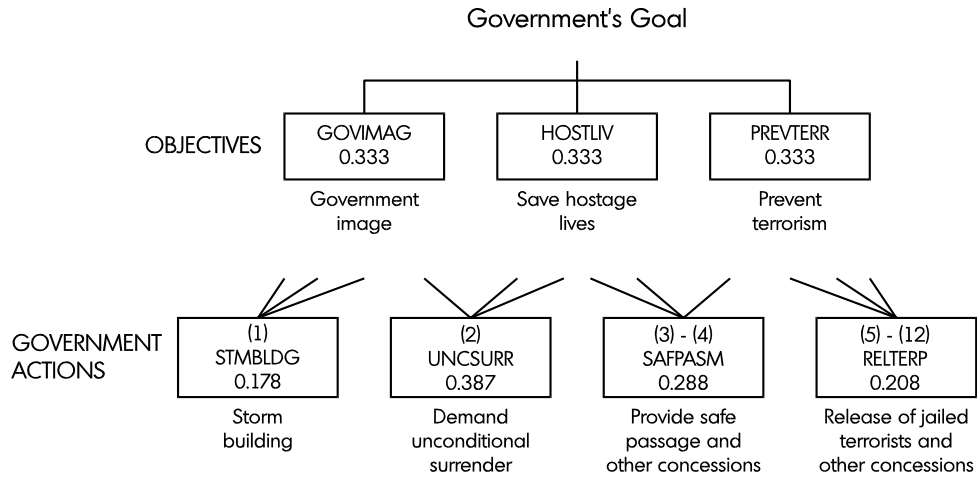


Figure 1. Government hierarchy
Source: Saaty and Mu (1997)

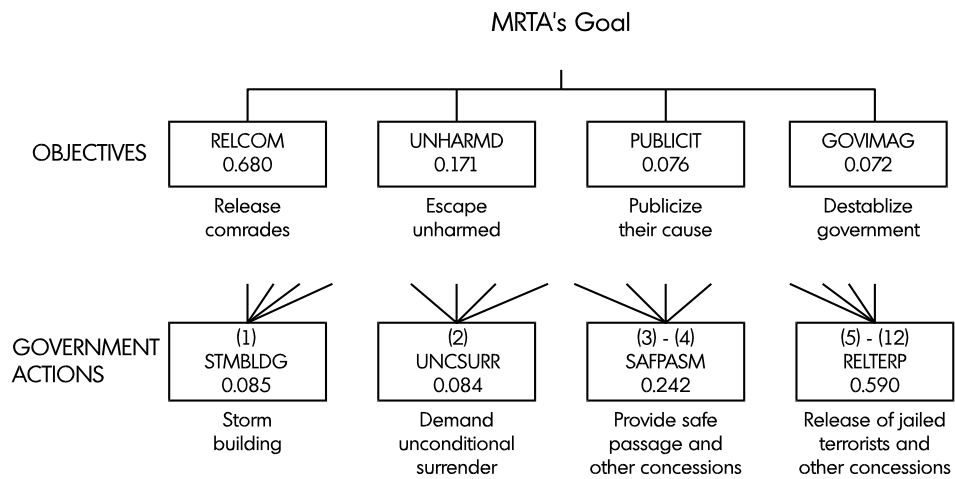


Figure 2. MRTA hierarchy
Source: Saaty and Mu (1997)

3. Methodology

The pairwise comparisons to obtain the priorities shown in Figures 1 and 2 for both criteria and alternatives in the government and MRTA's hierarchy respectively were done by the authors. The results corresponding to both perspectives as well as their product aggregation are shown in Table 2.

Table 2
Government and MRTA hierarchies
Source: Saaty and Mu (1997)

<u>Government's Perspective</u>		<u>MRTA's Perspective</u>	
<u>Key Objectives</u>	Priority	<u>Key Objectives</u>	Priority
GOVIMAG	0.333	RELCOM	0.680
HOSTLIVE	0.333	UNHARMD	0.171
PREVTERR	0.333	PUBLICIT	0.076
		GOVIMAG	0.072

Potential Government Actions

				Product of the two vectors for compromise
UNCSURR	0.387 (1)	UNCSURR	0.084 (4)	$0.387 \times 0.084 = 0.03$
SAFPASM	0.228 (2)	SAFPASM	0.242 (2)	$0.228 \times 0.242 = 0.06$
RELTERP	0.208 (3)	RELTERP	0.590 (1)	$0.208 \times 0.590 = 0.12$
STMBLDG	0.178 (4)	STMBLDG	0.085 (3)	$0.178 \times 0.085 = 0.02$

Notice that for our original analysis, all the government objectives were considered equally important (0.333 each) because there was no way to guess any particular preference although one would expect hostage lives to be high in the list. On the other hand, release comrades (0.680) was considered to be at the top of the list of MRTA's objectives. Based on this preliminary analysis, releasing MRTA guerrillas (RELTERP) in one way or another is the most desirable alternative.

Sensitivity Analysis

The obvious argument to the preliminary analysis is the question of how valid comparisons judgments made by the two authors of this study could be to model this problem. The answer is that there is no way to know. A solution could be to perform a sensitivity analysis, taking into account all possible combinations. The sensitivity analysis for the case of the Government and MRTA's perspectives are shown in Tables 4a and 4b respectively.

Table 4a
Sensitivity Analysis from the government's perspective

Major Objectives:

	All Equal	Government Image	Hostages lives	Preventing Terrorism	Both Government Image and Preventing Terrorism	Both Hostages Lives and Preventing Terrorism	Both Government Image and Hostages
GOVIMA	0.333	<u>0.703</u>	0.076	0.243	<u>0.414</u>	0.102	<u>0.442</u>
HOSTLIV	0.333	0.149	<u>0.703</u>	0.051	0.160	<u>0.448</u>	<u>0.453</u>
PREVTER	0.333	0.149	0.221	<u>0.706</u>	<u>0.426</u>	<u>0.450</u>	0.105

Desirable Government Action:

	Demand Unconditional Surrender	Demand Unconditional Surrender	Demand Unconditional Surrender	Safe Passage or Release of Jailed Terrorists	Demand Unconditional Surrender	Demand Unconditional Surrender	Demand Unconditional Surrender
UNCSUR	<u>0.387</u> (1)	<u>0.446</u> (1)	0.265 (3)	<u>0.520</u> (1)	<u>0.457</u> (1)	<u>0.352</u> (1)	<u>0.337</u> (1)
SAFPAS	0.228 (2)	0.198 (3)	<u>0.303</u> (2)	0.136 (3)	0.183 (3)	0.245 (3)	0.264 (2)
RELTER	0.208 (3)	0.135 (4)	<u>0.314</u> (1)	0.118 (4)	0.150 (4)	0.251 (2)	0.236 (3)
STMBLD	0.178 (4)	0.221 (2)	0.117 (4)	0.226 (2)	0.210 (2)	0.152 (4)	0.163 (4)

Table 4b
Sensitivity Analysis from MRTA' s perspective

Major Objectives:

	Release Comrades	Escape Unharmed and Publicity	Escape Unharmed and Government Image	Release Comrades and Government Image	Release Comrades and Publicity	Release Comrades and Escape Unharmed
RELCO	0.680	0.048	0.048	0.454	0.458	0.449
UNHAR	0.170	0.452	0.454	0.041	0.041	0.457
PUBLICI	0.076	0.455	0.043	0.047	0.455	0.049
GOVIM	0.072	0.045	0.455	0.458	0.046	0.045

Desirable Government Action:

In all cases, the most convenient government action is the release of jailed MRTAs. The second best government action is safe passage for the hostages.

UNCSUR	0.084 (4)	0.100 (3)	0.093 (4)	0.066 (4)	0.073 (4)	0.101 (3)
SAFPAS	0.242 (2)	0.340 (2)	0.304 (2)	0.190 (2)	0.246 (2)	0.314 (2)
RELTER	0.590 (1)	0.480 (1)	0.497 (1)	0.618 (1)	0.587 (1)	0.511 (1)
STMBLD	0.085 (3)	0.080 (4)	0.105 (3)	0.125 (3)	0.094 (3)	0.074 (4)

4. Conclusions

Our conclusions can be divided into two parts: those corresponding to the original study and those derived from re-visiting this study later.

Conclusions from the original study (Saaty and Mu, 1997)

The key conclusions were:

- a. The three driving issues in any Peruvian government decision are hostage's lives, government image and prevention of terrorism;
- b. The government's course of action is driven by the priority assigned to each of these three issues (Figure 4-a);
- c. Negotiating, by releasing some terrorists, and, perhaps, giving MRTA political negotiation, is the best course of action if hostage lives have greater priority (70.3%) than the other two objectives (Figure 4-a, third column).
- d. If either government image or prevention and punishment of terrorism is the main objective, then the best course of action is to demand unconditional surrender (Figure 4-a, second and fourth columns), though it could lead to dire consequences.

Conclusions from re-visiting the study

In hindsight and following our declared interest to discuss the lessons we learned from this study, we can state that:

- a. Developing a model of a conflict requires a qualitative analysis of the existing literature plus gathering expert opinions. In a sense, interviewing experts should follow techniques similar to those used in the development of grounded theory and similar qualitative expert elicitation techniques (Corbin and Strauss, 2008; Charmaz, 2006). In addition, identifying objectives and alternatives out of secondary literature sources (e.g. newspaper clips) requires the use of theme identification techniques used in qualitative studies (Saldaña, 2016).
- b. The previous observation suggests the importance of qualitative research training for researchers and practitioners using AHP/ANP and similar MCDM methodologies that are strongly based on decision maker's opinions. To my knowledge, not even basic qualitative research is currently considered part of the training of MCDM researchers and professionals. The emphasis is still on the quantitative aspects of the discipline.
- c. Never underestimate the power of simple models to provide insights into complex problems. The hierarchies used in this study were relatively simple: 3 levels, no more than 4 criteria and alternatives; however, this simple structure provided us with the insights necessary to analyze a complex conflict.
- d. Sensitivity analysis is key to providing insights about a decision even when the proper criteria weights cannot be accurately determined. In the original study, it was not possible for the researchers to interview either the government or MRTA actors during the crisis to elicit comparison judgments on the criteria and alternatives. However, the sensitivity analysis (Figures 4a and 4b) clearly delineated the possible courses of action based on different weightings of the actors' objectives.

The Crisis Aftermath

On April 22, 1997, Peruvian commandos stormed the Japanese embassy through an underground tunnel and rescued the hostages, with the loss of two commandos and one

hostage (who had previous health issues) while all 14 MRTA guerrillas were killed in the attack (The New York Times, 1997). While the attack was a military success, it was possible to know later on that at least one of the guerrillas had had the opportunity to kill most or all of the hostages but hesitated because of what has been labeled Stockholm reverse syndrome (Association for Diplomatic Studies and Training, 2017). In other words, attacking instead of negotiating could have had disastrous results. In any case, our AHP analysis did not recommend a specific action per se but provided rather a set of actions which could be chosen based on the government's own view of the importance of its objectives.

My Personal Aftermath

This study was sent to the Peruvian media at the end of February 1997, and also discussed by mainstream newspapers. An article indicated that the study had been analyzed by the government (El Sol, 1997). While there is no way to know if, and to what extent, this study may have influenced the events, it piqued my interest in the field of decision making. AHP and Tom became part of my life ever since!

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