



**Calhoun: The NPS Institutional Archive**  
**DSpace Repository**

---

Theses and Dissertations

1. Thesis and Dissertation Collection, all items

---

2007-12

# The soldier's dilemma: using decision theory to explain American War crimes

Stitt, Orrin G.

Monterey California. Naval Postgraduate School

---

<http://hdl.handle.net/10945/10174>

*Downloaded from NPS Archive: Calhoun*



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

**Dudley Knox Library / Naval Postgraduate School**  
**411 Dyer Road / 1 University Circle**  
**Monterey, California USA 93943**

<http://www.nps.edu/library>



**NAVAL  
POSTGRADUATE  
SCHOOL**

**MONTEREY, CALIFORNIA**

---

**MBA PROFESSIONAL REPORT**

---

**The Soldier's Dilemma: Using Decision Theory  
to Explain American War Crimes**

---

**By: Orrin G. Stitt  
December 2007**

**Advisors: Raymond Franck, Brig. Gen. (R), Ph.D.  
Bill Gates, Ph.D.  
Pete Coughlan, Ph.D.**

*Approved for public release; distribution is unlimited.*

THIS PAGE INTENTIONALLY LEFT BLANK

<b>REPORT DOCUMENTATION PAGE</b>			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
<b>1. AGENCY USE ONLY (Leave blank)</b>		<b>2. REPORT DATE</b> December 2007	<b>3. REPORT TYPE AND DATES COVERED</b> MBA Professional Report	
<b>4. TITLE AND SUBTITLE:</b> The Soldier's Dilemma: Using Decision Theory to Explain American War Crimes			<b>5. FUNDING NUMBERS</b>	
<b>6. AUTHOR(S)</b> Orrin G. Stitt				
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> Naval Postgraduate School Monterey, CA 93943-5000			<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
<b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> N/A			<b>10. SPONSORING / MONITORING AGENCY REPORT NUMBER</b>	
<b>11. SUPPLEMENTARY NOTES</b> The views expressed in this report are those of the author(s) and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
<b>12a. DISTRIBUTION / AVAILABILITY STATEMENT</b> Approved for public release; distribution is unlimited.			<b>12b. DISTRIBUTION CODE</b>	
<b>13. ABSTRACT (maximum 200 words)</b> This project explores identity modeling as an observable and quantifiable indicator of the rational foundations of apparently inconsistent behavior. A model of rational choice is presented in which behavior is the product of (a) feasible alternatives, (b) available information (c) ethical identity, and (d) social setting – all of which are subject to change as the given situation is played out. This model is developed and then applied in two cases. The first is the movie <i>Under Suspicion</i> , tracing the decisions of Henry Hearst, the prime suspect in a murder case. The second is the account of the Tiger Platoon, a special operations unit during the Vietnam War – documented in the book <i>Tiger Force</i> . The model has good explanatory power for understanding apparently inconsistent and irrational behavior. To this end, rational choice models are useful in understanding human behavior, especially in stressful environments such as police interrogations and combat. This study is a contribution to a research agenda that aims first to understand criminal behavior in wartime, and ultimately to identify means to prevent it.				
<b>14. SUBJECT TERMS</b> Decision Theory, Behavioral Economics, Game Theory, War Crimes, Wartime Atrocities, Identity Modeling, Ethics Modeling, Rational Choice, Rational Actor, Apparently Inconsistent Behavior, Apparently Irrational Behavior, Human Behavior, Vietnam			<b>15. NUMBER OF PAGES</b> 67	
			<b>16. PRICE CODE</b>	
<b>17. SECURITY CLASSIFICATION OF REPORT</b> Unclassified	<b>18. SECURITY CLASSIFICATION OF THIS PAGE</b> Unclassified	<b>19. SECURITY CLASSIFICATION OF ABSTRACT</b> Unclassified	<b>20. LIMITATION OF ABSTRACT</b> UU	

THIS PAGE INTENTIONALLY LEFT BLANK

**Approved for public release; distribution is unlimited**

**THE SOLDIER'S DILEMMA: USING DECISION THEORY TO  
EXPLAIN AMERICAN WAR CRIMES**

Orrin G. Stitt, Captain, United States Army

Submitted in partial fulfillment of the requirements for the degree of

**MASTER OF BUSINESS ADMINISTRATION**

from the

**NAVAL POSTGRADUATE SCHOOL  
December 2007**

Author:

\_\_\_\_\_  
Orrin G. Stitt, Captain, U.S. Army

Approved by:

\_\_\_\_\_  
Raymond Franck, Brig. Gen. (R), Ph.D., Lead Advisor

\_\_\_\_\_  
Bill Gates, Ph.D., Co-Advisor

\_\_\_\_\_  
Pete Coughlan, Ph.D., Co-Advisor

\_\_\_\_\_  
Robert N. Beck, Dean  
Graduate School of Business and Public Policy

THIS PAGE INTENTIONALLY LEFT BLANK

# **THE SOLDIER'S DILEMMA: USING DECISION THEORY TO EXPLAIN AMERICAN WAR CRIMES**

## **ABSTRACT**

This project explores identity modeling as an observable and quantifiable indicator of the rational foundations of apparently inconsistent behavior. A model of rational choice is presented in which behavior is the product of (a) feasible alternatives, (b) available information (c) ethical identity, and (d) social setting – all of which are subject to change as the given situation is played out. This model is developed and then applied in two cases. The first is the movie *Under Suspicion*, tracing the decisions of Henry Hearst, the prime suspect in a murder case. The second is the account of the Tiger Platoon, a special operations unit during the Vietnam War – documented in the book *Tiger Force*. The model has good explanatory power for understanding apparently inconsistent and irrational behavior. To this end, rational choice models are useful in understanding human behavior, especially in stressful environments such as police interrogations and combat. This study is a contribution to a research agenda that aims first to understand criminal behavior in wartime, and ultimately to identify means to prevent it.

THIS PAGE INTENTIONALLY LEFT BLANK

# TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	DECISION ANALYSIS OF AN APPARENTLY INCONSISTENT CHOICE ....	3
A.	USE OF A FILM AS A PLAUSIBLE CLOSED SYSTEM .....	3
B.	BASIC CHARACTER ASSUMPTIONS.....	3
C.	CHARACTER INTERACTION .....	4
D.	CHARACTER CHOICE PREFERENCES .....	6
III.	ETHICAL IDENTITY IN CHOICE.....	9
A.	PLAYER CONSISTENCY .....	9
B.	CONTRIBUTING FACTORS TO RATIONAL DECISION MAKING .....	9
C.	APPLICATION TO THE FILM.....	10
D.	DECISION FUNCTION DESCRIPTIONS AND PROPERTIES .....	11
E.	ETHICS IN IDENTITY .....	12
F.	COHESION AND UNILATERAL SELF INTEREST .....	14
G.	SEPARATION .....	15
H.	RESULTANT CHOICE.....	15
IV.	RATIONAL CHOICE IN DOCUMENTED WAR CRIMES .....	21
A.	CASE STUDY: TIGER FORCE .....	21
B.	METHODOLOGY .....	21
C.	SPECIALIST GREEN .....	22
D.	SERGEANT TROUT .....	27
E.	LIEUTENANT WOOD .....	32
F.	OBSERVATIONS.....	34
V.	CONCLUSION .....	37
A.	SUMMARY .....	37
B.	FURTHER RESEARCH.....	37
C.	ADDITIONAL APPLICATIONS .....	38
	APPENDIX A. <i>UNDER SUSPICION</i> FILM SYNOPSIS.....	39
A.	FILM SUMMARY .....	39
B.	ADDITIONAL CLARIFICATIONS .....	40
	APPENDIX B. <i>TIGER FORCE</i> SYNOPSIS.....	43
	APPENDIX C. APPLICABLE LIKERT SCALES .....	45
A.	METHODOLOGY .....	45
B.	SCALES .....	45
	LIST OF REFERENCES .....	49
	INITIAL DISTRIBUTION LIST .....	51

THIS PAGE INTENTIONALLY LEFT BLANK

## LIST OF FIGURES

Figure 1.	Decision Tree Diagram of the Interrogation in <i>Under Suspicion</i> . .....	5
Figure 2.	Contributing Factors to Dynamic Rational Decision Making. ....	10
Figure 3.	Comparison of Hearst’s Perceived Identities According to Ethical Ranking with Likert Equivalencies. ....	13
Figure 4.	Hearst’s Decision-making Components at Node B. ....	17
Figure 5.	Hearst’s Decision-making Components at Node D. ....	18
Figure 6.	Hearst’s Decision-making Components at Node F. ....	20
Figure 7.	Specialist Green’s Decision Tree Regarding War Crimes. ....	23
Figure 8.	Specialist Green’s Decision-making Components at Node G. ....	24
Figure 9.	Specialist Green’s Decision-making Components at Node H. ....	25
Figure 10.	Specialist Green’s Decision-making Components at Nodes I, J, and K. ....	27
Figure 11.	Sergeant Trout’s Decision Tree Regarding War Crimes. ....	28
Figure 12.	Sergeant Trout’s Decision-making Components at Node L. ....	29
Figure 13.	Sergeant Trout’s Decision-making Components at Node N. ....	30
Figure 14.	Sergeant Trout’s Decision-making Factors at Node P. ....	31
Figure 15.	Lieutenant Wood’s Decision Tree Regarding War Crimes. ....	32
Figure 16.	Lieutenant Wood’s Decision-making Components at Nodes Q Through U. ...	34

THIS PAGE INTENTIONALLY LEFT BLANK

## LIST OF TABLES

Table 1.	Hearst’s Rankings for Outcomes in <i>Under Suspicion</i> . .....	7
Table 2.	Hearst’s Contributing Factors at Node B.....	17
Table 3.	Hearst’s Contributing Factors at Node D.....	18
Table 4.	Hearst’s Contributing Factors at Node F. ....	19
Table 5.	Specialist Green’s Contributing Factors at Node G.....	24
Table 6.	Specialist Green’s Contributing Factors at Node H.....	25
Table 7.	Specialist Green’s Contributing Factors at Nodes I, J, and K. ....	26
Table 8.	Sergeant Trout’s Contributing Factors at Node L.....	29
Table 9.	Sergeant Trout’s Contributing Factors at Node N. ....	30
Table 10.	Sergeant Trout’s Contributing Factors at Node P.....	31
Table 11.	Lieutenant Wood’s Contributing Factors at Nodes Q Through U.....	34

THIS PAGE INTENTIONALLY LEFT BLANK

## **ACKNOWLEDGMENTS**

The author would like to thank Professors Raymond Frank, Bill Gates, and Pete Coughlan, without whose support, mentorship, and guidance, this study would simply not have been possible. I am greatly indebted for their insight and privileged to have them oversee this project.

A word of gratitude is also in order to Commander Phil Gonda, who has extended his confidence and trust in the author, and provided the opportunity for research at the NPS Graduate School of Business and Public Policy.

THIS PAGE INTENTIONALLY LEFT BLANK

## I. INTRODUCTION

The actual number of recent war crimes and allegations from Operations IRAQI FREEDOM and ENDURING FREEDOM is relatively low. However, the incidents are similar in that they involve small groups of soldiers who chose to deviate from accepted behavior, rather than a consequence of illegal orders. The probability that all of the soldiers involved became simultaneously psychopathic is almost zero, and the residual organization underlying their group makes irrational behavior similarly unlikely. These anomalous soldiers can then be usefully studied as rational players making rational choices, albeit inconsistent with behavior expected of American armed forces. In other words, the war criminal is playing what is perceived as his best strategy, given his evaluation of the circumstances. Moreover, such a strategy must be consistent with his governing identity, which is not that of the American soldier.

The purpose of this project is to determine the nature and relationship of factors that may contribute to the commission of war crimes as a rational choice through the use of decision theory. As a descriptive application, the project will assess the usefulness of identity modeling, inherent ethics, and cooperation as explanatory factors in rational decision making. To assess the usefulness of the model, a plausible interpretation of the film *Under Suspicion* and a detailed account of specific war crimes from the Vietnam conflict are used as cases in point.

Some basic conventions in terminology are applied to prevent ambiguity and focus this effort. First, the term “war crime” denotes those wartime activities that the United States has declared illegal in international agreements, including the Geneva Conventions of 1949 and the Additional Protocol of 2005.<sup>1</sup> Second, the terms “moral” and “ethical” are used interchangeably. Third, this study addresses aspects of *jus in bello*

---

<sup>1</sup> The United States is not signatory to the first and second 1977 Additional Protocols of the 1949 Geneva Conventions, which include further restrictions on the scale of force relative to military objectives as well as re-defining “self-defense” as an attack (International Committee of the Red Cross, 2007).

relating to small group dynamics, without discussing the ethics or factors of *jus ad bellum*. Finally, the war crime of “mercy killing” a mortally wounded opponent is not addressed in this study.

## **II. DECISION ANALYSIS OF AN APPARENTLY INCONSISTENT CHOICE**

### **A. USE OF A FILM AS A PLAUSIBLE CLOSED SYSTEM**

To illustrate the usefulness of a descriptive model in a complex issue such as war crimes, it is often beneficial to first demonstrate usefulness in a closed system where relatively complete knowledge of the conditions exists for the audience. Although the film *Under Suspicion* does not involve war crimes, it contains a plausible scenario of apparently inconsistent choices (and what many would consider irrational behavior) when the main character confesses to monstrous crimes that he did not commit. A synopsis of the film concerning the relevant plot factors is included in Appendix A.

The objective of this analysis is to show, through the use of decision theory, that the choice was not only rational at that moment, but also consistent with the character's identity.

### **B. BASIC CHARACTER ASSUMPTIONS**

The film depicts police chief Captain Benezet's extended interrogation of a local prominent attorney, Henry Hearst, during an investigation into the murder of two young local girls. Through conversation and flashbacks, the audience becomes aware of Hearst's failing marriage, his solicitation of prostitutes, his possible pedophilia, and his proximity to both murder scenes. Hearst's eventual confession comes as no surprise until more information comes to light, revealing that he cannot possibly be the killer. An innocent man's decision to confess is thus the starting point for this study of rational decision making.

This analysis assumes that Hearst acts rationally throughout the film. Additionally, Hearst loves his wife, Chantal, and wishes to protect her at all costs. Benezet is considered to be an accomplished police captain whose years of experience indicate a high probability Hearst committed the crimes. There is a high payoff if he can elicit a confession through interrogation by using isolation, time, confronting Hearst with

the unpleasant aspects of his private life, and magnifying the collapse of his marriage. Benezet is so successful at framing the situation to his ends that he is able to dominate many of Hearst's choices with his own preferred strategy, as well as convince Chantal to cooperate against her husband. Benezet knows that Hearst was Chantal's guardian for many years, but does not properly weight this information.

### **C. CHARACTER INTERACTION**

Henry Hearst expects to provide his witness statement and then leave to attend the fundraising event, and does not consider that Benezet is pursuing a confession from the outset. Benezet has the advantage of possessing more complete circumstantial information about his suspect throughout the discussion, but still makes a false assumption about Hearst's involvement in the crimes.<sup>2</sup> Hearst, however, has incomplete knowledge about the extent of Benezet's investigation and the crimes themselves, and focuses his efforts on divulging as little as possible to obtain a release. Benezet's chosen strategy is to keep Hearst in play until he confesses, while Hearst's attempts to convince Benezet of his innocence while protecting his own secrets (arguably his best strategy).

The sequence of the film can be depicted with a decision tree diagram, where both Hearst and Captain Benezet attempt to use backward induction (within the framework of limited and asymmetrical information sets) to determine their best moves, considering the foreseeable conclusions and the associated outcome preferences. Neither player wants to reveal his strategy, for fear of allowing the other to take advantage, so both reveal only the minimum information necessary. Like the traditional Prisoner's Dilemma, this might demonstrate the failure of backward induction to produce the Pareto-optimal result in a non-repeated imperfect information game (Ross, 2006).

Figure 1 provides a decision tree diagram of the film, where Node A represents the Benezet's initial investigation, and node B shows Hearst's options once he receives the phone call to report to the station. Nodes C and D represent a series of interactions

---

<sup>2</sup> This constitutes a Type I error or a false positive finding: an unwelcome assumption for juries, but not for suspicious police detectives trying to solve crimes and remove criminals from the streets.

between Hearst and Benezet where they spar with each other while revealing the least information possible. At node E, however, Benezet chooses to bluff and misrepresent the nature of Chantal’s knowledge about the photographs. Given that Benezet has been candid up to this point, Hearst draws a false conclusion and changes his strategy to protect Chantal.

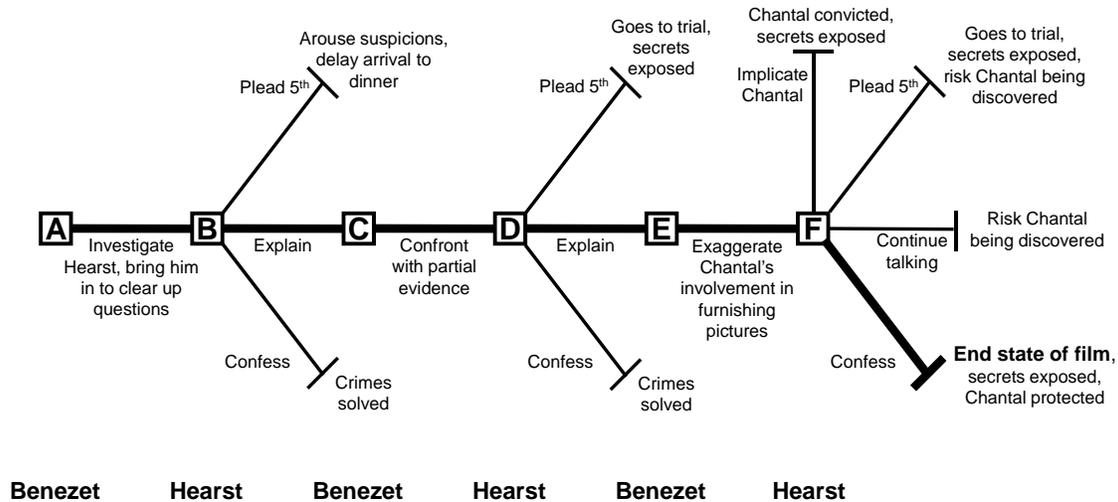


Figure 1. Decision Tree Diagram of the Interrogation in *Under Suspicion*.

Due to his noninvolvement with the crimes, Hearst cannot anticipate Benezet’s next move at any point in the interrogation. Captain Benezet uses a strategy that pursues confession, but encourages continued discussion rather than letting Hearst plead the Fifth Amendment and request an attorney.

The interrogation continues with both players making rational and consistent choices until Captain Benezet produces pictures of the victims, found in Hearst’s collection, and says: “Chantal was nice enough to bring these out of your darkroom,” *which means ...*

*Chantal knew the pictures were there, which means ...*

*Chantal knew about the girls he was photographing, which means ...*

*Chantal, acting out of rage and jealousy, killed these young girls whom she envied, which means ...*

*Chantal is framing Henry for the crimes...*

...or so Hearst's reasoning leads him to believe, as indicated by his response: "I can't believe that she would go to these lengths to make this kind of point. It's almost farcical."

When Hearst confesses, Benezet does not fully appreciate the actual chain of events that led up to that decision, and thinks his strategy has played to success. Hearst understands that the fates of Chantal and himself are entwined, realizes that a trial of any sort will expose all of his behavior and secrets in the worst possible light, and makes a decision that salvages what little utility is left from the situation by protecting Chantal.<sup>3</sup> He is also anxious that Captain Benezet might eventually realize Chantal's involvement, and that both continued protestations of innocence and keeping silent increase that likelihood with each passing moment, so timeliness of the confession is paramount.

#### **D. CHARACTER CHOICE PREFERENCES**

The key to understanding this film is recognizing that Hearst's perceived situation has changed in such a manner that pursuing an apparently incomprehensible outcome is now his best strategy as a rational player.

Table 1 illustrates the players' rankings for each outcome, and the change in Hearst's valuation of the results. Here, outcomes perceived as unlikely are depicted with an X, while preferentially superior outcomes are represented with smaller numbers. While confession is improbable during the initial stages of the interrogation, it is a choice that Hearst could consider, whereas implicating Chantal does not occur to him until the point where he imagines her involvement in the crimes.

---

<sup>3</sup> Hearst's choice is the Othello board game equivalent of playing a white piece when one's own pieces are black, in order to cover up an unoccupied square depicting Chantal's involvement, and at the cost of losing the game: a rational move if there is utility in safeguarding something valuable when faced with imminent defeat.

Table 1. Hearst's Rankings for Outcomes in *Under Suspicion*.

<b>Player Progression</b>	<b>Hearst at B</b>	<b>Hearst at D</b>	<b>Hearst at F</b>
<b>Outcomes</b>			
<b>Confession</b>	<b>3</b>	<b>3</b>	<b>1</b>
<b>Continue Talking</b>	<b>1</b>	<b>1</b>	<b>3</b>
<b>Plead 5<sup>th</sup> Amendment</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>Inform on Chantal</b>	<b>X</b>	<b>X</b>	<b>4</b>

It would seem that Benezet and Hearst had converged to a Nash equilibrium, playing their best strategies given the information available and the strategies of their opponents, until decision point F where Hearst loses all hope of escaping from the situation. Moreover, their use of these strategies jeopardizes the careers and lives of both men by the end of the film.

THIS PAGE INTENTIONALLY LEFT BLANK

### **III. ETHICAL IDENTITY IN CHOICE**

First say to yourself, who you wish to be: then do accordingly what you are doing, for in nearly all other things we see this to be so. (Epictetus, 3: 23, 101)

#### **A. PLAYER CONSISTENCY**

Henry Hearst's behavior is consistent with his underlying motivations as his choices adapt to new information. Assuming players are consistent at a basic level allows modeling of their actions, even making apparently irrational choices. This chapter describes the use of ethical identity, cohesion, and separation to demonstrate that consistency.<sup>4</sup>

#### **B. CONTRIBUTING FACTORS TO RATIONAL DECISION MAKING**

Given a complex situation, a rational player continually considers the available information and the attainable outcomes to determine the best course of action. His dominant strategy implements supportive decision making to achieve the optimal outcome. A player's dominant strategy can change during the course of play, however, subject to the dynamic effects of new information and variances in coercive forces. Specifically, these contributing decision-making factors in dynamic relationships can be grouped into three general components: ethics, cohesion, and separation, as depicted in Figure 2.

---

<sup>4</sup> These components, and their subcomponents, are not specifically identified in existing literature as contributing decision-making factors. They are the researcher's experience and assessment of the primary causal elements, and are found consistently within apparently irrational decisions, including war crimes.

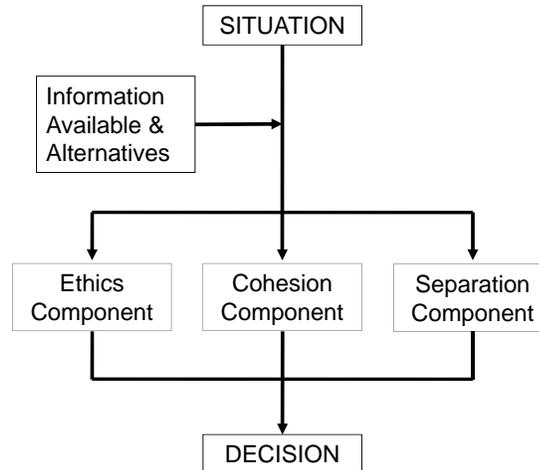


Figure 2. Contributing Factors to Dynamic Rational Decision Making.

### C. APPLICATION TO THE FILM

In order to analyze Hearst’s decision-making process in the film, this discussion is limited to the audience point of view, which prevents a direct measurement of coercive forces. Instead, a system of numerically quantified Likert scales, which represent the instantaneous subcomponent magnitudes, permits a useful approximation. Complete lists of these Likert scales are included in Appendix C.

In the absence of an established causal relationship of these factors that is stated mathematically, a set of simple formulas that are consistent with the component functions and their partial derivatives supports the analysis. These specific functional forms are representative examples of the comparative statics among the variables, which satisfy the partial derivative requirements. In actuality, the exact relationship may differ from the formulas given. The resultant values are normalized and aligned to allow comparison among factors and present an approximation of the player’s propensity to cooperate or betray. The limitations of this method include subjective evaluation by the researcher and the rudimentary nature of fixed numerical increments when approximating factor weights.

#### D. DECISION FUNCTION DESCRIPTIONS AND PROPERTIES

Within these three components, subcomponents determine the degree of influence that the component group has on the decision. Specifically, ethical decision making can be described as a result of the player's chosen identity and the probability of secrecy. Cohesion is based upon the comparison of cohesive interpersonal forces with unilateral self-serving options. Similarly, the influence that separation exerts depends on the player's experience level and changes in the distance and time spent within the environment.

These three major components are then a function of the individual contributing factors, where:

$$\text{Probability of Ethical Action} = f(\text{Identity, Probability of Secrecy})$$

$$\text{Cooperation}^5 \text{ due to Cohesion} = f(\text{Cohesion, Utility of Unilateral Action})$$

$$\text{Cooperation due to Separation} = f(\text{Experience, Distance, Time})$$

Additionally, the effect that a change in a subcomponent has on the component's coercive influence to decision making can be described in terms of first derivatives<sup>6</sup>, where:

$$\frac{\partial \text{Ethical Action}}{\partial \text{Identity}} > 0$$

$$\frac{\partial \text{Ethical Action}}{\partial \text{Secrecy}} < 0$$

$$\frac{\partial \text{Cooperation}}{\partial \text{Cohesion}} > 0$$

$$\frac{\partial \text{Cooperation}}{\partial \text{Utility of Unilateral Action}} < 0$$

$$\frac{\partial \text{Cooperation}}{\partial \text{Experience}} < 0$$

---

<sup>5</sup> Cooperation is behavior that is cooperative with a reference influence, whether proximate or distant. The model requires that all three components refer to the same influence for comparison purposes.

<sup>6</sup> Here increases in distance and time lead to an increase in cooperation *with a proximate influence*, a specific distinction explained later in this chapter.

$$\frac{\partial \text{Cooperation}}{\partial \text{Distance}} > 0$$

$$\frac{\partial \text{Cooperation}}{\partial \text{Time}} > 0$$

## E. ETHICS IN IDENTITY

There is evidence to suggest that personal preferences depend on chosen or assumed identities,<sup>7</sup> as an extension of Thomas Schelling’s “Self-Command” (1984). Players choose an identity that they can relate to, and which is seen as a desirable or expected model of behavior. They then wish to be perceived as, and considered consistent with, this identity. Moreover, after having made choices, players then reevaluate their identity to determine the appropriateness of fit, with some confirmation bias: If I have chosen Y over X, what does that make me?

To an outside observer, Hearst has several plausible identities from the context of the film. First, when he took care of Chantal after her father’s death, he was her *guardian*, which later evolved into her *husband* once they married. As a *tax attorney*, he is a *legal professional*. He is also a respected *community leader*, chosen to speak on behalf of hurricane victims and champion the cause of charity work in the community.

However, due to the unfortunate decline of his marriage, Hearst’s public façade is no longer consistent with the reality in his personal life. Thinking he can keep his personal affairs out of public knowledge, Hearst resorts to prostitutes as a substitute for nonexistent marital affection. Hearst realizes that he has become an *adulterer*, but as Benezet accuses him of the crimes, Hearst begins to understand that he could be perceived as having any of several other disagreeable identities as well.

---

<sup>7</sup> For the sake of simplicity, this study addresses all potential identities in terms of a single contributing factor. In reality, competing identities can exist: If a police officer were to discover that a family member committed a crime, what action represents the higher moral ground?

A numerical categorization of identities according to inherent ethical value is useful in predicting player choice.<sup>8</sup> Although comprehensive lists of ethical identities do not currently exist, intuitive categorization is possible for identities in various careers and contexts.<sup>9</sup> Use of a Likert scale is appropriate to compare ethical identities in terms of the benefits and costs that the player imposes upon society, as shown in Figure 3.

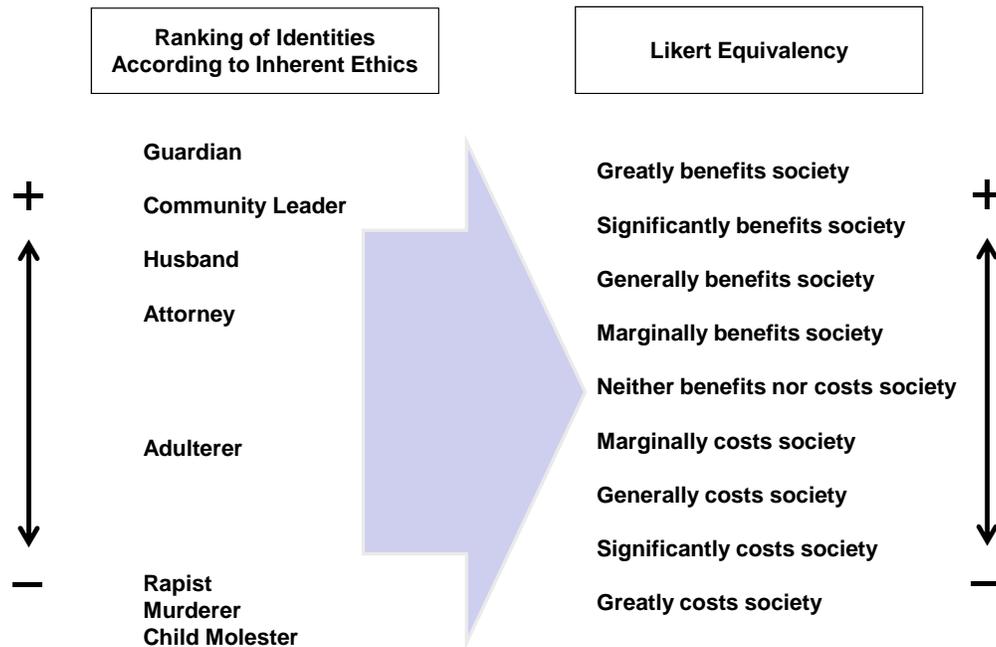


Figure 3. Comparison of Hearst's Perceived Identities According to Ethical Ranking with Likert Equivalencies.

The corresponding Likert match is then converted to a scaled number. This numerical equivalent is further refined by the probability of secrecy, which makes sense at a fundamental level: actions consistent with a player's personal moral standard may

<sup>8</sup> It is likely that a player's identity preference and selection is based on the rank ordering of those identities according to inherent power, while the player's subsequent decision-making process is a function of the ethical ranking of the chosen identity.

<sup>9</sup> The Forbes Poll of Most Admired Professions and the Harris Polls of Most Trusted and Most Respected Professions are examples of the general perception regarding inherent ethics within limited lists of certain careers. Intuitive extrapolation allows evaluation of the ethical components in other careers.

not meet the minimum public moral standard, but a higher probability of public disclosure increases the propensity to act in a socially acceptable manner.<sup>10</sup> A simple formula that demonstrates this relationship in terms of an exponential discount factor could be:

$$\text{Ethical Component} \approx \text{Identity}^{(\text{Probability of Secrecy})}$$

For Henry Hearst, a typical action might include an identity of *community leader* (significantly benefits society = 0.8) and a low probability of secrecy (disclosure likely = 0.3), resulting in a component value of 0.935, or a highly ethical anticipated action.

## **F. COHESION AND UNILATERAL SELF INTEREST**

Cohesion and self interest compete for dominance in the player's decision-making process – the result having a potentially significant effect on resulting behavior. Cohesion can be defined as the strength of the players' interpersonal bond, exhibiting a proclivity for cooperation due to existing player relationships. To the observer, estimation of cohesion may depend on the length of time they have known each other, the number or type of challenging situations that they have experienced together, and the amount of time players spend together when not required by their association, job, or mission.

In contrast, the utility of unilateral action is a measure of the player's expected benefit when he chooses a course of action indicated by tangible personal interests in long term outcomes. To simplify the analysis, this utility is limited to those self serving options that are in direct opposition to group cooperation, i.e., betrayal or resistance. A useful benchmark is the utility available to the player if the situation did not involve interaction with other players known to him, or what he might choose when amongst strangers.

---

<sup>10</sup> In actuality, this is the probability of negative consequences. Since the film involves crimes which, if discovered, lead to punishment, the estimation of disclosure produces the same result (R.E. Franck, Brig.Gen., Ph.D., personal communication, March 8, 2007).

The relationship used to illustrate the marginal difference between cohesion and the utility of unilateral action could be:

$$\text{Cohesion Component} \approx \text{Cohesion} - \text{Utility of Unilateral Action}$$

The resulting component value from equal influences would equal zero (generally cohesive conditions at 0.7 minus generally beneficial unilateral action at 0.7 results in 0.0), or a case where the player would be indifferent in the -process, in terms of cohesion.

## **G. SEPARATION**

A player's personal familiarity and capability in dealing with situations involving a choice between cooperation and betrayal is represented by their experience factor. Highly experienced players can evaluate and weight their decisions more appropriately, while inexperienced players are subject to effects of separation from their natural environment. In this case, their inexperience is exponentially discounted by the amount of separation by distance or time, whichever is less, and can be shown as:

$$\text{Separation Component} \approx (1 - \text{Experience})^{(1 - \text{MIN}(\text{Distance}, \text{Time}))}$$

Thus, a significantly inexperienced player (experience = 0.2) subjected to a significant distance (0.7) and a long period of time (0.8) from his familiar environment might have a separation component of  $(1 - 0.2)^{(1 - \text{MIN}(0.7, 0.8))}$  or 0.935. The minimum value between distance and time is used to illustrate the interactive effects of both factors in exerting influence.

## **H. RESULTANT CHOICE**

A player's choice is representative of current preferences among available alternatives given the dominant factors at each stage in his decision-making process. The use of alignment modifiers and corrective coefficients is necessary to normalize the numerical component scales in terms of cooperation or betrayal, with a range of -1 to 1. Specifically:

$$\text{Ethics Component} = \text{Congruence} \cdot \text{Identity}^{(\text{Probability of Secrecy})}$$

$$\text{Cohesion Component} = 1.237 \cdot (\text{Cohesion} - \text{Utility of Unilateral Action})$$

$$\text{Separation Component} = \text{Polarity} \cdot (1 - \text{Experience})^{(1 - \text{MIN}(\text{Distance}, \text{Time}))}$$

Congruence, equaling either 1 or -1, allows conversion of the ethics component to a likelihood of cooperation, and represents the alignment of the player's moral values with the appropriate situational cooperative or betraying action. For example, an ethical obligation to cooperate would have a congruence of 1, whereas a moral responsibility to betray or resist would result in a congruence of -1.

Polarity is a modifier to indicate whether the influence to cooperate is distant or proximate, and also equals either 1 or -1, determining the direction that the effect of distance has on the player.<sup>11</sup> Here, close proximity with an influence is represented by 1, and removal from an influence would have a polarity of -1.

The cohesion component exhibits dissimilar mathematical characteristics in comparison to the ethics and separation components. A cohesion coefficient of 1.237 is therefore used to normalize the cohesion scale with the others (between -1 and 1), but has no explanatory function or use beyond this study.

Henry Hearst's actions can be described and enumerated in terms of cooperation and betrayal concerning Chantal. At the outset of the film timeline, Hearst is already cheating on Chantal with prostitutes, and he is fully aware that he is an *adulterer* and *contributor to the prostitution industry*. Although they remain together under the same roof, they have taken to sleeping in separate rooms and have been effectively separated for some time. Hearst obtains some utility from paid sexual encounters, and could arguably be considered as marginally inexperienced since Chantal is his first wife. Table 2 summarizes these quantified Likert values up to node B, where Hearst is called in to the police station.

---

<sup>11</sup> This is a simple version of the separation equation. The accompanying Excel worksheet with the corresponding formulas contains a conditional function that reflects an increasing cooperation tendency when the influence is proximate and a corresponding increasing betrayal tendency when the influence is distant. The observer must make a distinction of whether to analyze the entire scenario in terms of a present or a removed influence, represented by the polarity modifier.

Table 2. Hearst's Contributing Factors at Node B.

Ethics Contributing Factors	
Identity: Generally costs society	0.3
Probability of Secrecy: Disclosure very unlikely	0.8
Congruency: Cooperation aligned with moral values	1
Cohesion Contributing Factors	
Cohesion: Generally incohesive	0.3
Utility of Unilateral Action: Marginally beneficial to self	0.6
Separation Contributing Factors	
Experience: Marginally inexperienced	0.4
Distance: Close proximity to ...	0.2
Time: Marginally greater time from ...	0.6
Polarity: ... removed influence	-1
<b>Ethics component</b> = Congruency • (Identity) <sup>p(Secrecy)</sup>	= <b>0.382</b>
<b>Cohesion component</b> = 1.237 • (Cohesion - Utility)	= <b>-0.371</b>
<b>Separation component</b> = Polarity • (1-Experience) <sup>(1 - MIN(Distance, Time))</sup>	= <b>-0.665</b>

A graphic depiction of the decision-making components shows that Hearst's decision might be predicted with some reasonable probability, as shown in Figure 4. While Hearst's reduced ethical values still encourage continued cooperation and loyalty to Chantal, the accumulated effects of separation and inexperience are a larger component and present an inclination toward betrayal, in this case as adultery. The thought that Chantal might have some involvement in the crimes has not occurred to Hearst thus far.

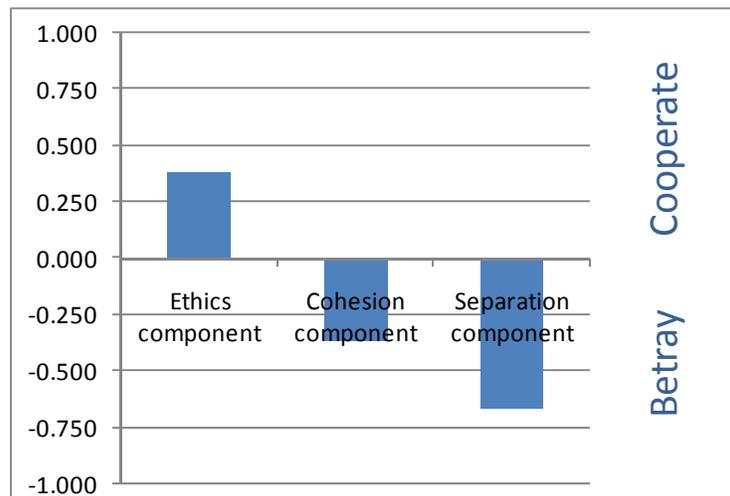


Figure 4. Hearst's Decision-making Components at Node B.

At this point, the dominant choice is represented by the component with the greatest magnitude from indifference, or zero. This does not necessarily prescribe a clear choice, however, and large magnitudes in either of the remaining components must be considered in estimating the probability of the player’s particular choice.

Later, when Detective Benezet confronts Hearst with knowledge of his indiscretions at node D, the perceived probability of secrecy is drastically reduced, as is the utility of unilateral action. Cooperation due to the dynamics of ethics and disclosure becomes the dominant strategy for Hearst, as detailed in Table 3 and Figure 5.

Table 3. Hearst’s Contributing Factors at Node D.

Ethics Contributing Factors		
Identity:	Generally costs society	0.3
Probability of Secrecy:	Disclosure likely	0.3
Congruency:	Cooperation aligned with moral values	1
Cohesion Contributing Factors		
Cohesion:	Generally incohesive	0.3
Utility of Unilateral Action:	Significant costs to self	0.2
Separation Contributing Factors		
Experience:	Marginally inexperienced	0.4
Distance:	Close proximity to ...	0.2
Time:	Marginally greater time from ...	0.6
Polarity:	... removed influence	-1
<b>Ethics component</b> = Congruency • (Identity) <sup>p(secrecy)</sup> = <b>0.697</b>		
<b>Cohesion component</b> = 1.237 • (Cohesion - Utility) = <b>0.124</b>		
<b>Separation component</b> = Polarity • (1-Experience) <sup>(1 - MIN(Distance, Time))</sup> = <b>-0.665</b>		

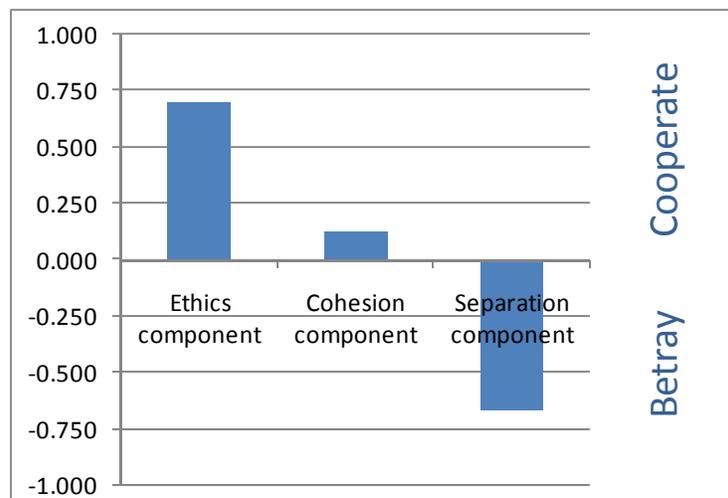


Figure 5. Hearst’s Decision-making Components at Node D.

With these factors in mind, Hearst would most likely discontinue his visits with the prostitutes. Though his ethical identity has not improved, the significantly increased probability of disclosure effects a strategy change which conforms to socially acceptable behavior. Chantal’s supposed involvement with the crimes is still not a consideration at this node.

Finally, when Benezet suggests Chantal’s involvement at node F, Hearst reverts back to the *guardian* identity, arguably the strongest identity that exists, and analogous to the highest characteristics of ethical value. Despite increased separation and immense personal incentive to pursue a unilateral self-serving action to salvage his innocence, Hearst’s guardian identity becomes the dominant factor which determines cooperation with Chantal. Benezet has no idea that a significant change has taken place, nor can he predict the effect on Hearst’s strategy, described in Table 4.

Table 4. Hearst’s Contributing Factors at Node F.

Ethics Contributing Factors		
Identity:	Greatly benefits society	0.9
Probability of Secrecy:	Disclosure unlikely	0.7
Congruency:	Cooperation aligned with moral values	1
Cohesion Contributing Factors		
Cohesion:	Generally incohesive	0.3
Utility of Unilateral Action:	Great benefit to self	0.9
Separation Contributing Factors		
Experience:	Marginally inexperienced	0.4
Distance:	Marginal distance from ...	0.6
Time:	Marginally greater time from ...	0.6
Polarity:	... removed influence	-1
<b>Ethics component</b> = Congruency • (Identity) <sup>p(Secrecy)</sup> = <b>0.929</b>		
<b>Cohesion component</b> = 1.237 • (Cohesion - Utility) = <b>-0.742</b>		
<b>Separation component</b> = Polarity • (1-Experience) <sup>(1 - MIN(Distance, Time))</sup> = <b>-0.815</b>		

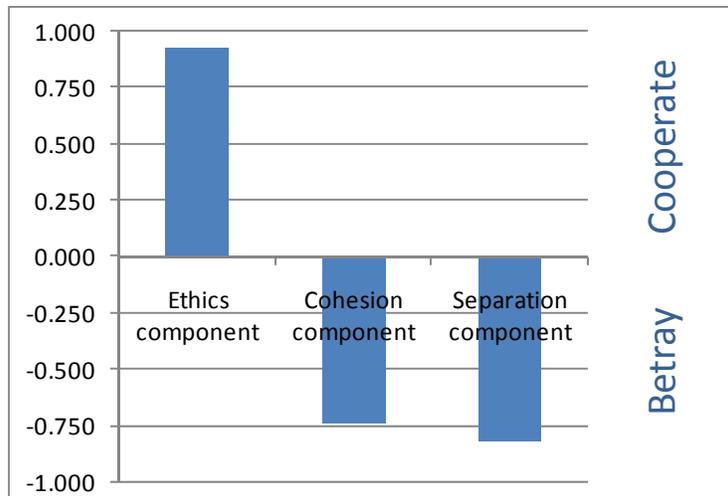


Figure 6. Hearst's Decision-making Components at Node F.

While the changes in contributing factors do not mandate or predetermine a particular choice, they can illustrate the extent to which a player may feel his options are limited, defined, or framed. An instantaneous set of component values only becomes important when the player decides to make a choice *at that moment*. This is a significant reason why Hearst makes a choice that many observers would not consider available or advisable. Moreover, a subtle change in the player's, or the observer's, estimation of these factors can result in a drastic change in preferences and the selection of another strategy. The ultimate choice, however, always remains with the player and is a product of rational appraisal of the situation and autonomous action. In other words, despite any coercive effects present, so long as the player maintains an ethical identity sufficiently strong enough to preserve control of his actions, the resulting decision will reflect good judgment. Selections based on other factors still reflect rational action, but may not represent prudent choice.

Another interesting observation is that the magnitudes of Hearst's decision-making components have increased significantly by node F. Difficult and intense choices are often accompanied by equally intense factors in the decision-making process.

## IV. RATIONAL CHOICE IN DOCUMENTED WAR CRIMES

### A. CASE STUDY: TIGER FORCE

This account of atrocities committed by a small American combat unit during the Vietnam conflict is an excellent compilation and analysis of witness statements taken from the soldiers involved. As a result, this study takes the reported data at face value regarding the truth and accuracy of the circumstances, without extrapolation. Further, sufficient time has passed to allow a sufficiently complete evaluation of the factors, permitting the parties involved to make their accounts known.

The narrative follows the evolution of the Tiger platoon from their initial assignment forward of friendly lines to the eventual disbanding following a seven-month swath of destruction and carnage they brought to Vietnamese villages during 1967. Most importantly, the account includes the detailed interpersonal dynamics and background necessary to fully examine the decision-making processes of the soldiers involved.<sup>12</sup> Appendix B contains a brief synopsis of *Tiger Force*.

### B. METHODOLOGY

The analysis follows the model of Likert scales used for *Under Suspicion*, with one additional contributing factor: the value placed on enemy and civilian lives. This aspect characterizes the humanity involved in treatment of the local population and those captured or wounded enemy soldiers who are no longer capable of acting as combatants, and in no way reflects a hesitance or unwillingness to engage and kill enemy soldiers during the course of combat. Thus, the ethics component reflects this consideration:

---

<sup>12</sup> Mark Osiel's *Obeying Orders* is an excellent primer on the historic and legal precedents involved in war crimes. Additionally, Philip Zimbardo's explanation of the Abu Ghraib military prison scandal in *The Lucifer Effect* is a modern parallel, save for the analysis following a social-psychological theme.

Probability of Ethical Action =  $f$  (Identity, Enemy Value, Probability of Secrecy)

Likewise, the first derivative reflects the relationship between humane treatment and ethics:

$$\frac{\partial \text{Ethical Action}}{\partial \text{Enemy Value}} > 0$$

There is sufficient information to analyze many of the soldiers in Tiger platoon. However, three cases in particular illustrate the dynamics in choice and are examined herein: Specialist Green, Sergeant Trout, and Lieutenant Wood. Similar assessments are possible for Private Ybarra, Sergeant Doyle, and Lieutenant Hawkins among the participants of atrocities, and for Sergeant Bruner, Sergeant Sanchez, and Private Causey as the voices of reason.

### **C. SPECIALIST GREEN**

Growing up in Globe, Arizona, Specialist Ken Green was always something of a rebel, bored with the local area. Consequently, he signed up for the adventure of Vietnam with his high school friend Sam Ybarra through the U.S. Army's buddy recruiting system. After arriving in Vietnam, Green ran into Ybarra again, who by then was a member of a newly formed elite infantry unit of the 101<sup>st</sup> Airborne Division: the reconnaissance platoon, known as the "Tigers," within the 1/327<sup>th</sup> Parachute Infantry Regiment. Ybarra persuaded Green to apply for the Tigers as well, and the two friends were able to spend their tour of duty together in Vietnam. (Sallah & Weiss, 2006)

Specialist Green was not as experienced in combat as Ybarra, and took his cues for survival from his friend on long-range patrols deep into suspected enemy territory. Initially, Green questioned some of what he saw, but later began to emulate this behavior. (Sallah & Weiss, 2006)

What seemed objectionable initial choices later influenced and possibly limited Green's future options, due to the severe penalties involved if knowledge of his actions ever surfaced. Along with many Tigers, Specialist Green began a downward spiral of

decision making that began to shape and limit the utility of his future decisions. Figure 7 details Green’s basic decision tree while in the Tiger platoon.

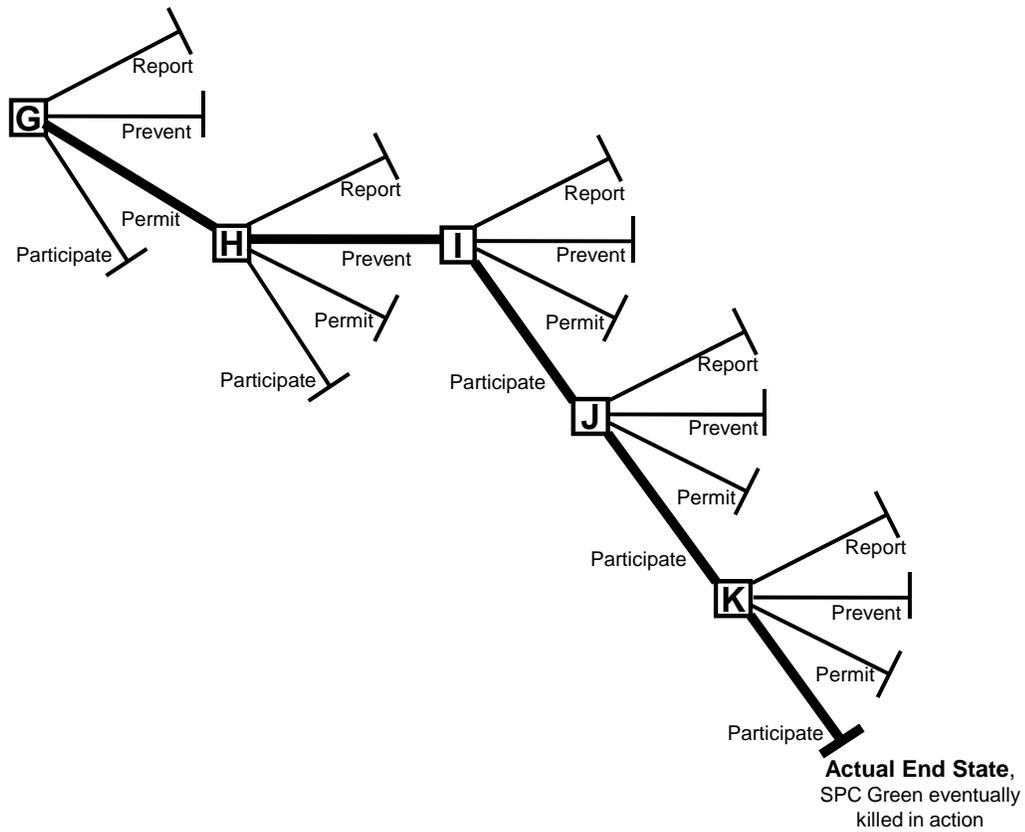


Figure 7. Specialist Green’s Decision Tree Regarding War Crimes.

Specifically, at node G (Table 5 and Figure 8), Green had just joined the Tigers. Following an engagement with the enemy well forward of friendly lines, Ybarra showed Green severed ears that he had cut from dead enemy soldiers (p 62). New to the unit and knowing his friend’s childhood disposition toward questionable habits, Green shrugged and ignored the event. This was the start of Green’s eventual ethical decline, as the concept of being an honorable soldier began to lose its perceived applicability to him. Since he had nothing to do with the actual act, and because it took place after the soldier was already dead, he felt no obligation to take any action other than to hope it was an isolated event. This lack of concern then was taken by Private Ybarra as a cue of consent, identifying his friend Green as an enabling confidant for future atrocities.

Moreover, Green and the rest of the Tigers became separated from the standard military environment where discipline, law, and moral principles steered decisions and actions.

Table 5. Specialist Green’s Contributing Factors at Node G.

Ethics Contributing Factors		
Identity:	Generally benefits society	0.7
Enemy:	Enemy does not merit express concern	0.5
Probability of Secrecy:	Disclosure unlikely	0.7
Congruency:	Cooperation conflicts with moral values	-1
Cohesion Contributing Factors		
Cohesion:	Highly cohesive	0.9
Utility of Unilateral Action:	Marginally costly to self	0.4
Separation Contributing Factors		
Experience:	Generally inexperienced	0.3
Distance:	Close proximity ...	0.2
Time:	Average time ...	0.5
Polarity:	... with proximate influence	1
<b>Ethics component</b> = Congruency • (MAX(Identity, Enemy)) <sup>p(Secrecy)</sup> =		<b>-0.779</b>
<b>Cohesion component</b> = 1.237 • (Cohesion - Utility) =		<b>0.613</b>
<b>Separation component</b> = Polarity • (1-Experience) <sup>MIN(Distance, Time)</sup> =		<b>0.837</b>

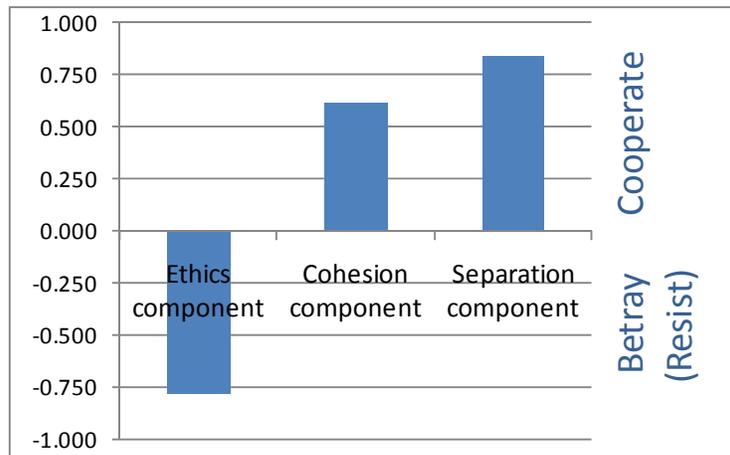


Figure 8. Specialist Green’s Decision-making Components at Node G.

Subsequently, at node H, Specialist Green witnessed Ybarra behead a subdued Vietcong prisoner (p. 64), as depicted in Table 6 and Figure 9. Immediately recognizing the gravity of the deed, Green directly questioned Ybarra’s actions, but was met with the rationale that the enemy would have killed him and others if given the chance, which

merited a gruesome death sentence. Not under platoon leadership supervision, and confronted with the choice between maintaining loyalty to his friend against making waves over an irreversible action, Green made it known to Ybarra that he was not comfortable with the killing. He kept the event to himself, but felt a need to spend some time away from his friend Ybarra on the following rest cycle out of the field.

Table 6. Specialist Green’s Contributing Factors at Node H.

Ethics Contributing Factors		
Identity:	Generally benefits society	0.7
Enemy:	Avoid causing unnecessary enemy suffering	0.6
Probability of Secrecy:	Disclosure unlikely	0.7
Congruency:	Cooperation conflicts with moral values	-1
Cohesion Contributing Factors		
Cohesion:	Significant cohesiveness	0.8
Utility of Unilateral Action:	Marginally costly to self	0.4
Separation Contributing Factors		
Experience:	Average experience	0.5
Distance:	Close proximity ...	0.2
Time:	Marginally greater time ...	0.6
Polarity:	... with proximate influence	1
Ethics component = Congruency • (MAX(Identity, Enemy)) <sup>p(Secrecy)</sup> =		<b>-0.779</b>
Cohesion component = 1.237 • (Cohesion - Utility) =		<b>0.490</b>
Separation component = Polarity • (1-Experience) <sup>MIN(Distance, Time)</sup> =		<b>0.758</b>

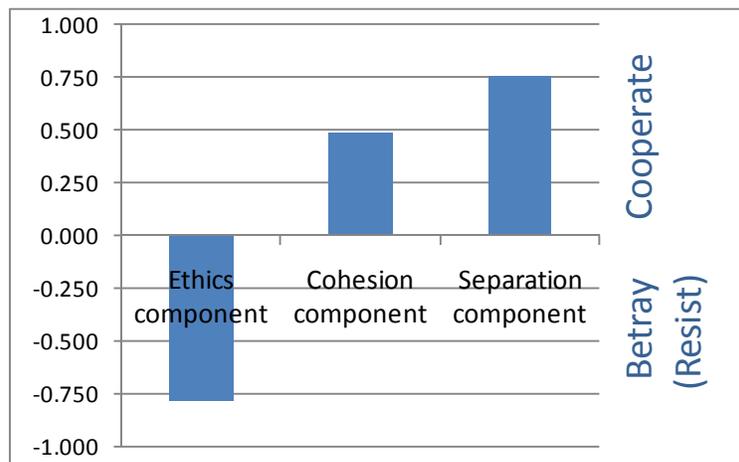


Figure 9. Specialist Green’s Decision-making Components at Node H.

Moreover, Green and the rest of the Tigers became separated from the standard military environment where discipline, law, and moral principles steered decisions and actions.

Table 5. Specialist Green’s Contributing Factors at Node G.

Ethics Contributing Factors		
Identity:	Generally benefits society	0.7
Enemy:	Enemy does not merit express concern	0.5
Probability of Secrecy:	Disclosure unlikely	0.7
Congruency:	Cooperation conflicts with moral values	-1
Cohesion Contributing Factors		
Cohesion:	Highly cohesive	0.9
Utility of Unilateral Action:	Marginally costly to self	0.4
Separation Contributing Factors		
Experience:	Generally inexperienced	0.3
Distance:	Close proximity ...	0.2
Time:	Average time ...	0.5
Polarity:	... with proximate influence	1
<b>Ethics component</b> = Congruency • (MAX(Identity, Enemy)) <sup>p(Secrecy)</sup> =		<b>-0.779</b>
<b>Cohesion component</b> = 1.237 • (Cohesion - Utility) =		<b>0.613</b>
<b>Separation component</b> = Polarity • (1-Experience) <sup>MIN(Distance, Time)</sup> =		<b>0.837</b>

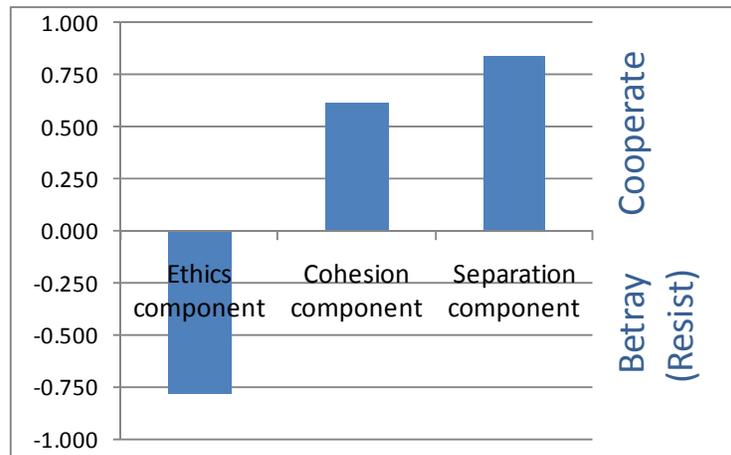


Figure 8. Specialist Green’s Decision-making Components at Node G.

Subsequently, at node H, Specialist Green witnessed Ybarra behead a subdued Vietcong prisoner (p 64), as depicted in Table 6 and Figure 9. Immediately recognizing the gravity of the deed, Green directly questioned Ybarra’s actions, but was met with the rationale that the enemy would have killed him and others if given the chance, which

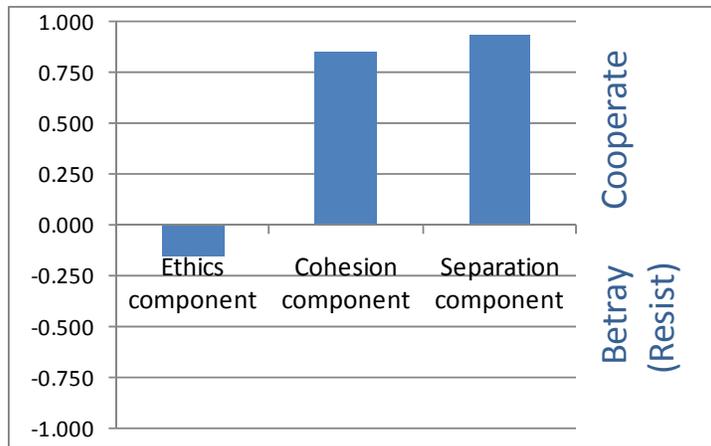


Figure 10. Specialist Green’s Decision-making Components at Nodes I, J, and K.

Specialist Green’s criminal rampage would most likely have continued indefinitely. However, Green was hit multiple times by snipers and died during a later ambush. Distraught by the loss of his friend, Ybarra redoubled his penchant for atrocities and began a series of increasingly horrible crimes that rival most any others reported during modern warfare.

#### D. SERGEANT TROUT

Sergeant Harold Trout was a career soldier who had served in Germany and Korea, and had already completed a year of combat in Vietnam — making him eligible to rotate out to a safer location. Wanting to remain with his soldiers, Trout elected instead to remain in theater, and was considered a tough but respected and experienced team leader among the Tigers. Acting as a mentor and leader, Trout kept an ongoing roster of the Tiger platoon members. Having to regularly line through names of those killed and wounded brought home the gravity of the environment. (Sallah & Weiss, 2006)

Trout had competition from within the platoon, however, and he had to contend with Sergeant Barnett, with whom he did not get along. Often, one or the other would take an increasingly stronger stance or set a tougher example to illustrate their superior leadership status. (Sallah & Weiss, 2006)

Figure 11 details Sergeant Trout’s decision tree during his tour with the Tigers.

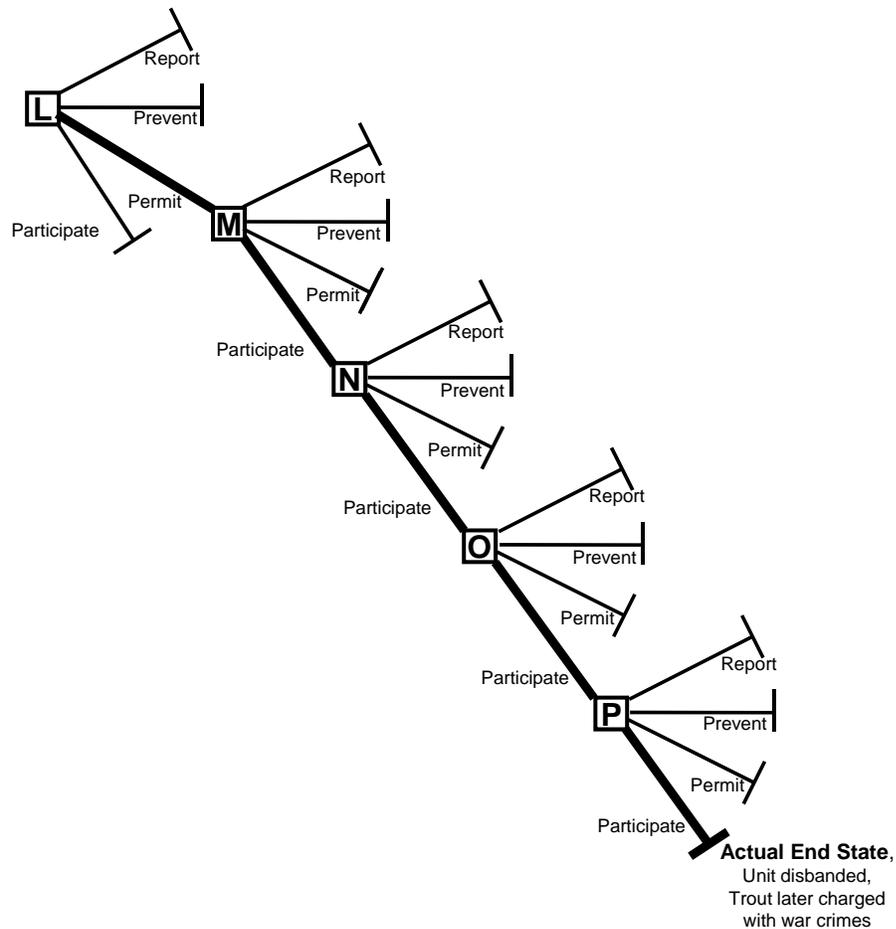


Figure 11. Sergeant Trout's Decision Tree Regarding War Crimes.

After Private Ybarra beheaded the Vietcong prisoner, Trout ordered his body hidden in the woods, at node L (p 65). That the killing was illegal and a matter for concealment was not lost on the Tigers; many platoon members took this as a signal that enemy territory was a permissive environment for criminal action. The platoon had spent a long time forward of friendly lines at this point, and Sergeant Trout, among others, was interested in keeping this mission from becoming even more of an ordeal. Table 8 and Figure 12 detail Trout's decision-making process at this point.

Table 8. Sergeant Trout's Contributing Factors at Node L.

Ethics Contributing Factors		
Identity:	Generally benefits society	0.7
Enemy:	Enemy is hindrance to operations	0.4
Probability of Secrecy:	Disclosure unlikely	0.7
Congruency:	Cooperation conflicts with moral values	-1
Cohesion Contributing Factors		
Cohesion:	Generally cohesive	0.7
Utility of Unilateral Action:	Marginally costly to self	0.4
Separation Contributing Factors		
Experience:	Generally experienced	0.7
Distance:	Close proximity ...	0.2
Time:	Long time ...	0.8
Polarity:	... with proximate influence	1
<b>Ethics component</b>	$= \text{Congruency} \cdot (\text{MAX}(\text{Identity}, \text{Enemy}))^{p(\text{Secrecy})} =$	<b>-0.779</b>
<b>Cohesion component</b>	$= 1.237 \cdot (\text{Cohesion} - \text{Utility}) =$	<b>0.368</b>
<b>Separation component</b>	$= \text{Polarity} \cdot (1 - \text{Experience})^{\text{MIN}(\text{Distance}, \text{Time})} =$	<b>0.786</b>

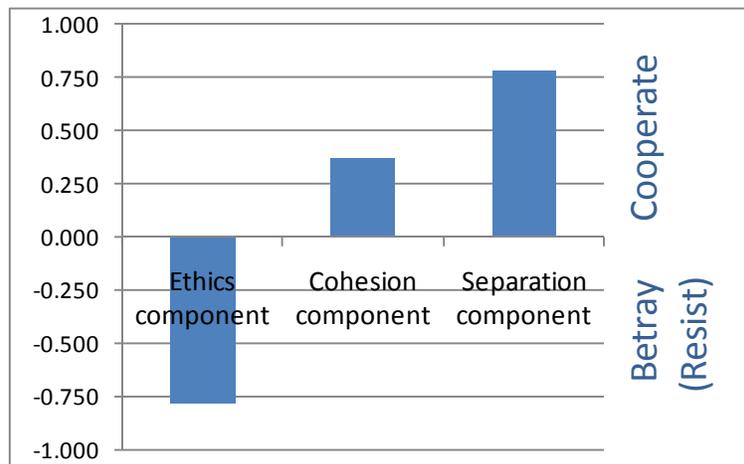


Figure 12. Sergeant Trout's Decision-making Components at Node L.

Trout's toughness with the platoon members began to extend to the Vietnamese as well. At node M, when a pleading Vietnamese prisoner annoyed him, Trout clubbed the man on the head, causing him to fall down. Lieutenant Hawkins then finished the confrontation by shooting the prisoner in the head (p 96). Later, by node N, when a local Vietnamese villager stumbled into the Tigers' perimeter and was shot by the men pulling

security, Trout wanted the man killed rather than evacuated. He first attempted to coerce a medic into killing the prisoner, but instead executed the man himself when no one else wanted to carry out the deed (p 101).

Table 9. Sergeant Trout’s Contributing Factors at Node N.

Ethics Contributing Factors		
Identity:	Significantly costs society	0.2
Enemy:	Enemy unworthy of mercy	0.2
Probability of Secrecy:	Disclosure very unlikely	0.8
Congruency:	Cooperation conflicts with moral values	-1
Cohesion Contributing Factors		
Cohesion:	Generally cohesive	0.7
Utility of Unilateral Action:	Significant costs to self	0.2
Separation Contributing Factors		
Experience:	Significantly experienced	0.8
Distance:	Close proximity ...	0.2
Time:	Very long time ...	0.9
Polarity:	... with proximate influence	1
<b>Ethics component</b> = Congruency • (MAX(Identity, Enemy)) <sup>p(secrecy)</sup> =		<b>-0.276</b>
<b>Cohesion component</b> = 1.237 • (Cohesion - Utility) =		<b>0.613</b>
<b>Separation component</b> = Polarity • (1-Experience) <sup>MIN(Distance, Time)</sup> =		<b>0.725</b>

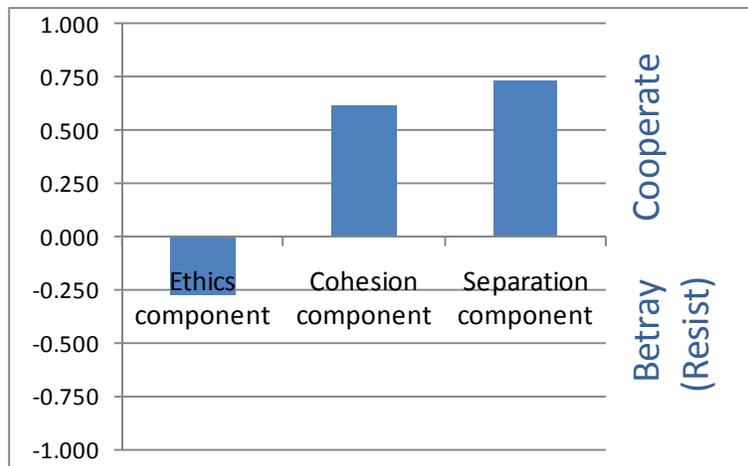


Figure 13. Sergeant Trout’s Decision-making Components at Node N.

At node O, when a search in a burned-out hamlet produced a prisoner, Trout ordered Private Kerrigan to kill the captive (p 145). This type of order became more typical with Trout as he ordered his subordinates to carry out crimes, presumably to exert

his authority and bind the platoon members to secrecy by ensuring their involvement. In this case, Kerrigan complied and executed the prisoner.

Afterward, at node P, the Tigers searched for a suspected Vietcong soldier, but only found his family. When the Tigers burned their hut, the wife loudly complained. Trout first sedated the wife, raped her in another hut, and finally ordered her execution (p 202). His eventual decline into completely lawless behavior is described with the decision-making factors in Table 10 and Figure 14.

Table 10. Sergeant Trout’s Contributing Factors at Node P.

Ethics Contributing Factors		
Identity:	Greatly costs society	0.1
Enemy:	Enemy inhuman	0.1
Probability of Secrecy:	Disclosure very unlikely	0.8
Congruency:	Cooperation conflicts with moral values	-1
Cohesion Contributing Factors		
Cohesion:	Generally cohesive	0.7
Utility of Unilateral Action:	Great costs to self	0.1
Separation Contributing Factors		
Experience:	Significantly experienced	0.8
Distance:	Close proximity ...	0.2
Time:	Very long time ...	0.9
Polarity:	... with proximate influence	1
<b>Ethics component</b> = Congruency • (MAX(Identity, Enemy)) <sup>p(Secrecy)</sup> =		<b>-0.158</b>
<b>Cohesion component</b> = 1.237 • (Cohesion - Utility) =		<b>0.735</b>
<b>Separation component</b> = Polarity • (1-Experience) <sup>MIN(Distance, Time)</sup> =		<b>0.725</b>

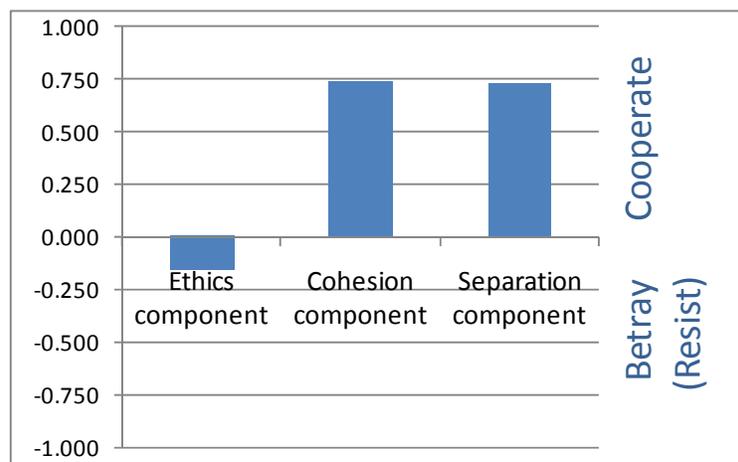


Figure 14. Sergeant Trout’s Decision-making Factors at Node P.

## E. LIEUTENANT WOOD

As opposed to the other senior leaders in the Tigers, Lieutenant Donald Wood understood the local socioeconomic factors of the unconventional warfare in Vietnam. He had studied the Vietnamese culture and often spoke with translators to gain insight into the environment. Moreover, he was a very experienced and competent field artillery officer with the Tigers, who had to correct the platoon leader's map-reading and indirect fire skills repeatedly when Lieutenant Hawkins put the Tigers into unnecessary danger through his ineptitude. (Sallah & Weiss, 2006)

Wood also appreciated the importance in curbing deficient behavior from the beginning. By simply stopping the enlisted soldiers' idle talk about what criminal actions they would like to commit, Wood continually made it clear that he would not tolerate such behavior, and that he would not be an enabler for unethical conduct, as depicted in Figure 15.

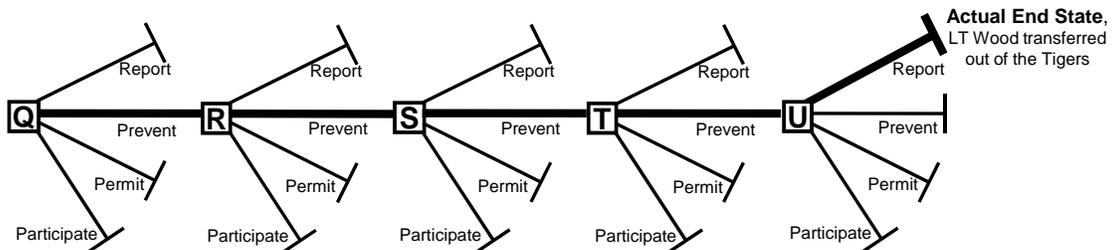


Figure 15. Lieutenant Wood's Decision Tree Regarding War Crimes.

At node Q, when Private Ybarra was talking about opening fire on civilians, Wood corrected him in front of the platoon, and specifically prohibited firing on any unarmed persons (p 39). Later, at node R, an engagement responding to enemy fire from a hut unfortunately killed the insurgent as well as his wife and child, as collateral damage. Lieutenant Wood took responsibility for the consequence but made a distinction

between intentional and accidental civilian deaths (p43). Maintaining an honorable and ethical identity after this incident was arguably Wood's toughest decision during his tour with the Tigers.

Lieutenant Wood made further reprimands at node S, when Sergeant Doyle began to talk openly about killing Vietnamese villagers rather than taking them to the detainment camp. Wood pulled Doyle aside and corrected him, which may have limited the effects on the rest of the platoon (p 92).

When Lieutenant Hawkins took over the platoon from Lieutenant Naughton, the Tigers' propensity to commit atrocities went up drastically, and Wood had difficulty preventing crimes encouraged by the ranking officer. Even at node T, when Hawkins ordered the Tigers to fire on two approaching Vietnamese women, Wood openly countermanded the order and directly confronted the platoon leader in front of the troops (p 99). Finally, unable to prevent Hawkins from continually ordering and carrying out murders at node U, Lieutenant Wood reported the platoon leader's actions to the battalion executive officer (p 128). However, instead of removing and investigating Hawkins, the command transferred Wood out of the Tigers. With Wood gone, the last bastion of integrity and ethics left the platoon. The scale and types of atrocities accordingly escalated rapidly, resulting in hundreds of murdered civilian Vietnamese in the following few months. Mounting rumors about the Tigers' crimes eventually caused their final removal from the field and the platoon was disbanded.

Lieutenant Wood never compromised his ethical standards during his tour with the Tigers, which allowed him to make moral choices, despite being subjected to the same coercive factors experienced by the other soldiers. His decision-making components in nodes Q through U are illustrated in Table 11 and Figure 16.

Table 11. Lieutenant Wood’s Contributing Factors at Nodes Q Through U.

Ethics Contributing Factors		
Identity:	Significantly benefits society	0.8
Enemy:	Enemy requires protective measures	0.7
Probability of Secrecy:	Disclosure slightly probable	0.4
Congruency:	Cooperation conflicts with moral values	-1
Cohesion Contributing Factors		
Cohesion:	Marginally cohesive	0.6
Utility of Unilateral Action:	Significant benefit to self	0.8
Separation Contributing Factors		
Experience:	Significantly experienced	0.8
Distance:	Close proximity ...	0.2
Time:	Very long time ...	0.9
Polarity:	... with proximate influence	1
Ethics component = Congruency • (MAX(Identity, Enemy)) <sup>p(Secrecy)</sup> =		-0.915
Cohesion component = 1.237 • (Cohesion - Utility) =		-0.245
Separation component = Polarity • (1-Experience) <sup>MIN(Distance, Time)</sup> =		0.725

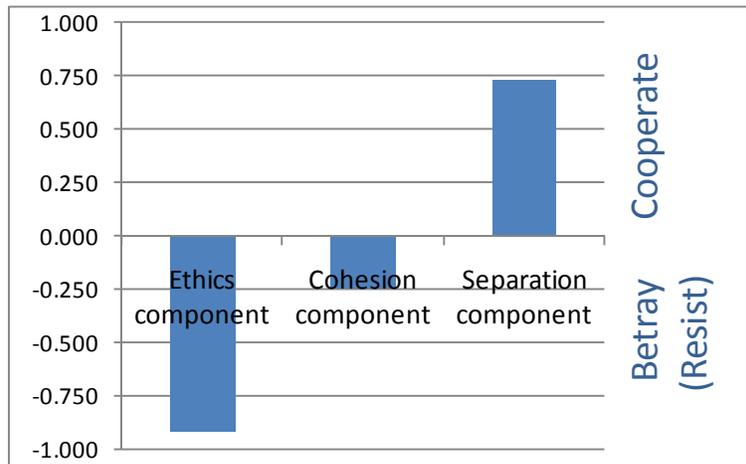


Figure 16. Lieutenant Wood’s Decision-making Components at Nodes Q Through U.

## F. OBSERVATIONS

The two most important decisions for individual players to fully consider are the choice of identity and the choice to resist temporary coercive factors from the outset. Once started down a path of unethical actions that contain potential repercussive penalties, subsequent choices become much more limited, leading to preferences that entail further unscrupulous strategies.

For leaders, it becomes important to demonstrate a zero tolerance for any actions that could be perceived as a criminally permissive approach, and to properly frame the situation in a way that the players' ethical options are preferable to the alternatives.

Cohesion in itself is not an adverse influence, and in military scenarios is considered a highly desirable aspect of unit operations. In concert with pressures to take part in illegal acts, it is a formidable force for any soldier to resist.

THIS PAGE INTENTIONALLY LEFT BLANK

## V. CONCLUSION

### A. SUMMARY

There is evidence to suggest that seemingly irrational decisions should sometimes be considered the result of rational players pursuing temporarily “best” strategies. This analysis has examined some potential influences which can affect how players weight their identity, information, probabilities, and utility in the decision-making process.

This approach is limited to a numerical approximation that predicts one of two outcomes: cooperation or betrayal. This technique is relatively rudimentary and requires significant subjective approximation of the contributing factors on the part of the observer. Moreover, the formula contained herein involves an inexact normalization among scales, and more sample data is required to properly weight and relate these factors in a comprehensive rational decision-making model.

These contributing factors do not necessarily determine a particular choice, and seemingly overwhelming magnitudes among components only become important when the player makes a choice at that moment. The ultimate decision, however, always remains with the player and is a product of rational and autonomous action. Whether the choice is moral or prudent depends on the player maintaining an ethical identity sufficiently strong enough to retain dominance in the decision-making process.

### B. FURTHER RESEARCH

The study of the factors causing war crimes remains underdeveloped territory. A complete analysis of the issues involved could encompass elements from decision theory, behavioral economics, and social psychology.

When the precise relationship of causal components of seemingly irrational decisions becomes clearer, research might permit the use of Dixit and Nalebuff’s rules of game theory to look forward and reason back (1991). Knowing that the outcome is the result of players pursuing their best strategy, military leaders can successfully consider which factors, if changed, would result in selection of a different strategy. More

precisely, leaders can implement a combination of approaches to facilitate the choice of an ethical identity that promotes strategies aligned with moral choice.

Some of these approaches to identity choice could include considering education, ethical and legal training, cultural and humanitarian awareness, the value of sustained family contact, the interpersonal dynamics of female soldiers among today's ranks, and tailored Army recruiting strategies. Additionally, using appropriate role models can help to facilitate a strong ethical development in American soldiers. General Douglas MacArthur remains a relevant example of a multi-faceted role model applicable to the current battlefield. Besides having served as a brilliant and competent combat commander, he and his command later saved more Japanese lives than all of those lost by Japan during World War II, through the use of medicine and hygienic practices instituted during the post-war occupation, and in so doing demonstrated the value placed on the lives of our former enemies (Manchester, 1978).

As a fallback, framing the subsequent choices can effectively make war crime commission a dominated strategy, achieving the same desired result. Additional factors to help structure soldiers' decision-making processes could include using the media and embedded reporters, existing vehicle tracking and location technology, and the widespread acknowledgement and dissemination of the punishments resulting from war crimes cases.

### **C. ADDITIONAL APPLICATIONS**

The study of influences that affect seemingly irrational decisions could also apply to other areas of interpersonal dynamics within military applications. Analyses of Prisoner of War interrogation techniques, coerced espionage, and enemy intimidation of the local population during unconventional warfare can lead to a better understanding of the complex choice between cooperation and betrayal.

## **APPENDIX A. *UNDER SUSPICION* FILM SYNOPSIS**

### **A. FILM SUMMARY**

Filmed in 1999 and released to theaters in 2000, *Under Suspicion* is an updated version of the French film *Garde a Vue*, also based on the book “Brainwash,” by John Wainwright (IMDb, 2007). Set in Puerto Rico, the film follows police detective Captain Benezet, played by Morgan Freeman, and a prominent attorney named Henry Hearst, portrayed by Gene Hackman, as they engage in a battle of wits in the wake of two appalling murders. As movie reviews avoid spoiling the plot by excluding any explanation of the ending, the following synopsis is an interpretation of the film.

Hearst, a tax attorney and prominent community leader, happens to find the body of a young girl while jogging in his neighborhood. After reporting the crime to the police, he is called to the station by Captain Benezet the next day to clear up lingering questions about the circumstances. Benezet, sensing equivocation and deception during the interview, suspects Hearst has committed this crime, as well as a similar murder in the vicinity, and attempts to ensnare Hearst by disclosing facts which conflict with Hearst’s story.

Before long, it is revealed that Hearst and his wife Chantal are practically estranged and now sleep in separate rooms, that he visits online pornography sites and that there is family tension regarding his behavior around his young niece. As the conversation turns to the first murder, committed two weeks prior, Benezet explains that Hearst’s vehicle was reported in close proximity to the crime scene on the night in question, and confirms that the local prostitutes indicated that Hearst had been visiting them for months, soliciting the particularly younger looking ones. Intrigued, Benezet highlights the fact that Henry Hearst has married a woman who was almost three decades his junior, and for whom he had previously acted as guardian during her teenage years.

During the questioning, it becomes apparent that Chantal’s current coldness toward Henry is a result of an incident involving their young niece some time ago, which resulted in Chantal experiencing jealousy and betrayal. Capitalizing on the marital

tension, Benezet convinces Chantal Hearst to indulge her suspicions regarding her husband by authorizing a search of their residence. This search produces pictures from Hearst's hobby photography collection, which happens to include stills of the two murdered girls at some time prior to their deaths. Confronted with all of this evidence, Hearst confesses to the crimes, and it seems that all of the loose ends are explained.

However, an undercover police officer then arrives and informs Benezet that she has apprehended the real child killer in the park as a result of a stakeout, to include irrefutable proof of the crimes. Completely taken aback at this turn of events, both Chantal and Benezet can only watch as Hearst continues to dictate a taped confession to crimes they now know he did not commit. It becomes evident that Hearst was convinced that his wife had committed the crimes as a result of jealousy. Feeling responsible for driving her to those ends, he confesses as a means to conceal her guilt. Without Chantal, and his professional life surely in ruins, he attempts to salvage something by protecting his wife.

After the momentary shock wears off, Benezet stops the confession and releases Hearst. Outside the station, Chantal attempts to speak to Henry, but he becomes cold and ignores her, as he now must assume that Benezet has revealed to Chantal all of the facts in the effort to persuade her to permit the search.

## **B. ADDITIONAL CLARIFICATIONS**

It is imperative to understand two things about the character Henry Hearst: he loves his wife dearly and he is not a pedophile. Hearst would love to raise children of his own with his wife Chantal. Complications within his marriage currently prevent that possibility, so he resorts to photography of the neighborhood children as a way of envisioning his dream nuclear family. This is also the reason that he admires Chantal's niece and nephew, who resemble Chantal.

The narrative, however, goes to great lengths to convince the audience otherwise, as Benezet insinuates several times that the prostitutes were underage<sup>13</sup> and that Hearst was romantically involved with Chantal at a young age. Unquestionably, if Benezet had found that the prostitutes were minors, he would have explicitly stated as much and immediately arrested Hearst on that felony charge (Interpol, 2007). Although Hearst became Chantal's guardian when she was 14, she admitted that she and Hearst did not have a romantic relationship until her first spring break in college, when she was presumably 18 or 19 years old. Chantal's misdirected jealousy of Hearst's affection toward her niece, however, does not help the situation.

Soliciting prostitutes is enough to ruin Hearst's career and life. Puerto Rican law categorizes it as a crime (Kinsey Institute, 2007) and Hearst would face disbarment if convicted (Supreme Court of Puerto Rico, 2007). Unemployed and in disgrace, Hearst could expect a divorce shortly thereafter.

---

<sup>13</sup> Interestingly, biographies of the actresses who played the roles of the prostitutes indicate that they were each 25 years old at the time of production in 1999, illustrating the extent of makeup, costume, and script efforts to facilitate the portrayal of minors (IMDb, 2007; MySpace, 2007).

THIS PAGE INTENTIONALLY LEFT BLANK

## **APPENDIX B. *TIGER FORCE SYNOPSIS***

In 1967, the U.S. Army's 101<sup>st</sup> Airborne Division created an experimental platoon of long range reconnaissance troops to close with the enemy and target their formations, caches, and compounds for aerial and artillery strikes. This unit, named the "Tigers," was led by senior infantry lieutenants and was expected to operate far forward of friendly lines for extended periods in Vietnam. (Sallah & Weiss, 2006)

Many of its assigned missions involved evaluating Vietnamese villages for signs of Vietcong presence, support, and influence. Working independent of friendly forces sometimes resulted in significant casualties to the Tigers before they could repel or break away from enemy contact. As a result, many of the platoon's soldiers ceased to distinguish between the enemy and the Vietnamese civilians, and began to perceive everyone outside of the Tigers as a deadly threat. (Sallah & Weiss, 2006)

After receiving orders to move all civilians out of the Song Ve farming valley and into "relocation camps," straggler civilians who hid and were later spotted in the valley were taken as proof the Tigers had failed. Consequently, the platoon was kept in the field beyond the expected rotation schedule to rectify the fiasco. (Sallah & Weiss, 2006)

With little to no external supervision, the original senior platoon leadership was all that kept the unit aligned with the Laws of Land Warfare, the Geneva Conventions, and American Army values. As these leaders rotated out of the platoon, the newer leadership began to take their cues from the more experienced, but less disciplined, members of the platoon. (Sallah & Weiss, 2006)

Eventually, the unit deteriorated into an anarchic gang of civilian-killing thugs. Directives to produce high body counts resulted in hundreds of civilian deaths and elimination of entire villages over a period of seven months before the platoon was finally pulled from the field and disbanded. (Sallah & Weiss, 2006)

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX C. APPLICABLE LIKERT SCALES

### A. METHODOLOGY

Conducting decision-making research using documented accounts requires estimating the weight of the contributing factors from an observer's point of view at the moment of choice. Each scale used in this research has a range between zero and one. Due to the inability of an observer to determine whether any particular factor is an absolute determinant of choice, the values of exactly zero and one are not used to weight factors.

### B. SCALES

Identity:

Greatly benefits society	0.9
Significantly benefits society	0.8
Generally benefits society	0.7
Marginally benefits society	0.6
Neither benefits nor costs society	0.5
Marginally costs society	0.4
Generally costs society	0.3
Significantly costs society	0.2
Greatly costs society	0.1

Probability of Secrecy:

Disclosure highly improbable	0.9
Disclosure very unlikely	0.8
Disclosure unlikely	0.7
Disclosure slightly improbable	0.6
Disclosure possible	0.5
Disclosure slightly probable	0.4
Disclosure likely	0.3
Disclosure very likely	0.2
Disclosure highly probable	0.1

Cohesion:

Highly cohesive	0.9
Significant cohesiveness	0.8
Generally cohesive	0.7
Marginally cohesive	0.6
Neither cohesive nor incohesive	0.5
Marginally incohesive	0.4
Generally incohesive	0.3
Significant incohesiveness	0.2
Highly incohesive	0.1

Utility of Unilateral Action:

Great benefit to self	0.9
Significant benefit to self	0.8
Generally beneficial to self	0.7
Marginally beneficial to self	0.6
Benefits balanced by costs	0.5
Marginally costly to self	0.4
Generally costly to self	0.3
Significant costs to self	0.2
Great costs to self	0.1

Experience:

Highly experienced	0.9
Significantly experienced	0.8
Generally experienced	0.7
Marginally experienced	0.6
Average experience	0.5
Marginally inexperienced	0.4
Generally inexperienced	0.3
Significantly inexperienced	0.2
Highly inexperienced	0.1

Distance:

Very great distance	0.9
Great distance	0.8
Significant distance	0.7
Marginal distance	0.6
Average distance	0.5
Marginal proximity	0.4
Significant proximity	0.3
Close proximity	0.2
Very close proximity	0.1

Time:

Very long time	0.9
Long time	0.8
Significantly greater time	0.7
Marginally greater time	0.6
Average time	0.5
Marginally less time	0.4
Significantly less time	0.3
Little time	0.2
Very little time	0.1

Enemy Value:

Very great value on enemy life	0.9
Significant value on enemy life	0.8
Enemy requires protective measures	0.7
Avoid unnecessary enemy suffering	0.6
Enemy does not merit express concern	0.5
Enemy is hindrance to operations	0.4
Enemy is unfortunate target	0.3
Enemy unworthy of mercy	0.2
Enemy inhuman	0.1

The following two coefficients, of values equaling exactly one or negative one, are used in the model to align contributing factors with cooperation or betrayal, as appropriate to the situation. As such, they may reverse the sign of the decision-making component, but not the magnitude from zero.

Congruency:

Cooperation aligned with moral values	1
Cooperation conflicts with moral values	-1

Polarity:

Proximity to present influence	1
Distance from removed influence	-1

## LIST OF REFERENCES

- CCIES. (2004). *Puerto Rico*. Retrieved December 2, 2007, from [www.kinseyinstitute.org](http://www.kinseyinstitute.org).
- Dixit, A.K., & Nalebuff, B.J. (1991). *Thinking Strategically*. New York: W.W. Norton & Company, Inc.
- Epictetus. (101). *Discourses*. Retrieved June 13, 2007, from <http://www.constitution.org/rom/epicdisc.txt>.
- Hopkins, S., McCreary, L., & Zayas-Garcia, M. (Producers), & Hopkins, S. (Director). (2000). *Under Suspicion* [motion picture]. United States: Lions Gate.
- International Committee of the Red Cross. (2007). *International humanitarian law – treaties and documents*. Retrieved November 27, 2007, from [www.icrc.org](http://www.icrc.org).
- Internet Movie Database. (2007). *Under suspicion*. Retrieved September 25, 2007, from [www.imbd.com](http://www.imbd.com).
- Internet Movie Database. (2007). *Actor biography: Sahyly Yamile Alvarez Esponda*. Retrieved September 25, 2007, from [www.imdb.com](http://www.imdb.com).
- Interpol. (2007). *Legislation of INTERPOL member states on sexual offenses against children: Puerto Rico*. Retrieved December 2, 2007, from [www.interpol.int](http://www.interpol.int).
- Manchester, W. (1978). *American caesar*. New York: Dell Publishing.
- MySpace. (2007). *Tangram films: Patricia Beato*. Retrieved September 25, 2007, from <http://profile.myspace.com>.
- Osiel, M. (1999). *Obeying orders*. New Jersey: Transaction Publishers.
- Ross, D. (2006). *Game Theory*. Retrieved January 22, 2007, from Stanford University, Stanford Encyclopedia of Philosophy web site: <http://plato.stanford.edu>.
- Sallah, M. & Weiss, M. (2006). *Tiger force: a true story of men and war*. New York: Little, Brown and Company.
- Schelling, T.C. (1984). *Choice and consequence*. Massachusetts: President and Fellows of Harvard College.
- Supreme Court of Puerto Rico. (2007). *Rule 83.5 Attorneys: disciplinary rules and enforcement*. Retrieved September 25, 2007, from [www.prd.uscourts.gov](http://www.prd.uscourts.gov).

Willoughby, J. (2001). *Remaking the conquering heroes*. New York: Palgrave.

Zimbardo, P. (2007). *The lucifer effect*. New York: Random House.

## **INITIAL DISTRIBUTION LIST**

1. Defense Technical Information Center  
Ft. Belvoir, Virginia
2. Dudley Knox Library  
Naval Postgraduate School  
Monterey, California