

# MAKING SENSE OF DISSIDENCE AND REPRESSION IN CUBA: A GAME THEORETIC ANALYSIS

Matthew Craig<sup>1</sup>

“Why aren’t you in jail?”

—Caroline Overington, journalist.

“This is the question everybody — all my friends, my family — is asking. I don’t know the answer, but I know another question. Why are other people in jail?”

—Oswaldo Payá, Cuban human rights activist.<sup>2</sup>

This paper seeks to answer Payá’s question about the nature of political repression in Cuba from a game theoretic perspective. To many observers, a simple answer may suffice: the arrests are the result of a Cuban government that sticks to the motto “Within the Revolution, anything; outside of the Revolution, nothing” — Fidel Castro’s famous words from a 1961 address. The repression of political rights in Cuba has long been the object of criticism from those inside and outside the island. The Cuban government has been labeled “most repressive” by Freedom House and has been the target of heavy criticism from the U.S. government, the United Nations, Amnesty International and other human rights monitoring groups.<sup>3</sup> The arrest of seventy-five Cuban dissidents in March 2003 — *el marzo negro* (black March) — seemed only to confirm the continued lack of political freedom available to the Cuban people.

Nevertheless, Cuban government officials and others who sympathize with the Cuban Revolution assert that political rights do exist in Cuba, though they must not “be exercised contrary to the existence and objectives of the socialist state, or contrary to the decision of the Cuban people to build socialism and communism.”<sup>4</sup> For them, Castro’s oft-quoted statement implies political rights only exist as long as they do not affect the provision of social, economic, and cultural rights.

Political beliefs aside, the truth is obviously more complex than a characterization of Castro as freedom-hating dictator would provide. This paper aims to use game theory to shed light on political repression in Cuba, demonstrating the strategic nature of both the Cuban government and dissident organizations.

Game theory is an approach used by rational choice theorists to analyze the interaction (the “game”) between decision-makers. It is a tool for studying interdependence, in which the players choose the best possible action available given their expectations for how the other players in the game will act. An outcome of this interaction is called an “equilibrium.” The use of rational choice theory will allow for an objective analysis that will account for various fac-

---

1. Editor’s Note: This essay was awarded Second Prize in the ASCE Student Prize Competition for 2007 for undergraduate students.

2. Overington, Caroline, “Living in Castro’s shadow,” *The Age*, May 17, 2003.

3. Freedom House, “Program Detail: Cuba,” <http://www.freedomhouse.org/template.cfm?page=66&program=54>.

4. Republic of Cuba, *Constitution of the Republic of Cuba*, Article 61.

tors that influence dissidence and political repression in Cuba.

In particular, the model will focus on the March 2003 arrests, as this incident exhibited a number of factors that provide for interesting study. First, it appears that the Cuban government issued different punishments to the different dissident organizations. Of the seventy-five dissidents arrested, only fourteen belonged to Oswaldo Payá's Christian Liberation Movement, which is generally seen as more moderate than Martha Beatriz Roque's opposition front, the Assembly to Promote Civil Society in Cuba. Many of the arrested dissidents belonged to this opposition front, which represented 260 organizations as of July 2004.<sup>5</sup> Second, dissident organizations appear to have chosen different opposition strategies. Some dissidents aligned themselves closely with the United States and the U.S. Interests Section, while others distanced themselves from the U.S. government. Lastly, the effects that the international community can have on the Cuban government (i.e., the "costs" of repressing dissident activity) are clearly seen, as the European Union withheld an economic package, and other governments and organizations protested the crackdown as well.

It is important to recognize the greater context in which the arrests took place. James Cason, who began as the head of the U.S. Interests Section in September 2002, was more antagonistic to the Cuban government than any previous official in his post, and the U.S. Interests Section worked more closely with dissidents than ever before. The Cuban government issued numerous complaints and even considered cutting the ties that exists between the two countries. In the end, the Cuban government chose to punish the Cuban dissidents instead. Though the lead-up to the 2003 crackdown must be appreciated, this paper will focus solely on the interaction that

took place between dissidents and the Cuban government before the arrests.

It is also necessary to point out the inherent irony in using rational choice theory to examine dissident activity in Cuba, as it could be demonstrated that dissidence in closed societies is irrational behavior. However, the model presented in the paper will assume dissidents are concerned about the costs they face as a result of their dissident activity, regardless of the steadfast commitment to opposition they may have. The rationality of dissident activity in and of itself will not be discussed.

### **THE MARCH 2003 CRACKDOWN**

Before the Cuban government began the arrests, scores of dissidents were reported to have met with James Cason and other U.S. officials. Despite having some contact with the U.S. government, Oswaldo Payá had long been a critic of U.S. policy towards Cuba. After receiving the Sakharov Prize for Freedom of Thought, the European Parliament's top human rights award, in 2002, he took the opportunity to voice his opinion to the international press, condemning the embargo and the United States' detainment of prisoners at Guantanamo Bay.<sup>6</sup> Payá tried to distance himself and the Christian Liberation Movement from the U.S. Interests Section and did not accept the economic aid that the U.S. government provided to other dissidents.

The work of Martha Beatriz Roque and other dissidents from the Assembly to Promote Civil Society in Cuba was far more inflammatory to the Cuban government in terms of cooperation with the United States. Though this opposition front was only organized in 2002, collaboration between its leaders and the U.S. government has its roots in the 1990s. In 1997, the U.S. Agency for International Development (USAID) created the Cuba Dissidence Task Group (CDTG), with the aim to support the activities of dissident groups in Cuba, especially the prom-

---

5. Canadian Foundation for the Americas, Research Forum on Cuba, "Cuba Opposition Organizations," [http://www.cuba-source.org/pdf/organizations\\_e.pdf](http://www.cuba-source.org/pdf/organizations_e.pdf).

6. Burns, Jim, "Cuban Dissident Criticizes US-Cuba Policy After Receiving Award," *Cybercast News Service*, December 18, 2002, <http://www.cnsnews.com/ViewForeignBureaus.asp?Page=%5CForeignBureaus%5Carchive%5C200212%5CFOR20021218b.html>.

inent “Group of Four,” which includes Roque. The CDTG was backed by a two-year \$250,000 grant and had the primary aim of “helping groups promote human rights and support dissidents on the island.”<sup>7</sup> Cooperation among the U.S. government, Roque, and other hard-line dissidents only increased with Cason’s arrival.<sup>8</sup>

During the March 2003 arrests, the Cuban government distinguished between the dissidents who had close ties with the U.S. government and those who did not. Almost of all the seventy-five people arrested were accused of working with the United States and were tried under either Article 91 of the Penal Code and/or Law 88.<sup>9</sup> Article 91 stipulates that “he who, in the interest of a foreign state, commits an act with the objective of damaging the independence or territorial integrity of the Cuban state, incurs the penalty of ten to twenty years imprisonment or death.” Law 88 modifies Article 91, allowing for a punishment of life in prison for similar crimes. The majority of those arrested in the 2003 crackdown were dissidents aligned with the Assembly to Promote Civil Society in Cuba. These included leaders Roque and Margarito Broche Espinosa, among many others. Many of the most prominent leaders, including the two aforementioned figures, were later granted provisional release. Only fourteen members of Payá’s moderate Christian Liberation Movement were arrested, despite Payá’s (and by extension, his organization’s) role in the Varela Project. Payá himself was not arrested, and only one of the organization’s founding members was among the seventy-five.<sup>10</sup>

In the case of the March 2003 arrests, two different levels of repression were seen. The first—“medium” repression—involved the arrest of both prominent leaders and lower-level members of an organization, with certain visible figures being

released before carrying out a full sentence. The Assembly to Promote Civil Society in Cuba faced this level of repression. Conversely, the Cuban government punished the Christian Liberation Movement with “low” repression—the arrest of some dissidents, including select leaders, but excluding the most prominent figures, such as Payá, who were harassed instead. Despite the severe nature of the arrests, the March 2003 crackdown did not represent the highest level of repression possible. Under “high” repression, the dissident organizations would have been unable to continue their opposition work and prominent figures such as Roque would not have been released from prison. In 2003, however, both the Assembly to Promote Civil Society in Cuba and the Christian Liberation Movement continued their activities in the face of the arrests.

In general terms, the 2003 crackdown saw the Cuban government issuing a medium-level punishment to hard-line dissidents who aligned more closely with the United States and a low-level punishment to moderate dissidents who distanced themselves from the United States. The question remains whether or not this outcome is the result of strategic behavior on the part of the Cuban government and the dissident organizations. In other words, if the parties involved were strategic actors, there must be an equilibrium that has the same characteristics as the March 2003 arrests. The model developed below demonstrates that this equilibrium does exist.

## MODELING DISSIDENCE AND REPRESSION IN CUBA

The game utilized in this paper to examine the March 2003 crackdown involves three players: Nature, the dissident organization, and the Cuban government. Nature is a common player in game theory that, in essence, represents chance. It allows the model to

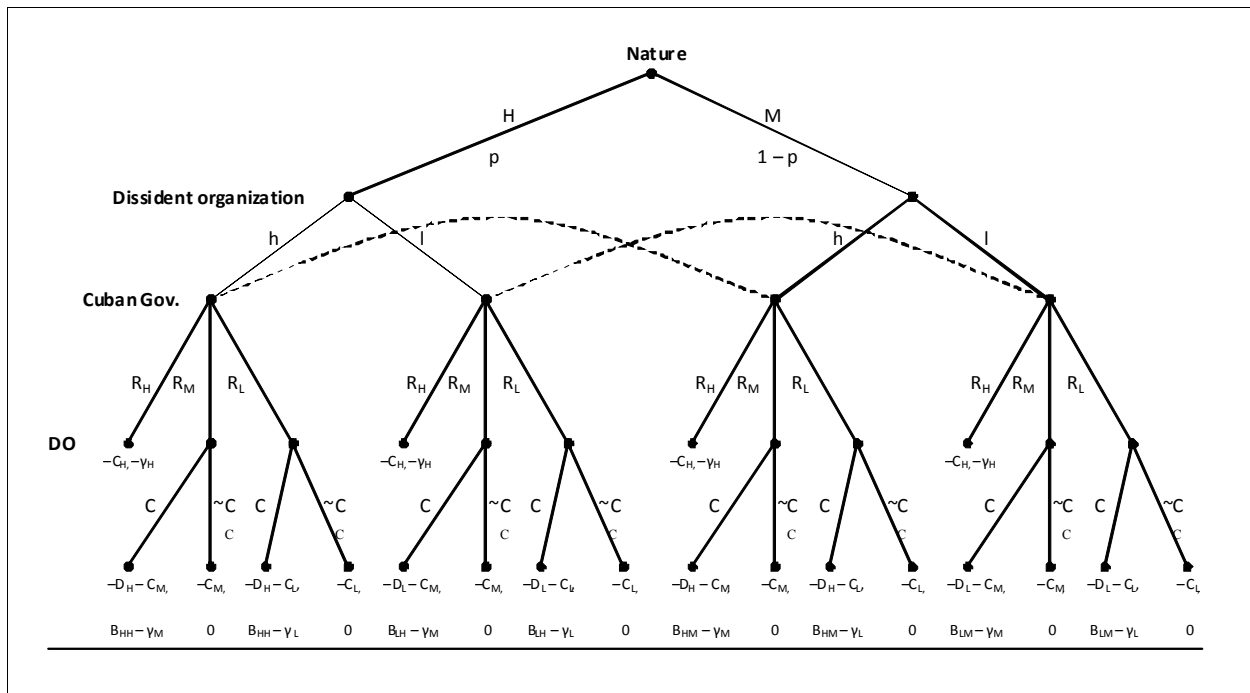
7. USAID, Appendix A: Descriptions of Cuba Program Grantee Activities, [http://www.usaid.gov/locations/latin\\_america\\_caribbean/country/pubs/program\\_report/appendix\\_a.html](http://www.usaid.gov/locations/latin_america_caribbean/country/pubs/program_report/appendix_a.html).

8. Amnesty International, *Cuba: Massive Crackdown on Dissent*, April 3, 2003, <http://web.amnesty.org/library/Index/ENGAMR250082003?open&of=ENG-CUB%3E>; and Castro, Fidel, “Special Presentation by Dr. Fidel Castro Ruz,” April, 25 2003, Havana, Cuba.

9. Amnesty International.

10. Canadian Foundation for the Americas, Research Forum on Cuba.

Figure 1.



take into account the Cuban government’s uncertainty about the dissident organization’s ideology. In this game, both the Cuban government and the dissident organization will be treated as unitary actors. For the Cuban government, the model assumes that final decision-making authority is wielded by Castro. The actions undertaken by the dissident organization are assumed to be directed by the organization’s leadership. A game tree for this model is given in Figure 1.

Nature makes the first move of the game, selecting the type of dissident organization. It may either choose hard-line ( $H$ ) or moderate ( $M$ ), which refer to ideological stances as opposed to the type of dissident activity in which the organization engages. The dissident organization, whether hard-line or moderate, can choose to undertake high-level dissidence ( $h$ ) or low-level dissidence ( $l$ ). In the case of the March 2003 arrests, the distinction between high and low-level dissidence deals with cooperation with the U.S. government. After the dissident organization chooses its level of dissident activity, the Cuban government can choose between three different punishments to issue to the dissident organization. These are denoted by  $R_H$  (high repression),  $R_M$  (medium re-

pression), and  $R_L$  (low repression). High repression will be defined as that which ensures the termination of dissident activity; thus, the game ends if the Cuban government chooses  $R_H$ . If the Cuban government chooses either  $R_M$  or  $R_L$ , the dissident organization has two options, continue dissident activity ( $C$ ) or stop dissident activity ( $\sim C$ ).

In this game, the Cuban government does not have complete information about the ideological stance of the dissident organization; in other words, it is unsure whether nature has chosen  $H$  or  $M$ . The Cuban government’s belief that the dissident organization is hard-line is given by  $\Pr(H) = p$  and the belief that the organization is moderate is given by  $\Pr(M) = 1 - p$ . The Cuban government is able to observe the level of dissident activity the organization has selected and has complete information about preferences of each type of dissident organization.

The preference over outcomes of the Cuban government is determined by its goal to minimize the effect (i.e., the cost) of dissidence on the island. This cost has two components. The first component is the cost of punishing the dissident organization. For each level of repression  $R_H$ ,  $R_M$ ,  $R_L$ , there is a corre-

sponding cost  $C_H, C_M, C_L$ . The second component is the cost imposed by the dissident organization itself. In this model, this cost only takes affect after the punishment phase of the game and only is experienced if the dissident organization chooses to continue opposition activities ( $C$ ). Since dissident activity ceases after the Cuban government chooses  $R_H$ , the payoff of this move is always  $-C_H$ . Likewise, if the dissident organization chooses  $\sim C$  after  $R_M$  or  $R_L$ , the Cuban government's payoff is given by  $-C_M$  and  $-C_L$ , respectively. On the other hand, if the dissident organization chooses  $C$ , the Cuban government faces one of two possible costs for continued dissident activity. The cost for continued high-level dissidence is given by  $D_H$ , and the cost for continued low-level dissidence is given by  $D_L$ . In this model, the cost that the dissident imposes on the Cuban government is determined by tactic ( $b$  and  $l$ ) rather than ideological stance ( $H$  and  $M$ ). Thus, the Cuban government experiences the cost of continued dissidence ( $D_H$  or  $D_L$ ) and the cost of repression ( $C_M$  or  $C_L$ ) after any history of the game in which  $C$  is played.

The payoffs of different outcomes for the dissident organization are also determined by two factors. The first is the benefit it experiences for continuing dissident activity ( $\beta$ ), which varies depending on ideological stance and opposition tactic. Four  $\beta$  values are possible:  $\beta_{HH}$  (high-level dissidence, hard-line dissident organization),  $\beta_{LH}$  (low-level dissidence, hard-line dissident organization),  $\beta_{HM}$  (high-level dissidence, moderate dissident organization), and  $\beta_{LM}$  (low-level dissidence, moderate dissident organization). The value of continued dissidence is greater for the hard-line dissident organization; thus,  $\beta_{HH} > \beta_{HM}$  and  $\beta_{LH} > \beta_{LM}$ . The second component of the dissident organization's payoff is the cost of the Cuban government's punishment. For each level of repression  $R$ , there is a corresponding cost  $\gamma$  faced by the dissident organization. Since continued dissidence is not possible after  $R_H$ , the total cost to the dissident organization is simply  $\gamma_H$ . If the dissident group chooses to capitulate ( $\sim C$ ) to the Cuban government's punishment, the payoff to the organization will be normalized to 0. If the organization decides to continue dissidence ( $C$ ), its payoff is determined by the difference between the corresponding  $\beta$  and  $\gamma$

values. The distinction between hard-line and moderate dissident organizations hinges on the condition that a hard-line group will continue high-level dissident activity after medium repression ( $\beta_{HH} - \gamma_M \geq 0$ ), whereas a moderate group will not ( $\beta_{HM} - \gamma_M < 0$ ) (Assumption 1). In addition, both groups prefer to continue low-level dissidence in the face of low repression ( $\beta_{LH} - \gamma_L > \beta_{LM} - \gamma_L \geq 0$ ) (Assumption 2). These assumptions have the following implications for the various  $\beta$  and  $\gamma$  values:

$$\begin{aligned} \beta_{HH} - \gamma_L &> \beta_{HH} - \gamma_M \geq 0 \\ \beta_{LH} - \gamma_L &> 0 \\ \beta_{LM} - \gamma_M &< \beta_{HM} - \gamma_M < 0 \\ \beta_{LM} - \gamma_L &\geq 0 \end{aligned}$$

Lastly, for purposes of clarity, this model assumes that if a player is indifferent between two actions,  $b$  will be chosen over  $l$ ,  $C$  over  $\sim C$ , and  $R_H$  over  $R_M$  over  $R_L$  (Assumption 3). Not all of the dissident organization's preferences are predetermined. There are two different possible payoffs profiles after the history ( $H, l, R_M$ ), resulting in two possible configurations of the payoffs of the hard-line dissident organization, as shown in Table 1.

This game can be solved using backwards induction, taking into account the beliefs the Cuban government holds about the ideology of the dissident organization ( $p$  and  $1 - p$ ). A listing of all equilibria is included in the Appendix and a summary can be found in Table 2. There are six general types of equilibria. In Type 1, the Cuban government always chooses high repression, regardless of the ideology or the opposition tactic of the dissident organization. The dissident organization will choose high-level dissident activity. In Type 2, the Cuban government punishes high-level dissidence with high repression and low-level dissidence with either medium or low repression. In either case, the dissident organization chooses low-level dissident activity. In Type 3, the Cuban government issues a medium punishment in response to both high and low-level dissidence, and the dissident organization chooses high-level dissidence. In Type 4, the Cuban government punishes high-level dissidence with medium repression and low-level dissidence with low repression. The hard-line dissident organization chooses high-level dissi-

**Table 1. Possible Configuration of Payoffs for Dissident Organization**

Profile	Conditions	Hard-line dissident organization	Moderate dissident organization
H <sub>1</sub> M <sub>1</sub>	$\beta_{LH} - \gamma_M > 0$ $\beta_{HM} - \gamma_L > 0$	Hard-line group's benefit for continuing low-level dissidence is greater than cost of medium repression	Moderate group's benefit for continuing high-level dissidence is greater than cost of low repression
H <sub>2</sub> M <sub>1</sub>	$\beta_{LH} - \gamma_M < 0$ $\beta_{HM} - \gamma_L > 0$	Hard-line group's benefit for continuing low-level dissidence is less than cost of medium repression	Moderate group's benefit for continuing high-level dissidence is greater than cost of low repression

**Table 2. Summary of Equilibria Corresponding to Partial Strategy Profiles<sup>a</sup>**

		Cuban government					
		$R_H/h,$ $R_H/l$	$R_H/h,$ $R_M/l$	$R_H/h, R_L/l$	$R_M/h,$ $R_M/l$	$R_M/h,$ $R_L/l$	$R_L/h, R_L/l$
<b>Dissident organization</b>	$b H, b M$	1 (Type 1)		2 (Type 3)		2 (Type 6)	
	$b H, l M$					2 (Type 4)	
	$l H, l M$	2 (Type 2)		1 (Type 2)		2 (Type 5)	

a. Except for the Type 1 equilibrium and the two Type 3 equilibria, the dissident organization will always choose C in equilibria regardless of its type.

dence, and the moderate group chooses low-level dissidence. In Type 5, the Cuban government again distinguishes between high and low-level dissidence and responds with medium and low repression, respectively. In this case, however, both types of dissident groups choose low-level dissidence. In Type 6, the Cuban government carries out low repression in response to both levels of dissidence, and the dissident organization chooses high-level dissidence. One should note that only in Type 4 is there a difference in strategy between hard-line and moderate dissident organizations. Since this model looks to analyze the March 2003 arrests, only certain equilibria will be discussed below. Conditions for all equilibria can be found in the Appendix.

**APPLYING THE MODEL TO THE MARCH 2003 ARRESTS**

This model was developed to show that the behavior exhibited in the March 2003 crackdown was, in fact, strategic and that there are equilibria that correspond with the events of *el marzo negro*. Type 4 equilibrium has the required characteristics. This outcome, however, is only possible under a certain set of conditions. These must be understood if one hopes to comprehend why the March 2003 arrests resulted as they did. The technical sets of conditions for both Type 4 equilibria are given in Figure 2:

**Figure 2.**

$  \begin{aligned}  & -C_H < p(-D_H) - C_M \\  & -C_H < -D_L - C_L \\  & p > -1 + (C_M - C_L)/(D_H) \\  & p < -1 + (C_M - C_L)/(D_L) \\  & \beta_{HH} - \gamma_M \geq \beta_{LH} - \gamma_L \\  & \beta_{LH} - \gamma_M > 0 \\  & \beta_{HM} - \gamma_L > 0  \end{aligned}  $	or	$  \begin{aligned}  & -C_H < p(-D_H) - C_M \\  & p \geq -1 + (C_M - C_L)/(D_H) \\  & -C_M < -D_L - C_L \\  & \beta_{HH} - \gamma_M > \beta_{LH} - \gamma_L \\  & \beta_{LH} - \gamma_M < 0 \\  & \beta_{HM} - \gamma_L > 0  \end{aligned}  $
---	----	--

**General Condition 1:** High repression must be sufficiently costly to the Cuban government.

The cost of high repression must be sufficiently greater than the combined cost of continued dissidence at either level and the cost of medium or low repression. The model does not account for the origins of this cost of repression, but there are plenty of possibilities. One determinant may be the reaction among the Cuban people; though, the dissident movement does not appear to have a great following amongst the Cuban people. Nevertheless, it should be acknowledged that greater popular support for Castro and the Cuban government of the Cuban people reduces the costs of punishing dissidence. Perhaps the most important factor in determining the cost of repression is the reaction of other countries, especially Cuba's trading partners. Indeed, after the March 2003 arrests, the European Union did react, suspending the process that would have made

Cuba a part of the Cotonou Agreement, which looks to integrate African, Caribbean, and Pacific states into the global economy.<sup>11</sup> Later the European Union took measures “to limit the bilateral high-level government visits; reduce the profile of member states’ participation in cultural events; invite Cuban dissidents at national days’ celebrations and proceed to the re-evaluation of the EU Common Position.”<sup>12</sup> U.S. policy towards Cuba has the potential to drastically affect the island, as evidenced by the U.S. embargo and the U.S. government support of counter-revolutionary activities. Thus, it is not surprising that the Cuban government chose to limit the attention the incident received from the U.S. government and public by beginning the arrests on March 18—the day before President Bush declared war on Iraq. Nevertheless, it is easy to imagine that the cost of high repression, as defined in this model, would have been much greater than the costs of repression seen in 2003. Perhaps the United States would have acted more forcefully, rather than turn to such symbolic gestures as the “75” it displayed on the side of the U.S. Interests Section building during the 2003 Christmas season. The European Union could have cut economic ties completely; instead, the relations between Cuba and the EU countries have since improved and are markedly better than those between Cuba and the United States. Overall, the international community, though punitive and very vocal in its response to the arrests, fell far short of imposing the costs on the Cuban government that it could have if extremely repressive measures were taken. In addition, though opposition does pose a threat to the Revolution, dissidence does not cost the Cuban government enough to outweigh the potential costs of high repression, given the continued support of the Revolution found in many parts of Cuban society.

**General Condition 2:** For the Cuban government, the difference between the costs of continued low-level dissidence and continued high-level dissidence

and between the costs of high and low repression must be sufficiently large.

In the Type 4 equilibrium in which the hard-line organization always chooses to continue dissident activity in the face of any punishment (excluding  $R_H$ ),  $-1 + (C_M - C_L) / (D_L) > p \geq -1 + (C_M - C_L) / (D_H)$ . For the second Type 4 equilibrium, in which the dissident organization prefers to capitulate instead of continue low-level dissident activity in the face of medium repression, the criteria are a bit less strict:  $p < -1 + (C_M - C_L) / (D_H)$  and  $-C_M < -D_L - C_L$ . The conditions in both of these cases reflect the interaction of various variables. However, it intuitively makes sense that the Cuban government will only distinguish between high and low-level dissidence if they actually pose significantly different threats. In terms of the March 2003 arrests, it must be that the cost to the government caused by cooperation between the Assembly to Promote Civil Society in Cuba and the U.S. government was significantly greater than the cost caused by the work of the Christian Liberation Movement, despite the international recognition gained by its Varela Project. Moreover, the Cuban government issued a medium punishment only to the Assembly to Promote Civil Society in Cuba. Therefore, it must not have been worth the cost to repress the Christian Liberation Movement to the same degree. This demonstrates the sufficiently large difference between the costs of medium and low repression. The Cuban government’s beliefs about the ideology of the dissident organization could potentially have an effect on its choice of punishment; however, this is only likely with smaller differences in cost between the various opposition tactics and levels of repression.

**General Condition 3:** The hard-line dissident organization must be willing to endure high costs in order to engage in any type of dissident activity.

11. Klepal, Jakub, “The EU’s Common Policy Towards Cuba: Always a Few Steps Behind,” *Cuba — Europe Dialogues*, no. 1 (2006), 5, [http://www.icdprague.org/download/documents/en/CUBA-EU\\_DIALOGUES\\_May\\_2006.pdf](http://www.icdprague.org/download/documents/en/CUBA-EU_DIALOGUES_May_2006.pdf)

12. European Union, “Declaration by the Presidency,” June 5, 2003, [http://ue.eu.int/ueDocs/cms\\_Data/docs/pressdata/en/cfsp/76075.pdf](http://ue.eu.int/ueDocs/cms_Data/docs/pressdata/en/cfsp/76075.pdf).

In both occurrences of Type 4 equilibrium, the hard-line group prefers to continue low-level dissidence in the face of medium punishment ( $\beta_{LH} - \gamma_M > 0$ ). If this condition is not met, only Type 1, 2, and 3 equilibria are possible. In addition, the hard-line dissident organization must also prefer continued high-level dissidence with medium repression to continued low-level dissidence with low repression ( $\beta_{HH} - \gamma_M \geq \beta_{LH} - \gamma_L$ ). These conditions imply that even if the Assembly to Promote Civil Society in Cuba did not work so closely with the United States, it still would continue government opposition when confronted with the same level of repression it received in the March 2003 arrests. Furthermore, it must be that the opposition front prefers to align itself closely with the U.S. government and endure medium repression, rather than distance itself from the U.S. Interests Section and subsequently face low repression. There is no empirical evidence that *proves* these conditions are true. However, the Assembly to Promote Civil Society in Cuba maintains a very high level of openness about its close relationship with the U.S. government, even displaying letters of support from Congressmen and President Bush on its website. This seems suggests the organization is prepared to suffer high costs for the opposition in which it engages.

Almost all these conditions are the same for Type 5 equilibrium, in which the Cuban government again distinguishes between high and low-level dissident activity, *but* both the hard-line and moderate groups choose low-level dissidence. In Type 5 equilibrium, unlike Type 4, the hard-line dissident organization prefers continued low-level dissidence with low repression to continued high-level dissidence with medium repression ( $\beta_{LH} - \gamma_L > \beta_{HH} - \gamma_M$ ). The difference in outcome intuitively makes sense; given that the Cuban government's choice of punishment depends on opposition tactic, the hard-line dissident organization can choose between the two outcomes for which the payoffs are  $\beta_{LH} - \gamma_L$  and  $\beta_{HH} - \gamma_M$ . It, of course, will select the outcome with the greater payoff.

Of the various types of equilibria shown to be possible by this model, a particular equilibrium stands out to be the most socially desirable from a democratic perspective—Type 6 equilibrium. In this equilibrium, both moderate and hard-line opposition groups are free to pursue any dissident tactic they would like, while the Cuban government issues the least severe punishment. (Technically, both groups choose high-level dissidence in equilibrium, but this is only due to Assumption 3.) Circumstances could change in Cuba so that this outcome would occur. The specific conditions depend on the preferences of the dissident organizations (see Appendix). However, two general changes could move the status quo towards this outcome. First, a greater difference in cost between medium and low repression make *low* repression more likely to be seen. Second, if high-level dissidence costs the Cuban government less (i.e., the government is less threatened by dissidence, either due to high support for the Revolution or a greater understanding of the democratic process by the Cuban government), it may be that medium repression is not worth the cost. Thus, dissidents, regardless of their activities, would be punished with low repression. Though a detailed analysis of how to achieve this situation in Cuba is beyond the scope of the paper, it is important to recognize the potential for this change highlighted by the model.

## CONCLUSION

The variety of equilibria shown to be possible in this game demonstrates that political freedom in Cuba is a more complex issue than it may appear at first glance. It is important to realize that the level of repression in Cuba is not only a function of the threat posed to the Cuban government by dissidents, but also of the potential costs to the Cuban government of repressing political movements. The March 2003 crackdown has been a highly significant event in a multitude of ways. On the diplomatic level, the crackdown set back a period of détente between Europe and Cuba that had begun in 1998.<sup>13</sup> It hurt already strained relations between the Cuban government and U.S. Interest Section. It also damaged the

---

13. Klepal, 5.



Cuban Revolution's standing among prominent leftist thinkers, writers, and organizations abroad. The Cuba Policy Foundation in Washington, D.C., which had advocated for increased economic and people-to-people exchange with Cuba, even ceased operations. Amongst the Cuban-American community and the dissident movement in Cuba, *el marzo negro* served as a rallying point for later opposition activities.

However, the arrests are significant for yet another reason: they reflect the strategic behavior of both dissident organizations and the Cuban government. The game presented in this paper produced an equilibrium that models the events of March 2003. The hard-line organization, the Assembly to Promote Civil Society in Cuba, partook in high-level dissident activity, whereas the more moderate organization, the Christian Liberation Movement, carried out low-level opposition. The Cuban government punished the Assembly to Promote Civil Society in Cuba more harshly than the Christian Liberation Movement. In the end, both groups continued their activities in the face of repression. According to the model, this is a logical outcome given the circumstances; nevertheless, if conditions are altered in Cuba, it is possible that the state of repression and dissidence will change as well.

Though precise application of this model may be difficult due to the multitude of conditions on each equilibrium, the game proposed in this paper could be made more complex still. It is possible that dissident organizations are uncertain about the "type" of the Cuban government. One such model could incorporate dissidents' beliefs about the level of sup-

port the Cuban government has amongst the Cuban people; another model could include beliefs about two types of Castro, distinguished by different levels of tolerance for political opposition. The model also could distinguish between the cost of continued dissident activity by hard-line and moderate groups. In other words, it is possible that  $D_H|H$  and  $D_H|M$  (and also  $D_L|H$  and  $D_L|M$ ) are not equal and that the cost of dissidence to the Cuban government is determined not only by tactic but also by ideology. A game in which the dissident group has the option to change tactic after the punishment phase in addition to options of  $C$  and  $\sim C$  would be an improvement as well. Lastly, the game could have included an option of no repression for the Cuban government. This would perhaps offer more insight into how, if at all, political repression could be eliminated in Cuba. Indeed, there is much left to study concerning rational choice and political dissidence in Cuba.

Regardless, the model does demonstrate the strategic interaction of the Cuban government and dissident organizations in the spring of 2003. In addition, it provides a general idea of how the situation in Cuba can be improved for political dissidents. Fidel Castro may not like opposition, but he has shown to be aware of the costs his government faces when repressing it. Likewise, hard-line and moderate dissident organizations understand of the costs of their activities and have proven to be strategic actors in a complex situation. The events of March 2003 are in line with the principles of rational choice theory, and one could expect to gain even more insight on Cuba with further game theoretic analysis.

## APPENDIX

Equilibrium	Payoff Profile	Type	Conditions
$((b, ((C, C), (C, C))   H, b, ((\sim C, C), (\sim C, C))   M), (R_H   b, R_H   b))$	$H_1M_1$	1	$-C_H \geq -D_L - C_L$ $-C_H \geq p(-D_L) - C_M$ $\beta_{LH} - \gamma_M > 0$ $\beta_{HM} - \gamma_L > 0$
$((l, ((C, C), (C, C))   H, l, ((\sim C, C), (\sim C, C))   M), (R_H   b, R_M   b))$	$H_1M_1$	2	$-C_H \geq -D_H - C_L$ $-C_H \geq p(-D_H) - C_M$ $p \geq -1 + (C_M - C_L) / (D_L)$ $-C_H < p(-D_L) - C_M$ $\beta_{LH} - \gamma_M > 0$ $\beta_{HM} - \gamma_L > 0$
$((l, ((C, C), (C, C))   H, l, ((\sim C, C), (\sim C, C))   M), (R_H   b, R_L   b))$	$H_1M_1$	2	$-C_H \geq -D_H - C_L$ $-C_H \geq p(-D_H) - C_M$ $p < -1 + (C_M - C_L) / (D_L)$ $-C_H < -D_L - C_L$ $\beta_{LH} - \gamma_M > 0$ $\beta_{HM} - \gamma_L > 0$
$((b, ((C, C), (C, C))   H, b, ((\sim C, C), (\sim C, C))   M), (R_M   b, R_M   b))$	$H_1M_1$	3	$-C_H < p(-D_H) - C_M$ $p \geq -1 + (C_M - C_L) / (D_L)$ $\beta_{LH} - \gamma_M > 0$ $\beta_{HM} - \gamma_L > 0$
$((b, ((C, C), (C, C))   H, b, ((\sim C, C), (\sim C, C))   M), (R_M   b, R_L   b))$	$H_1M_1$	4	$-C_H < p(-D_H) - C_M$ $p \geq -1 + (C_M - C_L) / (D_H)$ $p < -1 + (C_M - C_L) / (D_L)$ $-C_H < -D_L - C_L$ $\beta_{HH} - \gamma_M \geq \beta_{LH} - \gamma_L$ $\beta_{LH} - \gamma_M > 0$ $\beta_{HM} - \gamma_L > 0$
$((l, ((C, C), (C, C))   H, l, ((\sim C, C), (\sim C, C))   M), (R_M   b, R_L   b))$	$H_1M_1$	5	$-C_H < p(-D_H) - C_M$ $p \geq -1 + (C_M - C_L) / (D_H)$ $p < -1 + (C_M - C_L) / (D_L)$ $-C_H < -D_L - C_L$ $\beta_{HH} - \gamma_M < \beta_{LH} - \gamma_L$ $\beta_{LH} - \gamma_M > 0$ $\beta_{HM} - \gamma_L > 0$
$((b, ((C, C), (C, C))   H, b, ((\sim C, C), (\sim C, C))   M), (R_L   b, R_L   b))$	$H_1M_1$	6	$-C_H < -D_H - C_L$ $p < -1 + (C_M - C_L) / (D_H)$ $\beta_{LH} - \gamma_M > 0$ $\beta_{HM} - \gamma_L > 0$
$((l, ((C, C), (\sim C, C))   H, l, ((\sim C, C), (\sim C, C))   M), (R_H   b, R_M   b))$	$H_2M_1$	2	$-C_H \geq -D_L - C_L$ $-C_H \geq p(-D_H) - C_M$ $-C_M \geq -D_L - C_L$ $\beta_{LH} - \gamma_M < 0$ $\beta_{HM} - \gamma_L > 0$
$((b, ((C, C), (\sim C, C))   H, b, ((\sim C, C), (\sim C, C))   M), (R_M   b, R_M   b))$	$H_2M_1$	3	$-C_H < p(-D_H) - C_M$ $p \geq -1 + (C_M - C_L) / (D_H)$ $-C_M \geq -D_L - C_L$ $\beta_{LH} - \gamma_M < 0$ $\beta_{HM} - \gamma_L > 0$

Equilibrium	Payoff Profile	Type	Conditions
$((b, ((C, C), (\sim C, C))   H, l, ((\sim C, C), (\sim C, C))   M), (R_M   b, R_L   l))$	$H_2M_1$	4	$-C_H < p(-D_H) - C_M$ $p \geq -1 + (C_M - C_L) / (D_H)$ $-C_M < -D_L - C_L$ $\beta_{HH} - \gamma_M \geq \beta_{LH} - \gamma_L$ $\beta_{LH} - \gamma_M < 0$ $\beta_{HM} - \gamma_L > 0$
$((l, ((C, C), (\sim C, C))   H, l, ((\sim C, C), (\sim C, C))   M), (R_M   b, R_L   l))$	$H_2M_1$	5	$-C_H < p(-D_H) - C_M$ $p \geq -1 + (C_M - C_L) / (D_H)$ $-C_M < -D_L - C_L$ $\beta_{HH} - \gamma_M < \beta_{LH} - \gamma_L$ $\beta_{LH} - \gamma_M < 0$ $\beta_{HM} - \gamma_L > 0$
$((b, ((C, C), (\sim C, C))   H, b, ((\sim C, C), (\sim C, C))   M), (R_L   b, R_L   l))$	$H_2M_1$	6	$-C_H < -D_H - C_L$ $p < -1 + (C_M - C_L) / (D_H)$ $-C_M < -D_L - C_L$ $\beta_{LH} - \gamma_M < 0$ $\beta_{HM} - \gamma_L > 0$