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Eve of Genocide (1990-1993):
A Game Theory Model

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Foreign Intervention in Rwanda on the Eve of Genocide (1990-1993) : a Game Theory Model

Philip Verwimp ¹

I) Introduction

In April 1994, the world community was shocked by the incredible atrocities committed during the Rwandan genocide. Human rights activists, intelligence agencies and officials in Ministries of foreign affairs knew already that repression, political killings and mass murder were committed by the Habyarimana regime long before the genocide of April 1994. Detailed books and articles have been written that document the atrocities committed before the April 1994. Many authors focus on the Hutu-Tutsi divide in their explanations of the Rwandan genocide. As in other genocides, the use of ethnic ideology indeed is very important, but I doubt if this was the main motivation of the Habyarimana regime. In this paper, I will take another perspective on the regime and try to explain the behavior of the regime leaders by analyzing their interests. This aspect has been given less attention in the literature. I will look at the strategic behavior of the political leaders in the period before April 1994. I believe that the period 1990-1993 is of crucial importance to understand how the regime was able to commit and continue its atrocities. In section V of the paper, I will try to document the importance of this period. Generally speaking (indeed very general) one can distinguish two levels at which one could investigate a genocide. One could either take a perpetrator's perspective or a victim's

¹ This paper has benefited from conversations with several persons in the Genocide Studies Seminar Series at Yale University. I specifically want to thank Ben Kiernan, Edward Kissi and Thomas McDowe for their numerous comments. I also want to thank Lode Berlage, Bart Capéau, Stefan Dercon, Helena Kim, Ilana Kresnia and Els Vanheusden for their comments on earlier drafts of this paper. The author alone is responsible for the content of this paper. The author owes many thanks to the Fund for Scientific Research Flanders (Belgium) and the Belgian-American Educational Foundation for their support of this research.

perspective. Best is of course to do both. Inside the perpetrator's perspective, one can distinguish three levels of entry (again very general). The first is the question why was genocide committed. The second, how were the perpetrators able to execute their genocidal plans and third, why did ordinary people participate in the killings.

In this paper, I take a perpetrator's perspective and address the second question.² In my future research, I will also address the other questions, but I want to start with the second question for several reasons. First, the world community probably counts lots of people with dangerous ideas about how the world should look like and how the world or their country should be governed. I think the ideas of 99 % of these people are useless and probably no threat to peace. Less than 1% of people with dangerous ideas assume positions in which they can implement their ideas. It is the behavior of this kind of political elite that is under scrutiny here. Under which circumstances are dictators and autocratic governments able to implement their plans ? I believe this is one of the most important questions because if we research these circumstances, then we can act to change the circumstances and thus change the behavior of political elites. Underlying this view is the belief that human beings do not act in an empty environment. They act under constraints and try to get the best result for themselves given these constraints. To give a straightforward example, if NATO had not threatened to attack Milosevic if he continued to deploy his troops in Kosovo, then his troops would have stayed in Kosovo and the mass murder campaign there would have continued. A military threat is a change of the game; Milosevic would not have changed his behavior without the threat.

I will focus on the role of third party intervention in a civil war. I will develop a game-theoretic model to analyze the influence of foreign intervention on the strategies of the parties involved in the conflict.

This paper takes a strategic view on the conflict situation. In the vocabulary of game-theory, players choose strategies that yield payoffs to the players. These payoffs should

² In the course of this essay, I will also touch upon the first question.

not be seen as absolute monetary amounts. Only the ordering of the payoff is important. It suffices to say that player A prefers option x above option y. It is not necessary to say how big the difference is between the payoff of x compared to y.

Game theory assumes that players are rational. What is meant by rationality in game theory however, is entirely different from rational behavior in everyday parlance. There it means thoughtful, reflective, just and wise behavior. In game theory rational behavior means choosing the best means to gain a predetermined set of ends. As James Morrow puts it, it is an evaluation of the consistency of choices and not of the thought process.³ It is an evaluation of the pursuit of goals and not of the morality of these goals.

This last point should be stressed, especially before an audience of genocide scholars. Political economists are first of all interested in the choices that actors make from a set of available actions. Each action produces a certain outcome and each outcome gives a utility to the actor. Each actor can rank the outcomes from best to worst. We call this an ordering of preferences. Rationality requires that orderings are complete and transitive.⁴ Outcomes with a higher utility are preferred to outcomes with a lower utility. This reasoning means that political economists, from their disciplinary point of view, are not interested in the morality or immorality of goals. They analyze the implementation of goals, not the moral value of the goals.

This approach poses a personal problem to the author since the reader might think that I am not concerned with the immense immorality of genocide. Of course, no need to say that I am horrified by the brutal campaigns of killing that are at the core of each genocide. As a human being equipped with a strong appreciation for the value of each human being regardless of age, nationality, sex or other characteristics, I condemn these acts and the incitement to commit these acts in the strongest possible way.

³ Morrow, J. Game theory for political scientists, Princeton University Press, 1994, p 17.

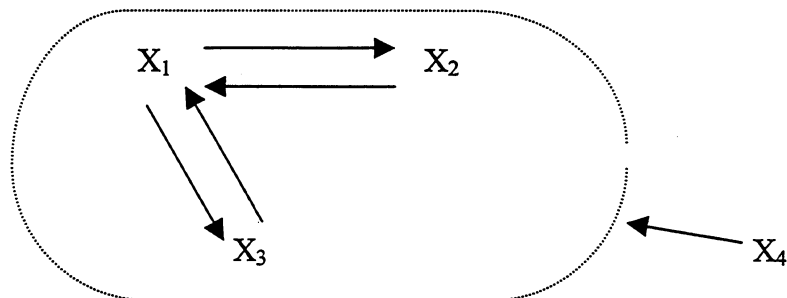
⁴ Preferences are complete if $x > y$ or $y > x$ or both are equally preferred. Preferences are transitive if $x > y$ and $y > z$ implies $x > z$. These two assumptions are necessary for rationality.

As a researcher however, I believe that moral disapproval will not stop genocide from happening and will also not help us to understand the processes that lead to genocide. I think it is very important to analyze the political context in which genocides take place with a particular attention for the strategies used by elites in times of political crises.

In analyzing political situations, Tsebelis has come up with the concept of *nested games*.⁵ Tsebelis distinguishes between two kinds of nested games. The first are games in multiple arenas and the second is institutional design. In this paper, we will only use the first kind of nested games. Games in multiple arenas are games with *variable payoffs* in which the payoffs in the principle arena are influenced by the prevailing conditions in another arena.

The conflict model that I propose can be drawn in the following way

Figure 1



Where X_1 is the autocratic regime
 X_2 is the domestic opposition
 X_3 is the rebel group
 X_4 is the international community

In Figure 1, I distinguish between a domestic game played by an autocratic regime and the domestic opposition and a civil war game played by a rebel army and the autocratic regime. The domestic game is the game in the principle arena. The autocratic regime is a

⁵ Tsebelis, G, Nested games, rational choice in comparative politics, University of California Press, 1990, p52

player in the domestic as well as in the civil war game. This does not mean that the domestic opposition is not affected by the civil war game. On the contrary, since the domestic game is nested in a bigger game, involving the civil war game, the payoffs of the autocratic regime are affected by both the domestic and the civil war game. This variability in the payoffs influences the optimal strategies of the autocratic regime. Because of the strategic nature of the game, this variability also affects the optimal strategies of the domestic opposition. Last but not least, all payoffs of all players are also affected by an intervention of the international community.

Figure 1 essentially represents a *comparative statics* problem. Outside conditions change the payoffs of the actors and the equilibria of the two different games have to be calculated.

According to Tsebelis, an actor's choice may appear to be sub optimal to an outside observer. This is because the observer only focuses attention to one game, the principal game. However, the actor is involved in a whole network of games, nested games. What appears to be a sub optimal choice in the principal game is in fact optimal when the whole network of games is considered.

Another word for payoffs, frequently used in the economics literature is *utilities*. Looking at payoffs in the sense of utilities makes it possible to think in terms of utility functions. In this paper The use of these variables in the utility function will make it possible to test the model empirically.

The paper is structured in the following way. Section two gives a brief overview of the literature on genocide with a focus on the role of political elites. In section III and VI, I develop the game-theoretic model to analyze the impact of foreign intervention in conflict situations. I first set up a model without foreign intervention and later introduce two kinds of interventions by third countries. In the fifth part of the paper, I summarize the theoretical results derived from the model. Part six looks at Rwandan politics in the years

1990-1993. I describe the behavior of the Rwandan political elite vis-à-vis the international community. In part seven, I discuss the relevance of the theoretical model to explain Rwandan politics. The last part of the paper concludes and puts forward issues important to genocide studies.

II) Theories of genocide

2.1) Definition of genocide

The Convention of the UN on genocide, accepted in December 1948, describes genocide in its second article as : “acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group”. Most authors and scientists however find this definition too narrow.⁶ Jonassohn uses three criteria that should be fulfilled to use the term : (a) there must be evidence of the intent of the perpetrator ; (b) there must be evidence that the physical survival of a group is threatened ; and (c) the victimisation must be one-sided.⁷ Most authors use a definition that implicitly or explicitly satisfies this definition. I will do this too.

2.2) Theory⁸

Vakan N. Dadrian and Helen Fein use typologies with respectively five and four categories. Chalk and Jonassohn also classify types of genocide. According to the motive of the perpetrator, they distinguish between the following types⁹:

⁶ Scholars disagree on the “right” definition, but there is a growing consensus on the difficulties with the UN definition.

⁷ Jonassohn, K , What is Genocide, in Helen Fein, Genocide Watch, 1992, chapter 2

⁸ I rely here on ‘The History and Sociology of Genocide’ by F.Chalk en K.Jonassohn and on the ‘Theories of Genocide’, a paper by Leo Kuper.

⁹ Chalk, F and Jonassohn, K, The History and Sociology of Genocide, New Haven, 1990, p.29

- to eliminate a real or potential threat
- to spread terror among real or potential enemies
- to acquire economic wealth
- to implement a belief, a theory or an ideology

I think this is problematic, not only because you run the danger of using the language of the perpetrator (I killed the peasants because they threatened the regime), but also because the genocide that I study here, fits in all four categories.

Harff introduces a new term in the debate, “politicide” , because she believes the UN definition does not cover the elimination of political groups. Her list of politicides and genocides in the 20th century convinced me of her point. However, I believe we do not need a new term for that and we can still use the term genocide to cover our subject as social scientists.

In a well-known article, Kuper discusses a number of theories on genocide : (a) scape-goat theory (b) overpopulation theory (c) elite theory ; and (d) imperialist theory.¹⁰ The first became popular after WW II as an explanation of the Nazi-genocide of the Jews. It is actually a theory about demonisation. Cohn puts it as follows : “ Over a period of some eight centuries, and over a wide range of countries, the myth of a Jewish world-conspiracy has enabled organised groups to kill Jews, by providing them with an ideology and by bewildering the rest of the population “¹¹ Important elements in this theory are the identifiability, the vulnerability and the stereotyping of a specific group of people. The second theory explains genocide as an instrument of regulation. Rubenstein for example describes the nazi genocide as a explicit policy to reduce population size. Modernization and bureaucratisation, so Rubinstein argues, made it possible to overcome the moral barriers that stopped men to consider the extermination of millions.¹² As an example of

¹⁰ Kuper, L., Theories of Genocide, Ethnic and Racial Studies, volume 4, no 3, 1981. Kuper discusses more than these four theories, but some very short and others as sub theories. I believe I have taken out the four main ones.

¹¹ Cohn, N., Warrant for Genocide, New York, 1967, cited in Kuper, L, ibidem

¹² Rubenstein, J.L., The cunning of History, New York, 1975, cited in Kuper, L, ibidem

the third theory, “elite-theory”, Kuper takes the example of the genocide of Hutus by Tutsis in Burundi in 1972. Horowitz describes this theory as follows: “When the ruling elites decide that their continuation in power transcends all other economic and social values, at that point does the possibility, if not the necessity, for genocide increase qualitatively. For this reason, genocide is a unique strategy for totalitarian regimes”.¹³ He also mentions the importance of ‘national culture’. Sartre, finally, believes that genocide can be explained within a theory of imperialism: “Since victory, easily achieved by overwhelming fire-power, provokes the hatred of the civilian population and since civilians are potential rebels and soldiers, the colonial troops maintain their authority by the terror of perpetual massacre, genocidal in character”.¹⁴

According to Kuper, the differences between the theories are due to the fact that they have particular cases of genocide in mind. Nevertheless, some general observations are possible. In that respect Kuper stresses the role of the authorities and the elite. This is also Horowitz’ opinion: “The involvement of governments and elites in many genocides is a reminder that human actors make choices and decisions, and carry out actions which constitute, or lead to, genocide. Genocide is not an inevitable consequence of certain social conditions within a society”¹⁵. I believe that the authorities also play a crucial role in the other theories of genocide. State agents define scapegoats by mass propaganda. The size of the population is often used as a policy argument by the authorities. According to the Nazis, Poland was overpopulated. To many people were employed in agriculture and had to be set free for German industry.¹⁶ We can also think about the writings of Amartya Sen, who explains the causal effect of poverty on population growth.¹⁷ Sen agrees with Condorcet and shows that economic development, the availability of contraception and the increase in education of women have lead to a sharp decrease in the birth rate. Here too, the government is at least partly responsible for. The rate of population growth is at least partly determined by economic policy.

¹³ Horowitz, I.L., *Genocide : State Power and Mass Murder*, 1976, cited in Kuper

¹⁴ Sartre, J.P, *On Genocide*, Ramparts, 1968, cited in Kuper

¹⁵ Kuper, L., *Theories of Genocide*, ibidem, p.332

¹⁶ Götz, A. en Heim, S, *Vordenker der Vernichtung*, Fischer Verlag, 1993, p.102-118

¹⁷ Sen, A., *Overbevolking : ideeën en feiten*, Streven, mei 1995

At the empirical level, R.J. Rummel and T. Gurr have played a pilot role. Rummel's project concentrates on countries that have killed their own citizens on a large scale.¹⁸ He uses the term 'democide' because 'genocide' is too narrow for scientific research.¹⁹ According to Rummel dictatorships are much more mortal for their citizens than democracies. That is because of the concentration of power, Rummel says. One of his well-known expressions in this regard is : " power kills, absolute power kills absolutely". In an interesting critique on Rummel's explanation, M. Crain writes that the concentration of power does not explain when genocide (democide) occurs. According to Crain, we should look at the periods where a regime is about to lose power. Look at the moments where an elite is insecure, is scared to be replaced by another elite or another government.²⁰ Gurr has gathered a lot of data on the position of minorities in the world.²¹ One of his important conclusions is that the probability of genocide to occur increases when a regime is put under both internal and external pressure.

In the following part of the paper, I will use these insights from genocide theory to construct a game theoretic model. I especially focus on the role of elites, the choices and constraints this elite faces and the effects of internal and external pressure on the elite. In order to show the effect of foreign intervention, I first develop a model without foreign intervention and then introduce foreign intervention in the model.

¹⁸ Rummel, R.J., Death by Government, 1994

¹⁹ Democide entails genocide, politicide, mass murder and terror.

²⁰ Krain, M, State-Sponsored Mass-Murder, the onset and severity of genocides and politicides, Journal of conflict resolution, volume 41, no 3, June 1997.

²¹ Gurr, T, Minorities at Risk project, Polity III dataset, University of Arizona.

III) The games of domestic and civil war politics without foreign intervention

3.1) A game of domestic politics

In this game, we are only looking at the interaction between the autocratic regime and the domestic opposition, this means we leave the international community and the rebels out of the game. Assume an autocratic regime (AR) involved in a game with a domestic opposition (DO). The autocratic regime and the domestic opposition each have two options. They cooperate with one another or they do not cooperate. Cooperation for the AR means some kind of multi-party system, a kind of democratization that allows the DO to participate in the government. Non cooperation for the AR means the maintenance of autocratic power in the hands of one party, no democratisation and no sharing of power. Cooperation for the domestic opposition means working with the regime be it a democratic or an autocratic regime. Non cooperation means working against the regime.

Figure 2

		PLAYER 2	
		cooperation	non cooperation
PLAYER 1	cooperation	R_1, R_2	S_1, T_2
	non cooperation	T_1, S_2	P_1, P_2

The payoffs with subscript 1 are the payoffs to the first player, the AR. The payoffs with subscript 2 are the payoffs to the second player, the DO. Figure 2 represents the generic payoff matrix of many possible games the AR and the DO can play. The payoffs are symbolized by the letters T, R, P and S where T stands for the temptation to defect, R for the reward of mutual cooperation, P for penalty of mutual defection and S for the sucker's payoff. What makes the games different from each other is the ordering of the payoffs. In

game theory it is not the absolute value of the payoffs that is important, but the relative value, meaning the ordering of the payoffs vis-à-vis each other. It is also not necessary that the payoffs of the two players are equal. Only the ordering of the payoffs for one player is important.

Tsebelis discusses the preference ranking of four well-known two-player games in his book, being the prisoners' dilemma ($T_i > R_i > P_i > S_i$), the deadlock game ($T_i > P_i > R_i > S_i$), the game of chicken ($T_i > R_i > S_i > P_i$) and the assurance game ($R_i > T_i > P_i > S_i$). He discusses the characteristics and the applications of these games in some detail in chapter three of his book. I will not repeat this discussion here.

In the games I develop here, I will give the payoffs T,R,P and S a specific content, that will enable me to test the model empirically later in the paper. I will assume that the utility of a certain outcome is determined by a number of variables. For the autocratic regime, these are the amount of foreign assistance received by the office holders (f_a), the revenue collected through taxation (t_n), the costs of the war w_{ar} , the cost of repression β and the costs of power sharing α . In the domestic game without foreign intervention, the utility of the AR is only determined by t_n , α and β . I use taxation (t_n) as a proxy for the resources available to the AR. These resources are not only the amount of taxation, but all kinds of income that the regime leaders derive from being in office. The autocratic regime wants to maximise (t_n) to keep its elite happy. α and β are parameters situated between zero and one.

The utility of the domestic opposition depends on t_n , α and ε where ε is the decrease in utility the domestic opposition experiences because of repression.

Figure 3

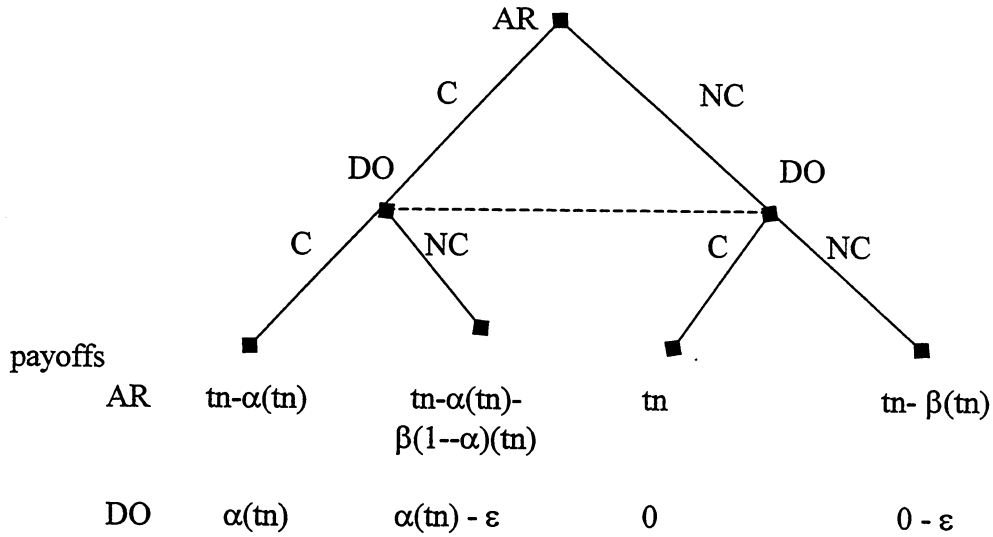


Figure 3 is the game played by the AR and the DO in extensive form. The AR can decide to cooperate with the domestic opposition or not to cooperate (defect). Cooperation for the AR means that it will share power with the DO, a kind of introduction of multi-party government. Non cooperation for the AR means it decided to stay autocratic, or a single-party regime. The DO also has two options. It can either cooperate with the AR or not cooperate with the AR. Depending on the choice of the DO and the AR, the payoffs of the different strategies to the AR and the DO can be described.

If the AR does not cooperate with the DO, the AR can enjoy the full benefit of taxation (tn) in case the DO cooperates (refrains from resistance). This situation is highly preferred by the AR. The benefit of foreign assistance does not play a role in this game. If the DO does not cooperate but engages in protest to the AR, the payoffs to the AR are smaller. The AR has to deduce from the benefit of taxation an amount β for repression. The AR namely has to use a certain amount of repression to stay in power. We will call the minimal amount of repression necessary to stay in power β^* .

The payoffs to the DO resulting from a non cooperative regime are zero when the DO does not resist the regime and negative ($-\varepsilon$) when they resists the regime. This negative effect is the burden of repression that the DO has to take as a consequence of resistance.

Cooperation for the AR means that it will have to share a part α of the benefits from taxation with the DO. This decreases the benefits to the AR. If the DO cooperates with the AR, the payoff to the AR will be $tn - \alpha(tn)$. If the DO decides not to cooperate with the AR the regime has to deduce an amount β from what is left of her payoff. The AR ends up with the payoff $[tn - \alpha(tn) - \beta(1 - \alpha)(tn)]$.

The payoffs for the DO resulting from a cooperative regime are the part α that they receive from taxation if they cooperate with the regime and less than $\alpha(tn)$ when they resist the regime. We have to deduce the burden resulting from repression ($-\varepsilon$).

The ordering of the payoffs of the AR and the DO are the following

For the AR $tn > tn - \beta(tn) > tn - \alpha(tn) > tn - \alpha(tn) - \beta(1 - \alpha)(tn)$

if $\beta < \alpha$ meaning that repression is cheaper than sharing power. We believe that this is often the case in an autocratic regime.

For the DO $\alpha(tn) > \alpha(tn) - \varepsilon > 0 > 0 - \varepsilon$

if the burden of repression is negative, meaning that the AR can effectively exercise power over the opposition and they suffer from this repression. We believe that this is often the case in an autocratic regime.

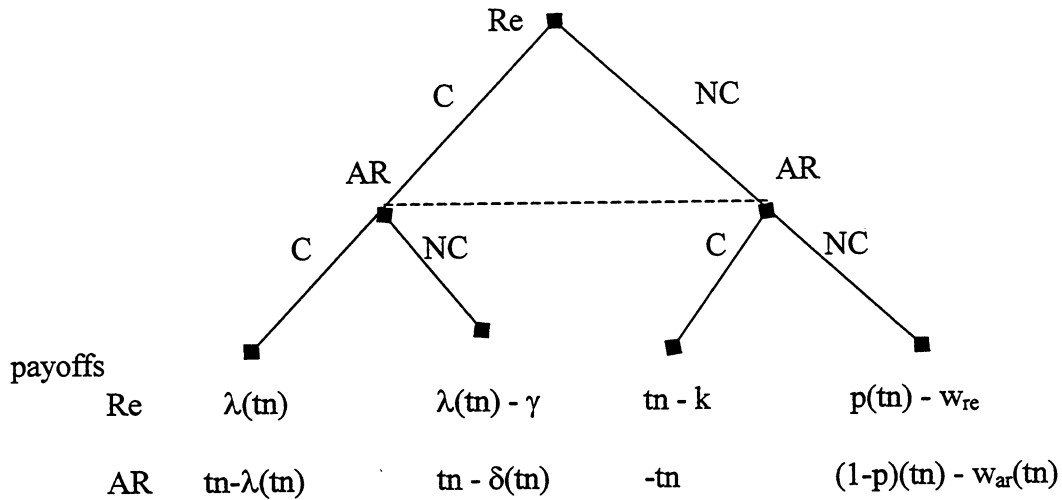
In this case, the ordering of the payoffs of the AR is the same as in the game known as deadlock. In a deadlock game, non-cooperation is always the dominant strategy. The deadlock game shares this feature with the prisoners' dilemma, but it differs in the sense that non-cooperation in the deadlock game leads to an optimal outcome. AR thus plays the domestic game with an ordering of payoffs of a game of deadlock. The preference ordering of the domestic opposition does not resemble a particular game known from the

literature. The ordering of the payoffs is rather peculiar and therefore I will give this preference ordering a new name :“carrot-and-stick preference ordering”. Since both players are rational, they will play their optimal strategies. AR will not cooperate with the DO and the DO will cooperate with the AR because of the fear for repression. The solution of this game is (NC, C) with the AR reaching its most preferred outcome (tn) and the DO reaching its third preferred outcome (0). This means that the regime receives all the revenue from taxation (payoff is tn) and bears no costs. The opposition neither benefits nor suffers from the autocratic regime (payoff is zero). Neither of the players can improve their payoffs by a unilateral defection. As Tsebelis (1990) points out, deadlock games have stable outcomes, they have a unique reasonable Nash equilibrium that is Pareto optimal. The domestic game is neither a deadlock nor a carrot-and-stick game, but a combination of both these games. In a game where both players have these preference orderings, (NC,C) is the unique Nash equilibrium that is also Pareto optimal. In other words, (NC,C) is stable against unilateral deviations and universal coalitions. Given these preference orderings in the domestic game, the regimes optimal strategy is to stay in power as an autocratic regime, it will not cooperate with the domestic opposition. This opposition in turn will cooperate with the autocratic regime because of fear for repression.

3.2) A game of civil war politics

In this game, we look at the game played by the rebels and the autocratic regime without considering the domestic opposition and the international community. This means that the benefits of office are still the revenue from taxation, but the costs to the office holder are not the costs from repression but the costs from war. Utility in this game depends on λ , the part of taxation (resources) going to the rebels in the event of power sharing between the regime and the rebels ; δ , the cost of unilateral warfare to the regime ; w , the cost of mutual warfare to both parties ; γ , the burden unilateral peace to the rebels and ; k the cost of unilateral warfare for the rebels.

Figure 4



The rebels decide whether to negotiate with the AR or to fight the AR. The first one is a cooperative choice; the second one is non cooperation. The AR faces the same choice.

The payoffs to the rebels from going to war with the AR are the revenue from taxation minus the cost of war (k) when the AR surrenders. The payoff from the war to the rebels when the AR fights back are the probability of winning the war p and receiving the benefit of taxation minus the costs of fighting the war w_{re} . These costs are higher in this case since the AR is also going to war.

The payoffs to the AR of the war strategy of the rebels is $(-tn)$ in case of surrender and $[(1-p)(tn) - w_{ar}(tn)]$ in case of fighting the war. The first part of this payoff is the probability the regime is going to win the war and having access to the taxation benefit. The second part is the costs of war to the AR.

If the rebels do not fight the war with the AR but choose to negotiate with the AR, then the payoffs to the rebels are $\lambda(tn)$ when to AR is also negotiating. λ is the part of the benefit the rebels will get at the negotiation table. If however the AR is waging war instead of negotiation, the benefits to the rebels decrease with an amount γ meaning the burden of war that the rebels get. The payoffs to the regime from a negotiation strategy by

the rebels are $(1-\lambda)(tn)$ when the AR is also negotiating. λ is the part of the benefit going to the rebels. When the AR is not willing to negotiate their payoff is $(tn - \delta(tn))$ where δ is the part of the benefit used for war efforts.

The ordering of the payoffs are the following

For the Rebels $tn - k > p(tn) - w_{re} > \lambda(tn) > \lambda(tn) - \gamma$

if the rebels believe the expected benefit of war is larger than the expected benefit of negotiations. We believe this is the case when rebels decide to go to war.

For the AR $tn - \lambda(tn) > tn - \delta(tn) > (1-p)(tn) - w_{ar} > -tn$

if the regime believes it has a lot to loose in the war with the rebels and not much to loose in negotiations provided the rebels do not go to war.

The ordering of the preferences for the rebels is the ordering of a game of deadlock because that is why they started the war in the first place, namely that the utility of fighting is larger than the utility of negotiating. The ordering of the payoffs to the AR are an assurance game ordering. We can think of the AR as a regime trying to minimize the costs of war and negotiation. The Nash-equilibrium of this game is the mutual non-cooperation or war strategy (NC,NC) where the rebels reach their second highest utility level and the AR his third highest utility level. The payoff to the rebels is $(p(tn) - w_{re})$ and the payoff to the autocratic regime is $((1-p)tn - w_{ar})$.

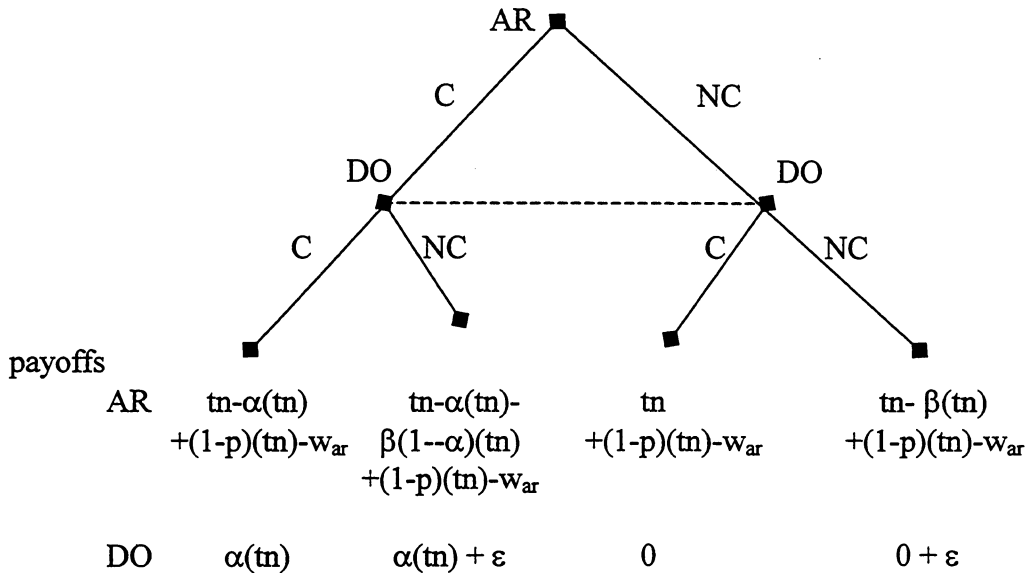
Again, since the civil war game is a combination of both a deadlock and an assurance game, mutual non-cooperation is the unique Nash equilibrium that is also Pareto optimal. In other words, mutual non-cooperation is stable against unilateral deviations and universal coalitions.

Given these preferences orderings in the civil war game, the optimal strategy of the rebels is to fight and this is the case for the autocratic regime too. The Nash- equilibrium of this foreign game is thus a war between the rebels and the autocratic regime.

3.3) A nested game

Because the autocratic regime is involved in both the domestic game and the civil war, the payoffs of the civil war (the arena game in Tsebelis terminology) enter into the domestic game. We therefore add the equilibrium outcome of the civil war to the payoffs of the different strategies in the domestic game.²² The regime will take the cost of war into account in its decision vis-a-vis the domestic opposition. We will assume that the revenue from taxation (tn) cannot be increased, at least not in the time-frame of this game.²³ The domestic game nested in the civil war now look as follows

Figure 5



²² The payoffs in the nested game are actually a linear combination of the payoffs in the two games. To keep it simple here I do not discuss this.

²³ Extensions of the model would make p , the probability of winning the war, depend on the the amount of resources (tn) both parties can spend. A second extension is to consider the effect of the equilibrium in the domestic game on the preference ordering in the civil war. I could very well be that the AR wants to increase the cost of war to the rebels by repressing the domestic opposition.

However, this is not the only effect of the war on the domestic game. We also have to consider two other effects. The first is the budget available to the AR. In a closed economy this is the amount of taxation (tn). With this amount the AR has to finance the war as well as the costs of playing the domestic game. These costs are either the cost of repression β or the cost of power sharing α . We have stated that in times of peace (in the absence of a game of civil war), the AR will prefer to repress the DO. This strategy namely allows the AR to benefit from (tn) minus the cost of repression $\beta(tn)$. We thus have assumed that the cost of power sharing is higher than the cost of repression. The total amount available to the AR is important in times of war, because it has to finance the war. Since we have assumed that taxation cannot be increased, other costs should be minimised. The AR namely needs most of the resources to pay for the war. The war indeed is important because it has the potential of defeating the AR. The amount of repression however, cannot be reduced a lot since you need a minimum amount of repression, otherwise the DO will overthrow you.

Formally we say $\text{Min } \beta = \beta^*$

The second effect of the war on the domestic game is the level of protest by the DO. The DO knows that a war is going on and that the AR has to devote resources to this war. This decreases the fear of repression for the DO. The war also shows the opposition that the autocratic regime is vulnerable. Protest will grow and the AR has to devote more resources to repression. The war makes repression at the domestic level more expensive. This diminishes the available budget to fight the war and will lower the probability of winning the war. The AR wants to avoid this of course and it also wants to avoid $\beta < \beta^*$.

The point of this is that at a certain moment the AR may reach a point where

$\alpha < \beta$.

This means that it is more beneficial for the AR to cooperate with the DO than to repress them.

If $\alpha < \beta$ the AR has no longer the preference ordering of a game of deadlock, but of a game known as prisoners' dilemma.

What are the effects of the war on the payoffs of the domestic opposition ? α will decrease because the AR has to devote resources to the war and can give less to the DO in the event of power sharing. ε , the burden of repression, will probably become less of a burden because the domestic opposition is more willing to protest against the AR and since resources for repression are limited, they have less fear from repression.

At a certain point one might reach the situation where the benefit of protest is larger than the benefit of cooperation. This point is reached when

$$\varepsilon > 0$$

At that point, when the expected utility of protest becomes positive, the preference ordering of the domestic opposition is no longer the ordering of a game of carrot-and-stick, but of a prisoners' dilemma.

When $\alpha < \beta$ and $\varepsilon > 0$ we have the following ordering of preferences

For the AR

$$\begin{aligned} \text{tn} + (1-p)(\text{tn}) - w_{\text{ar}} &> \text{tn} - \alpha(\text{tn}) + (1-p)(\text{tn}) - w_{\text{ar}} > \\ \text{tn} - \beta(\text{tn}) + (1-p)(\text{tn}) - w_{\text{ar}} &> \text{tn} - \alpha(\text{tn}) - \beta(1-\alpha)(\text{tn}) + (1-p)(\text{tn}) - w_{\text{ar}} \end{aligned}$$

For the DO

$$\alpha(\text{tn}) + \varepsilon > \alpha(\text{tn}) > 0 + \varepsilon > 0$$

Formally, the war is introduced as a asymmetric shock in the domestic game which increases the payoff for cooperation for the AR and decreases the payoff for cooperation for the DO. The shock is the result of the principle game being nested in the arena game.

This PD game has one Nash equilibrium, namely mutual non-cooperation.

In this game both players reach their third preferred outcome. The AR is not cooperating with the domestic opposition and vice versa. This equilibrium is not Pareto optimal. This means that both players can increase their payoff by mutual cooperation. Game theory has found that if a PD is played only once, the outcome will always be (NC,NC).

If the war continues, the players will play the domestic game more than once and thus cooperation may emerge. In a repeated prisoners' dilemma (RPD), cooperation can emerge under the following conditions:

- the game has to be played an infinite number of times (complete information) or the game has to be played a finite number of times (incomplete information);
- the players have to value the future enough (little discounting).

Cooperation is likely to emerge when the payoffs of cooperation are sufficiently high relative to the payoffs of defection (non-cooperation).

Since the AR and the DO are playing a RPD, they can cooperate at some point in the war. At that point a multi-party government is being formed. Since the domestic game is nested in a larger game involving the civil war, the new equilibrium in the domestic game will affect the civil war. Since the regime is not autocratic anymore, the civil war game is played by a new player, namely the multi-party government. It is likely that this government will have another preference ordering than the autocratic regime. It is also likely that the rebels now have incentives to negotiate with this new regime, more than they have incentives to continue the war. If we can assume that both parties have the preference orderings of the players in a prisoners' dilemma, cooperation can emerge if the

game is played several times. Cooperation in this repeated PD can emerge under the same conditions as in the repeated domestic game. If the payoffs of negotiation are large enough relative to the payoffs of defection, negotiation is likely to emerge as a solution in the game between the multi-party government and the rebels.

IV) The nested game with foreign intervention

We introduce foreign intervention in the game as a change in the context of the game. The foreign intervention will influence the payoffs of the different outcomes of the game and will therefore affect the choice of strategies by the players.

I will introduce two kinds of foreign intervention in the model. The first is a military intervention by a befriended country to support the autocratic regime against the rebels. The second is human rights conditionality by countries favoring a negotiated solution to the conflict.

4.1) Political and military support from a third country

If a third country sends troops to support the autocratic regime, the payoff of non-cooperation of the AR increases. This is a basic insight from game theory and an insight that is often forgotten in international politics and diplomacy : an intervention by a third party is not neutral to the game, it changes the strategic environment of the game. Given the political and military support of the third party, it is easier for the AR to sustain the war efforts. This might rise to a point where the AR will never cooperate with the rebels, making the civil war game between the AR and the rebels a full deadlock game. Both refuse to cooperate because war is a dominant strategy. However, foreign intervention on the side of the AR may decrease the payoff of war for the rebels up to a point where the payoff of war is smaller than the payoff of negotiations.

The original civil war game where the AR played a game of assurance and the rebels the game of deadlock is transformed into a game where the AR plays deadlock and the rebels play prisoners' dilemma.

The effect of military assistance for the autocratic regime on the civil war is double. For the AR, the costs of the war decrease and the probability of winning the war increase. This means that the preference ordering of the AR in the civil war game will change. The payoffs of non-cooperation increase dramatically. The result is that the AR no longer has an assurance game preference ordering, but a deadlock game preference ordering. For the rebels, the military assistance to the AR is a setback. Their probability of winning the war decreases dramatically. The incentive to negotiate with the regime thus increases. The rebels no longer have the preference ordering of a game of deadlock, but of a prisoners' dilemma.

Ordering of the payoffs to the AR in the civil war game before the military assistance

$$tn - \lambda(tn) > tn - \delta(tn) > (1-p)(tn) - w_{ar}(tn) > -tn$$

Ordering of the payoffs to the AR in the civil war game after the military assistance

$$fa + tn - \delta(fa + tn) > (1-p)(fa + tn) - w_{ar}(tn) > fa + tn - \lambda(fa + tn) > -fa - tn$$

Ordering of the payoffs to the rebels before the military assistance to AR

$$tn - k > p(tn) - w_{re} > \lambda(tn) > \lambda(tn) - \gamma$$

Ordering of the payoffs to the rebels after the military assistance to AR

$$tn - k > \lambda(tn) > p(tn) - w_{re} > \lambda(tn) - \gamma$$

This game has a unique Nash-equilibrium (NC,NC), the same equilibrium as in the war without foreign intervention, but with the difference that the AR reaches its second best outcome and the rebels their third best outcome.

As we have said before, the domestic game is nested in the civil war, meaning that we have to consider the effects of the war on the domestic game. As before, these effects are threefold. One has to add the equilibrium payoff of the war to the payoff of the autocratic regime in the domestic game, since the regime is involved in both games.

The military intervention also affects the payoffs of the players in the domestic game. Since it is easier for the regime to fight the war with the rebels, it can continue to devote resources to the repression of the domestic opposition. This means that the ordering of the payoffs for the AR in the domestic game is not altered because of the military intervention, but further strengthened. The AR thus continues to play deadlock. For the domestic opposition, the foreign military intervention on behalf of the autocratic regime is a signal that the regime is weak. They will therefore protest more. When the war has demonstrated the vulnerability of the regime, the foreign military assistance demonstrates the weakness of the regime. The domestic opposition thus has an ordering of a prisoners' dilemma game.

Ordering of the payoffs for the AR in the nested game with military intervention

$$\begin{aligned}
 fa + tn + (1-p)(fa + tn) - w_{ar} &> fa + tn - \beta(fa + tn) + (1-p)(fa + tn) - w_{ar} > \\
 fa + tn - \alpha(fa + tn) + (1-p)(fa + tn) - w_{ar} &> \\
 fa + tn - \alpha(fa + tn) - \beta(1-\alpha)(fa + tn) + (1-p)(fa + tn) - w_{ar}
 \end{aligned}$$

Ordering of the payoffs for the DO in the nested game with military intervention

$$\alpha(tn) + \varepsilon > \alpha(tn) > 0 + \varepsilon > 0$$

The equilibrium of the nested game with foreign intervention is (NC,NC), the same as in the nested game without military intervention. The difference is that the AR and the DO are not playing a prisoners' dilemma, but a mixed game of deadlock and prisoners' dilemma. This means that it is impossible to reach cooperation in this game. When both players have prisoners' dilemma preference orderings, cooperation can emerge if the game is repeated over time. When one player has the preference ordering of a deadlock game, this player will always prefer non cooperation. This means that repression and protest will remain the equilibrium over time. This result is one of the important findings of this paper : a military intervention on behalf of one player is not neutral to the game, it changes the payoffs of the different strategies the players can choose. An intervention not only affects the payoffs of the regime, but also the payoffs of the rebels and the domestic opposition. A change in payoffs results in a different game, where players will prefer other strategies than in the game without military intervention. In this particular game, the result indicates that the AR will repress the domestic opposition even when the game is repeated. This would not be the case without military intervention. In the latter case, repression by the AR is the outcome of the nested game if the game is played once, but cooperation can emerge if the game is repeated. The military intervention excludes this cooperative solution.

4.2) Human rights conditionality by the donor community

The second kind of foreign intervention that we will consider is human rights conditionality (HRC) by the donor community. HRC is a specific kind of intervention by the international community. It can be described as a support to the regime conditional of the choice of strategies by that regime. If the donor community applies HRC it will only give foreign assistance to the AR if the AR cooperates with the DO.

In this case, the payoff of non-cooperation with the DO decreases drastically, because it means that the part 'fa 'will be taken away from the AR if it continuous to be non-

cooperative towards the DO. Conditional support for the regime also generates changes in the behavior of the DO. They will feel encouraged in their protest behavior.

The ordering of the payoffs for the AR in the nested game with HRC is

$$\begin{aligned}
 & fa + tn - \alpha(fa + tn) + (1-p)(fa + tn) - w_{ar} > \\
 & fa + tn - \alpha(fa + tn) - \beta(1-\alpha)(fa + tn) + (1-p)(fa + tn) - w_{ar} > \\
 & tn + (1-p)(tn) - w_{ar} > tn - \beta(tn) + (1-p)(tn) - w_{ar}
 \end{aligned}$$

The orderings of the payoffs for the DO in the nested game with HRC is

$$\alpha(fa + tn) + \varepsilon > \alpha(fa + tn) > 0 + \varepsilon > 0$$

This means that under human rights conditionality, the ordering of the payoffs to the AR is changed from a deadlock ordering to its inverse. I will call this ordering the inverse deadlock. In this case it is always better for the AR to cooperate than not to cooperate. Whether actual cooperation occurs or not, depends solely on the ordering of the payoffs of the other player, in this case the domestic opposition. There is no doubt that HRC by the donor community strengthens the position of the DO. The DO knows that under HRC, the AR is going to cooperate and they know that they can participate in a multi-party government. If protest yields an extra positive payoff, because of the believe of the DO that the international community is on their side, the ordering of the DO is an ordering of prisoners' dilemma. The equilibrium under HRC will then be (C,NC). The AR will reach its second best outcome, meaning that it will get the donor funds (fa) but has to share part of the overall budget with the DO. On top of that, the AR also has to allocate funds for repression. The DO will reach its most preferred outcome, it gets part of the overall budget and also gets the extra benefit from protest.

Having reached this new equilibrium, the multi-party government will have another preference ordering than the autocratic regime. The same process as under section (3.3)

can emerge with the difference that negotiations are taking place between three players instead of two.

V) Results from the theoretical model

- *Without foreign intervention*

Domestic game between autocratic government and opposition leads to an equilibrium where the AR reaps all the benefits from power (taxation) without repressing the domestic opposition. The DO refrains from protest because of the fear of repression. In this game, the AR has deadlock preferences and the DO has carrot-and-stick game preferences.

A civil war, where war is the equilibrium outcome of the game between the AR and the rebels, changes the payoffs of the domestic game. Firstly, the incentive to protest against the AR increases and secondly, the AR has to devote resources to the war, decreasing its capacity to repress the DO. Under certain conditions, the game between the AR and the DO becomes a prisoners' dilemma. If the game is played once, the equilibrium will be repression by the AR and protest by the DO. If the game is repeated, cooperation between the AR and the DO may emerge.

- *With foreign intervention*

Military support by a foreign country changes the payoffs of the war and of the domestic game. It has a double effect on the nested game. Military support allows the AR to fight the war and at the same time repress the DO. The budget restriction is relieved. The deadlock preference ordering held by the AR before the war, therefore is reinforced by the military support. The DO notes however that the regime is weak and will stick to its wartime preference ordering, namely those of a prisoners' dilemma.

The resulting equilibrium is repression and protest with no chance for cooperation when the game is played repeatedly.

Human rights conditionality by the international donor community has dramatic effects on the orderings of the payoffs of the nested game. In fear of losing its budget and thus being unable to finance the war, the AR will cooperate with the DO. The DO, feeling strengthened by the international community, will reap the benefits from cooperation by the AR but nevertheless continues to protest, since protest yields an extra payoff to the DO.

VI) Foreign intervention and politics in Rwanda from 1990 to 1993 ²⁴

6.1) Military intervention and domestic events 1990-1991

When the rebels started their offensive on October 1, 1990, the regime reacted in three ways.

(1) It asked the French President, the Belgian King and the Zairian Dictator for military assistance. The Rwandan army of 5,200 soldiers was no match for the well-trained rebel group. 670 French troops supported the Rwandan army (FAR) on the battlefield. French support was unconditional. They supplied the regime with large quantities of arms, they guarded the airport, flew helicopters, secured radio transmissions and helped the FAR in the interrogation of suspects.²⁵ Belgium sent 500 paratroopers and decided to speed up delivery of ammunition to the regime. Mobutu sent 500 troops of his well-trained Presidential Guard to help out his friend Habyarimana. Officially, Belgian and French troops did not engage in combat with the rebels. For the Belgian troops, this is highly likely since they were withdrawn after a month. The engagement of French troops in direct combat activities is on record, at least for later periods of the war. Taking care of

²⁴ I am only mentioning the events before the signing of the Arusha peace agreement and only the events that I believe are important for the subject of this paper, namely the effect of foreign intervention.

²⁵ Prunier, G. History of a genocide, translated from the French version, p.129-141.

the logistics of the Rwandan army, the French troops reinforced its combat power.²⁶ The Zairean troops engaged in direct combat action against the rebels as soon as they arrived in Rwanda.

(2) The regime imprisoned 8,000 to 10,000 Rwandan civilians and tortured an unknown number of them, after a staged 'attack' on Kigali. The victims of this action were not only Tutsis living in the capital, but businessmen, intellectuals, journalists and opponents of the regime. People who were disliked by the regime and could be repressed. After pressures from the diplomatic community, they were released.²⁷ This process lasted till April 1991.

(3) The regime launched its first mass murder in a village in Kibilira, far from the front, killing 350 Rwandan Tutsis. This massacre is documented in a report by four human rights organisations. The massacre was directed by the local authorities, especially the mayor and the under-prefect. They gathered the villagers and told them that the Tutsi were coming to kill them. They used the false rumor that a well-known Hutu from the area had been killed, to incite the peasants to kill the Tutsi. The killings lasted from October 11, 1990, at 3.00 pm till October 13, at noon. 550 houses were burnt, cattle were killed, and household materials were destroyed. Diplomats and other people pressed the president to stop the attacks on October 12.

The Rwandan army succeeded in killing the rebel commander Fred Rwigyema. This fact, together with the help of the foreign military assistance to the FAR was detrimental to the rebels' offensive. The offensive lost momentum and the FAR was getting its act together. The rebels were pushed back into Uganda and it seemed the war was over by the end of October. At the same time, a mission by three Belgian ministers resulted in a first cease-fire agreement.

²⁶ Adelman, H. and Shurke, A., The International Response to Conflict and Genocide, Lessons from the Rwandan Experience, March 1996, part 2, p.22.

²⁷ Adelman, H and Shurke, A, *ibidem*, p 31.

6.2) Efforts by the international community and its domestic effect from 1991 to 1993

In June 1991, the first meeting between the Rwandan regime and the rebels took place under the auspices of the Organisation for African Unity. It had no result. On November 17, 1991 ten thousand people demonstrated for democratization. A week later twenty thousand demonstrators supported the regime. In February 1992, Human Rights Watch published a report on Rwanda and the diplomatic community together with the NGO's urged president Habyarimana to start the process of democratization. That same month five civilians were taken custody and tortured in Kigali. They were subsequently released after protest by human rights organisations. In March 1992, after another massacre in Bugesera and after strong pressure by the international community, president Habyarimana agreed to install a multi-party transitional government comprising his party (MRND) and domestic opposition parties. The new government took office in early April 1992. In May 1992, Amnesty International published a report on Rwanda. In early June 1992, the rebels and the new Rwandan government agreed to start peace negotiations in Arusha. These negotiations ran from August 1992 till January 1993, and were marked by a strong international presence.

In March 1993, after a new series of massacres, four human rights organisations published a joint report on human rights violations in Rwanda and accused the president and his entourage of direct involvement in the massacres. Habyarimana was internationally condemned after the publication of his report. Belgium recalled its ambassador and threatened to review its development aid to Rwanda. Several authors mention that after this the violence used against civilians decreased.

6.3) Donor aid, export earnings and war

It is no surprise that wars are expensive, especially for a regime that has only two major sources of funds. The first was the tax on the export of coffee, tea and tin. The second was international donor aid (also called direct foreign assistance). In the late eighties, the first source of funds dried up. The price of coffee on the international market dropped

sharply, depriving the regime of its major source of income. The income from the export of tin had already dropped to zero in the mid-eighties when the tin mines closed. Income from export of tea accounted for about 10% of export earnings in the late eighties and rose to 30% in the early nineties. Since tea is grown on large scale plantations, tea production suffered from the war. At the end of the eighties, the Rwandan regime faced a serious earnings problem.²⁸ The effects of the war on production worsened the problem.

This left the regime only the second source of funds. The international community had formed good impression of the Habyarimana regime before the war. World Bank reports on this matter said that the economy was well managed, that the regime built roads, invested in the health and educational sector and addressed the poverty problem of the peasants. Human rights records were not taken into consideration by the World Bank to judge the policy of a regime.²⁹ The World Bank and IMF were willing to help a well-managed country to overcome the economic crisis it was hit by. The same is true for bilateral aid to Rwanda. The major donor countries, Belgium, France, USA, Canada and Switzerland increased their bilateral aide substantially at the turn of the decade and continued the aid throughout the civil war. Some of these countries threatened to withdraw their aid when reports on mass murder of the civilian population were published, but this threat never materialized.³⁰ Direct foreign assistance to Rwanda increased from 242 million dollars in 1989 to 375 million dollars in 1991 and was maintained at that level until 1993. This is an increase of 60% over a period of two years. Belgium, Rwanda's most important donor before the genocide, increased its assistance from 1,2 billion BF in 1989 to 1,9 billion in 1991, to decrease it again to 1,2 million in 1993. Part of that aid was tied to purchases in Belgium and part was aid to the budget.

It may be difficult to prove that the Rwandan regime funded her wartime expenditures with funds from foreign assistance. However, we can consider the increase in

²⁸ As I mentioned in the beginning, I am focussing on the political elite in this paper. This means that here, I am not considering the effects the drop of the coffee prices had on the peasants.

²⁹ Uvin, P., Development, aide et conflit. Reflections a partir du cas du Rwanda, United Nations University, World Institute for Development Economics Research, 1997, p. 14-15

³⁰ Adelman, H and Shurke, A, *ibidem* , p.31

expenditures by the Ministry of Defense from 1989 to 1992 as a strong indication of this. These expenditures increased from 8 million Rwandan Francs in 1989 to 13 million RF in 1991. The number of soldiers increased from 5,200 in 1990 to more than 40,000 in 1993. The budget deficit increased from 21 billion RF in 1990 to 41 billion RF in 1993 (350 million dollars). It was the international community that financed this budgetary deficit.³¹ So we do not have to prove that a specific budget donated by a specific country was used to pay soldiers or to buy arms. The Rwandan regime considered all available resources as one common pool. Moreover, if donors directly fund one specific project or sector, this means that the regime does not have to allocate money to that project or sector, so resources are set free for other purposes.

Human Rights Watch says it has evidence of several shipments of arms to Rwanda. France delivered arms to Rwanda to the value of 6 million dollars even during the genocide³². Next to general financial support and direct military support, some donors also gave military training to Rwandan officers in the military academies of the donor country. This was the case for both Belgium and France. This will prove later detrimental to the level of alert of Belgian officers engaged in the UN peace-keeping mission in Rwanda. The Belgian officers knew that some of their Rwandan ‘colleagues ‘ were former students of their own academy. They also knew that Belgium had an agreement of technical cooperation with the Rwandan army. Consequently, Belgian officers trusted the Rwandan army mistakenly.

VII) Foreign intervention in civil war as an application of a nested game.

Can we explain the effects of foreign intervention on Rwandan politics with the theoretical model ? I do not claim that we can explain the Rwandan genocide with a game-theoretic model. The Rwandan genocide is the result of the combined presence of political manipulation, racist ideology, monopoly of power, obedient peasants, culture of

³¹ I am not going into detail on the specific financial mechanism, called fungibility.

impunity and failed peace agreements. A theoretical model, I believe, can help us to look carefully at some of the most important elements of this genocidal cocktail. As stated in the beginning, my concern in this paper is not to explain the role of racist ideology in Rwandan society nor to discuss the situation of the Rwandan peasants. These factors are certainly important, but in my opinion they alone cannot explain the occurrence of genocide. For genocide to occur one has to have a political elite that organizes this genocide. In that respect it is important to research the circumstances that made it possible for this elite to launch and continue the implementation of its genocidal plan. In part seven of this paper, I will focus on the explanatory power of the model I discussed previously. In order for the model to have explanatory value, the following elements should be established

- (a) Strategic interaction between the Habyarimana regime, the domestic opposition, the rebels, and the international community was essential to the course of events ;
- (b) Military assistance influenced the outcome of the war ;
- (c) The donor community could use foreign assistance as an instrument of pressure ;
- (d) Protest inside Rwanda rose in times of war and the domestic opposition felt reassured by the involvement of the international community.

(a) Game theory assumes that players are rational, meaning that they choose the strategy with the highest expected payoff. Since this payoff depends on the choice of strategies by both players, as demonstrated in the theoretical part of the paper, players will interact strategically. They will choose strategies taken the reaction of the other player into account. I will now try to demonstrate that the regime leaders, especially president Habyarimana, were rational and strategic players in Rwandan politics. Since this point is very important, I will give it more attention than the other elements (b,c,d).

³² Human Rights Watch/Arms Project, 1994

(a.1) In the summer of 1992, a member of the MRND, Christophe Mfizi, published an open letter to the president to explain his resignation from the party. Mfizi wrote that a group called 'the Zero Network' has penetrated the highest levels of society : in politics, in business, in the military, in religion. "This group considers the country as an enterprise where it is legitimate to get out as much profit as possible....It is this group that has incited the ethnic tensions to cover up their own interests..."³³ We also know that the family of the president and especially the family of his wife (called the Akazu) held most of the key positions in the National Bank, The Commercial Bank of Rwanda and the Continental African Bank. Apart from their control of official resources, the Akazu was also very active in clandestine enterprises. The ex-governor of the National Bank, Jean-Berchmans Birara has declared that the president and his clan earned a fortune by organising drug traffic from Guatemala via Abijan and Kigali to France. The transport was carried out in the president's own plane.³⁴

(a.2) At the moment of the rebel attack in the north of Rwanda, president Habyarimana was in New York attending a UN meeting. This illustrates by the way that the rebels were also strategic players. Habyarimana immediately called the famous 'cellule africaine' resorting directly in the office of the French president. Before flying back to Kigali, he stopped over in Brussels where he asked the help of the Belgian King and the Belgian Government. G. Prunier wrote that Habyarimana staged the attack on Kigali on the night of October 4 and 5, 1990 to convince France to send more troops than promised. It had the desired effect.³⁵

(a.3) Massacres of Tutsi civilians or attacks on opponents of the regime took place immediately after a military offensive by the rebels or advancements in the peace talks. This can be derived from the chronology of events . It is documented in the International

³³ Mfizi, C., Réseau Zéro, lettre ouverte a Monsieur le Président du MRND, Editions Uruhimi, Kigali, Juilluit-Aout 1992, p4 and 5.

³⁴ Vidal, K., Stukken van de Waarheid, De Rwandese Genocide en de Belgische Politiek, Antwerpen, 1998, p .23-24.

³⁵ Prunier, G., *ibidem*, p 129

Response to Conflict and Genocide study.³⁶ At the time several interpretations were given to this simultaneity: some analysts read the killings as a political negotiation tactic, others saw the violence as an attempt to derail the entire peace process; my own interpretation is that it was an attempt to blame the rebels for the massacres in the eye of the international community and to increase the cost of war for the rebels.³⁷ You could also see these local massacres as test cases; the regime testing the international community for its reaction.

(a.4) In the spring of 1992, the Belgian Ambassador in Rwanda, Johan Swinnen, transmitted several documents by telex and fax to the Belgian foreign minister. In this documents the Ambassador communicated information he had received from a top official inside the regime (called Mr X). The first document, transmitted March 12, 1992, had four important elements in it : (1) it cited the names of eight political and military leaders charged by the president to organize terror and mass murder in the country. (2) It said the president had asked the group to slow down the actions because he thinks the foreigners may have uncovered the plan. (3) It said the president had asked the group to study another method of killing the leaders of the MDR and the PL (4) It said that everything that was told to the diplomats is nonsense. The second document, transmitted March 13, 1992, describes a conversation with X. The third document, transmitted March 27, 1992, was labeled "a pamphlet" by the Ambassador. It confirmed the names in the first document and described the task of the group of eight : " to organize the extermination of the Tutsi of Rwanda, in order to finally solve, in their own way, the ethnic problem of Rwanda and to destroy the internal Hutu opposition". This document also describes the military and paramilitary groups that executed the massacre in Bugesera in the beginning of March.³⁸

(a.5) During the spring of 1991, Habyarimana tried to create one Hutu party. In this way he would be the leader of the entire Hutu community in the country and able to describe

³⁶ Adelman, H en Shurke, A., *ibidem*, p. 33

³⁷ This could fit in the model as an attempt to influence the civil war by domestic actions. See also footnote 23. I hope to elaborate on this in future research.

the war entirely as an ethnic war of Hutu against Tutsi. This did not work, because the Hutu of the south knew too well that the regime was dominated by the Hutu from the north (the region of Habyarimana and his wife). Since this did not work, the president tried to set up his Hutu opponents against one another to prevent the implementation of the Arusha peace agreements.

(a.6) There are at least four (but surely many more) occasions that prove the effect, at least temporary, of efficient international interventions on the behavior of the political elite. (1) The release of prisoners after diplomatic protest (2) The temporary stop to violence after the March 1993 protest by the international community (3) The dismissal of Léon Mugesera from his official positions after international protest concerning Mugesera's racist speech inciting the Hutu to kill the Tutsi on November 22, 1992. (4) The temporary stop to the killings in Rwanda during a visit of an international commission of human rights investigators in January 1993.

(b) Here, I refer to the Human Rights Arms Project which gave a detailed description of the military strength of both the Rwandan army and the rebels. Most authors agree on the following elements. The rebels were well-trained soldiers. Numbering 3,000 to 5,000 they received their training serving in Museveni's army and were supported by him. They captured some heavy weapons from the Rwandan army. They were committed to defeating the Rwandan army. That army consisted originally of 5,200 soldiers. They were no match for the rebel forces at the start of the war. The military and financial support by France, Belgium and Zaire allowed the FAR to increase its size (it provided time) and to increase its combat power (France provided training and logistics). Weapons were delivered by France, South Africa, Egypt and the US. On the involvement of France, I want to cite three authors :

G.Prunier (p. 135) " Paris se retrouve ainsi en train de soutenir une dictature malade dans un petit pays éloigné, qui ne produit que des bananes et une récolte de café en plein

³⁸ My translation as close as possible to the French text of the telex and fax.

déclin, sans même demander de réformes politiques en échange de son soutien. Cet engagement aveugle devait avoir de conséquences catastrophiques parce que, à mesure que la situation se durcissait, le gouvernement Rwandais, a pu croire que, quoi qu'il fasse, il pourrait toujours compter sur les Français. Et rien ne le démentait. ”

And Adelman and Shurke (p 23) : “The result was a dual policy that supported negotiations but simultaneously built up the Rwandan armed forces and embraced the regime politically. The policy helped to move negotiations forward at the inter-state level, while at the same time provided political space and resources for the regime to consolidate, and – indirectly – for the Hutu extremist fringe to develop.”

(c) In my model, human rights conditionality of aid policy effectively changes the behavior of the Rwandan political elite from non cooperative to cooperative. We know that the donor community did not condition its aid on the human rights record of the Rwandan regime. They used only words to put pressure on the regime. It is on record that the regime stopped using violence against civilians immediately after threats from the donor community. Because of pressure, Habyarimana decided to form a government on a multi-party basis. However, this cooperative behavior was only temporary. The president waited to see if the donors would really cut off their aid. Since they did not do this, repression could resume. In the model this means that the preference ordering of the regime never really changed. Since HRC was not applied, the regime preferred not to cooperate with the domestic opposition and stayed with its deadlock preferences.

(d) Before the war, Tutsis and Hutu from the south were discriminated against in Rwanda, as is demonstrated in a.o. Gerard Pruniers' book. Prunier describes the political situation at the end of the eighties. He describes the growing nervousness of the political elite at the fall of the international coffee price. This intensified competition for donor aid among the political elite. At that time, the first signs of protest by civilians turned up. After the start of the civil war, Prunier writes, the domestic opposition engaged in political action for reform and democratization (p. 151). The game was not played by two

(rebels and regime), but by three (p. 126). In the winter of 1990-1991, the opposition held clandestine meetings because they were afraid of regime repression (p.153). In March 1991, 237 members of the opposition publicly launched the MDR, which actually was a reinvention of the party of the former president Kayibanda. (p. 153). This party quickly gained support in the centre and in the south of the country.

Soon after, other opposition parties were established. In the theoretical model, I explain this protest activity by means of a changed ordering of the payoffs for the opposition. The war namely, provided incentives for non-cooperation. On November 17, 1991, three opposition parties sent out a joint memorandum detailing the obstruction of the regime to the advancement of democratization. These were : harassment and physical attacks on militants; propaganda by the MRND; and exclusive use of government buildings and vehicles by the MRND. The theoretical model predicts an equilibrium of protest and repression at this stage. There is evidence to suggest that a number of politicians continued with their political activity not only because of the war, but also because they felt secure due to the involvement of the international community. The Belgian Ambassador, for example, was frequently visited by politicians from all parties and also by human rights activists. At that time, people in Rwanda had great respect for the ambassador and trusted him. A survivor of the genocide told a Belgian journalist that she was very bitter that her husband, a politician of the opposition was not saved by UNAMIR. "The international community first supported my husband in establishing the Arusha peace agreements and when this man is in danger, they did not care about him."³⁹

³⁹ Vidal, K., *ibidem*, 1998, p. 110.

VIII) Conclusion and issues for genocide studies arising from this paper

8.1) Conclusion

From the nested model without foreign intervention, one can derive that cooperation could have emerged between the regime, the domestic opposition and the rebels. The logic of this argument is that without donor assistance the war would be too expensive for the regime and without military assistance they would not have been able to strengthen the army. We cannot know what the outcome of the game would have been in this case. One can argue that the rebels might have defeated the army entirely and installed an autocratic regime of their own. That is possible, but since I exclude foreign assistance here, I also exclude it on behalf of the rebels. This point is not stressed in the paper, since I focus on the autocratic regime being in the center of the game. This solution is hypothetical; we cannot really check it. Important at least from a theoretical point of view, is that this solution would have prevented the regime from carrying out the genocide.

Of course, this is easily stated from behind a desk, far away from the reality of war, but when I want to show the impact of foreign assistance, I at least have to show the hypothetical situation without the foreign aid. At the start of the war, Rwanda was a country favored by the donor community. These donors were willing to help Rwanda to overcome its economic crisis caused by a collapse of the international coffee price and worsened by the war. Noticing that the Rwandan regime engaged in crimes against humanity and mass murder, the donors tried to push the regime into a process of democratization. They were in the position to do this, since the survival of the regime depended on donor assistance. However, after pressure by the donors, president Habyarimana made conciliatory statements and donor aid continued. This process of pressure and reconciliation is especially clear in the Belgian context.

In 1992 and 1993, the donor community was heavily involved in the peace process and assumed shared responsibility for the implementation of the peace agreement. In this position they became hostage of their own policy. Since they were involved in the whole peace process, they could not simply withdraw. The regime leaders learned from this that human rights conditionality in aid policy was never a real threat. None of the donors cancelled its aid with reference to the bad human rights record of the regime. Moreover, France kept up its military support to the Rwandan regime, even after ample evidence of mass murder was established. Again, the regime learned from this that they could get away with it, that France would stand by their side no matter what they did.

8.2) Issues in genocide studies arising from this paper

Genocide scholars traditionally pay a lot of attention to the role of ideology and propaganda in a genocide. These issues are important in every genocide and they are very important to answer the question of participation in mass killings by ordinary citizens. That question I did not address in this paper. However, at the level of the political elite, my research into the Rwandan genocide has lead me to the conclusion that ethnic ideology was not a means in itself but an instrument to maintain power over a population and a country. The desire to hold on to power in order to benefit from the fruits of autocracy, was the driving force of the leaders in the Habyarimana regime. I came to this conclusion after studying the strategic behavior of the regime vis-à-vis the domestic opposition, the rebels and the international community. The regime leaders did everything they could to maintain their privileged position in society. Ideology was the vehicle with which they wanted to legitimize their reign, but it was not their real motivation. Maintaining the monopoly access to scarce resources was the real driving force.

The issue for genocide research arising from this paper is the following : Should we not pay more attention to the strategies used by political leaders to maintain their power ? Should we not pay more attention to the way political elites react to internal and external pressures? And when we see that they react to these pressures by killing their political

opponents, should we not cry out and ring the alarm bell ? Should the international community not stop doing deals with dictators ? These people only fool the international community and use the deal to enhance their power. Should diplomats not be trained to act as human rights activists instead of representatives of their own country? And finally, should human rights courses and in the techniques to study the behavior of political elites not be a mandatory course for all expatriates and development workers ? This at least would enable some of them to predict a coming genocide and act to prevent it.

Bibliography

Adelman, H. and Shurke, A., The International Response to Conflict and Genocide, Lessons from the Rwandan Experience, March 1996

Chalk, F and Jonassohn, K, The History and Sociology of Genocide, New Haven, 1990

Götz, A. en Heim, S, Vordenker der Vernichtung, Fischer Verlag, 1993

Gurr, T, Minorities at Risk project, Polity III dataset, University of Arizona.

Human Rights Watch/Arms Project, 1994

Krain, M, State-Sponsored Mass-Murder, the onset and severity of genocides and politicides, Journal of conflict resolution, volume 41, no 3, June 1997.

Kuper, L., Theories of Genocide, Ethnic and Racial Studies, volume 4, no 3, 1981.

Mfizi, C., Réseau Zéro, lettre ouverte a Monsieur le Président du MRND, Editions Uruhimb, Kigali, juillet-aout 1992

Morrow, J. Game theory for political scientists, Princeton University Press, 1994

Rummel, R.J., Death by Government, 1994

Sen, A., Overbevolking : ideeën en feiten, Streven, mei 1995

Tsebelis, G, Nested games, rational choice in comparative politics, University of California Press, 1990

Prunier, G, The Rwanda crisis. History of a genocide, 1995

Uvin, P., Development, aide et conflit, Reflections a partir du cas du Rwanda, United Nations University, World Institute for Development Economics Research, 1997

Vidal, K, Stukken van de Waarheid. De Rwandese Genocide en de Belgische Politiek, Antwerpen, 1998

