

REGIME REPRESSION AND DISSIDENT REACTION:
SUB-SAHARAN AFRICA FROM 1975 TO 1982

A Thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of
Masters of Arts.

McGill University
Montréal, Quebec
August, 1989

By
Brendan O'Duffy

Supervised by Professor Maurice Pinard
and Professor Donald Von Eschen

Abstract

Daily event data on a group of sub-Saharan African nations from 1975 to 1982 are analyzed to determine the nature of the short term relationship between acts of regime repression and dissident reaction. The results support the Relative Deprivation prediction of an **"Inverted U"** relationship between acts of repression and acts of **Turmoil**. Conversely, the concurrence of **"U-shape"** and **"Negative Linear"** relationships between repression and acts of **Internal War** suggest that a mixture of frustration-aggression and cost-benefit analysis may affect dissident behaviour. Moreover, the simultaneous strength of the deprivation indicators and the weakness of the mobilization indicators support the conclusion that a synthesis of the two main approaches to the study of social movement behaviour is in order.

Résumé

En se basant sur un ensemble de pays Africains au sud du Sahara, nous nous servons de données quotidiennes de 1975 à 1982 pour analyser la relation à court terme entre la répression exercée par le régime et la réaction dissidente. Nos résultats supportent l'argument de la privation relative de la relation du "U renversé" entre l'acte de répression et l'acte de violence désorganisée. Par contre, la concurrence des relations de forme en "U" et de "Negative Linear" entre répression et actes de guerre interne suggère qu'un mélange de frustration et d'agression et l'analyse coût-bénéfices puissent affecter les réactions des dissidents. De plus, la force simultanée des indicateurs de privations et la faiblesse des indicateurs de mobilisation suggèrent qu'une synthèse des deux approches principales dans l'étude du mouvements sociaux s'impose.

Table of Contents

<u>I. Introduction</u>	1
<u>II. Review of Literature</u>	2
A. Modern Theories of Social Movements	2
1. Resource Mobilization Theory	2
2. Deprivation Theories	8
3. Points of Contention -- Values and Interests	12
4. Empirical Tests of Social Movement Theories	15
a. Resource Mobilization Hypotheses	15
b. Deprivation Hypotheses	17
c. Interaction Models	18
d. Discussion of Previous Findings	20
5. Conclusion	24
B. From Mobilization to Violence: The Role of Repression	25
1. Determinants of Regime Repression	25
a. External Factors	25
b. Internal Factors	28
2. Effects of Regime Repression upon Dissident Reaction	29
3. Empirical Tests of Repression/Reaction Hypotheses	32
a. Repressive Capacity and Political Violence	34
b. Repressive Acts and Political Violence	36
4. Conclusion	44
<u>III. Proposed Hypotheses and Methods of Analysis</u>	46
A. Hypotheses.	46
1. Inverted "U"	46
2. Negative Linear	47
3. RD, RM Synthesis	47
4. Regime Type	47
5. World System Position	49
B. Methodology:	49
1. The Sample	49
2. Time Period	49
3. Event History -- The Proportional Hazards Model	50
4. Origin States -- Acts of Repression	54
5. Destination States -- Turmoil and Internal War	56
6. Covariates	57
7. Historical, Political, Economic Attributes	61
<u>IV. Results from Eight Event History Models</u>	64
<u>V. Discussion and Conclusion</u>	82
<u>Appendix 1</u> Countries Included in the Sample	90
<u>Appendix 2</u> Description of Event-History Data Set	91
<u>Appendix 3</u> Cross-Tabulation of Regime Type by Dissident Act	92
<u>Bibliography</u>	93

I. Introduction

The purpose of this project is to analyze the effect of regime repression upon collective dissident behaviour in a sample of 38 sub-Saharan African nations from 1975 to 1982. During this time period, the majority of these nations were entering only their second decade of political independence while one achieved independence in 1980 (Zimbabwe) and another has yet to achieve independence (South Africa)¹. The role of repression is especially relevant to this group of nations since the conflict process has such a direct effect on the formation of new regimes and governments. Two specific questions will be addressed: "When does repression instigate violence and when does it inhibit violence?" and "What factors affect the likelihood that dissidents will react to repression with protest or violence?" These questions have been addressed previously by scholars from the perspectives of Relative Deprivation (Feierabend and Feierabend, 1966, 1972; Gurr, 1970) and Resource Mobilization (Snyder and Tilly, 1972; Tilly, 1978) as well as by researchers applying more strictly empirical approaches which borrow from divergent theories (Markus and Nesvold, 1972; Hibbs, 1973; Sanders, 1981; Muller, 1985; Lichbach, 1987; Carter, 1988).

Despite the attention that repression has received in the literature, little consensus has been achieved concerning its effects upon dissident behaviour. One of the main reasons for the divergent findings is that previous approaches tend to aggregate levels of repression and levels of collective action or violence over time periods from one month to 10 years. They then focus simply on the correlation between different levels of repression and levels of dissident action without specifying that dissidents were in fact responding to specific acts of repression. The present study is the first to apply event-history analysis to these sequences in order to more carefully specify the causal relationship between repression and dissident reaction. This study also presents a more thorough measurement of repression than previous approaches, by differentiating between violent and non-violent

¹ Although South Africa is an independent republic, the fact that legislative, judicial and executive authority are controlled by the white minority, and that this control has been contested with a protracted "independence struggle" similar to that of Zimbabwe, precludes it from being labelled as a country which has achieved independence in the sub-Saharan context.

as well as reactive and pre-emptive forms. Finally, by utilizing daily event data, this study is able to clearly focus on the immediate or short-term impact of different levels of repression. This is an improvement over studies which attempt to uncover short-term reactions using aggregates of one year or longer.

Before the analysis is presented, the two main theoretical approaches to the study of social movements which have specifically incorporated repression into models of civil strife, Tilly's (1978) Resource Mobilization model and Gurr's (1969) Relative Deprivation model, will be outlined and evaluated. Throughout the discussion of each general model, specific attention will be paid to the role of repression. As we will attempt to show, the divergent predictions which are made by the competing perspectives concerning the effects of repression follow from their basic premises concerning the decision making process or impetus to act collectively against a regime or government. Empirical results of tests of the competing theories will be examined in order to resolve sources of contention between them. Next, theories and empirical results of analyses which specifically focus upon the relationship between repression and violence will be evaluated. Hypotheses which emerge from the current literature will be outlined and methods for conducting the research will be described. Finally, the results will be analyzed and discussed in order to resolve some of the ambiguous findings which have been offered concerning the relationship between a regime repression and dissident reaction.

II. Review of Literature

II-A. Modern Theories of Social Movements

1. Resource Mobilization Theory.

Charles's Tilly's (1978) contribution to the study of collective behaviour is derived primarily from a Marxist perspective. While he also applies concepts based on Millian decision making processes, the primary concern is with the mobilization of resources by 'contenders' against the state. The goals of contentious action are assumed by Tilly to be the control of the means of coercion. This in turn is used to maintain control over the means of production (1978:14,48).

Tilly develops two basic models--the 'mobilization model' and the 'polity model.' Within the mobilization model, Tilly divides the discussion into factors which affect the capacity to act collectively versus factors which affect the opportunity to act. The mobilization model describes the factors affecting individual contenders while the polity model concentrates on opportunities as they are affected by the total sphere of interaction between contenders and institutions of authority. We will attempt to show how the role of repression fits into the general framework of a Resource Mobilization model, and how its predicted effects evolve along with the increasing complexity of the model.

Starting with the factors affecting the capacity of a group to mobilize Tilly states that.

"The extent of a group's collective action is a function of:
1) the extent of its shared interests...
2) the intensity of its organization..
3) mobilization (the amount of resources under its control)"²

These concepts are operationalized in the following way: Shared interests are inferred from relation to the means of production (i.e., socio-economic position) as well as from a population's subjective description of their own interests. Thus, while stressing the importance of economic class as a determinant of shared interests, Tilly does allow for non-economic interests (such as those defined by ethnic identity) as potential determinants of the shared interests within a contending group. Despite this allowance, Tilly clearly emphasizes the veracity of socio-economic indicators over declared subjective interests. More importantly, Tilly assumes that these interests, even if measured accurately, are of a relatively fixed nature and therefore do not significantly affect the likelihood of collective action, once mobilization has been initiated. The implications of this assumption will be discussed below.

Organization is operationalized using Harrison White's group taxonomies.³ Accordingly, the degree of organizational strength is determined by the multiplicative

² Tilly, Charles 1978 From Mobilization to Revolution (Reading Mass: Addison-Wesley) p 84.

³ White, Harrison (n d) Notes on Constituents of Social Structure. Unpublished paper, Harvard University. Citation from Tilly op.cit

product of a group's CATNESS (its degree of association by categories) and NETNESS (degree of association through networks, formal or informal) Tilly also employs Oberschall's hypothesis concerning the mobilizing potential of various forms of social segmentation (Oberschall, 1973). Throughout the discussion, level of interest is not presumed to be affected by perceived status differential or potential for grievances. The pre-existing segments only affect the potential for organization (i.e., through networks or categories).

Mobilization is measured by the market value of factors of production (land, labour capital, technical knowhow) multiplied by the probability of its delivery when it is called upon for collective action.

The most vociferous critique of the mobilization model is that it assumes that grievances do not significantly affect the extent of shared interests. More specifically, Pinard (1983a) has argued that interests defined by class position do not sufficiently explain whether individuals will contribute their resources to collective action. Pinard argues that Tilly has essentially ignored the pre-mobilization phase because he has assumed that the issues around which individuals mobilize do not significantly affect the subsequent degree of collective action.

"He (Tilly) has shown no patience for any approach holding that deprivation could play an important role in some forms of collective action, holding instead that the shared interests of solidary groups were an important component to explain collective action. Tilly never spelled out, however, how individual interests or deprivations become shared ones, nor did he spell out the relationship of deprivations to interests."⁴

In sum, the Resource Mobilization perspective emphasizes factors which affect the costs and benefits of collective action while treating factors which cause grievances or subjective deprivation as relatively constant. In order to see how this perspective affects predictions concerning the effects of repression upon collective action, it is necessary to turn to the portion of the model which incorporates repression.

In the opportunity portion of the mobilization model, Tilly describes three components which determine whether a mobilized group will act

⁴ Pinard, Maurice. 1983a. op.cit. p.8.

- 1) Power: the extent to which the outcomes of the population's interactions favour its interests over those of others...
- 2) Repression: the costs of collective action to the contender resulting from interaction with other groups.
- 3) Opportunity/Threat: the extent to which other groups, including governments, are either (a) vulnerable to new claims which would, if successful, enhance the contender's realization of its interests or (b) threatening to make claims which would, if successful, reduce the contender's realization of its interests.

In the mobilization model, Tilly does not examine the dynamics of repression and reaction beyond predicting that increased repression will decrease (linearly) the likelihood of response because it eventually becomes too costly for contenders to overcome repressive authority. Likewise, the implementation of repression by the government (considered as simply a stronger and potentially more organized group) increases the government's costs. If these costs become prohibitive (as hoped by those favoring sanctions against South Africa) then repressive means of control such as internal sanctions and the physical force necessary to enforce them may be removed. Tilly refers to this inverse form of repression as 'facilitation' - any act which lowers the cost of a collective action. Thus, he would hypothesize that an increase in facilitation should indirectly increase the likelihood of collective action by lowering the costs of mobilization.

While these factors comprise the second half of the mobilization model, in terms of the effect of repression upon collective action, they are more relevant to the interaction between competing groups within the overall polity. Tilly's polity model moves beyond the stages of mobilization and examines the conditions necessary for the contenders, once control of their resources is secured, to make a challenge against the existing regime. According to this model, the mobilized group must determine its choice of action after analyzing "a series of responses to changing estimates of the costs and benefits likely to result from various possible interactions with governments and with other contenders."⁵ As a result, the role of repression is crucial to the polity model since most interactions between governments and contenders involve either the repression or facilitation of collective action.

⁵ Tilly, Charles, 1978 op cit. p.99.

In the basic polity model, like the mobilization model, repression and facilitation only affect the likelihood of collective action indirectly through their effect on the costs of collective action. These costs, relative to resources, along with the group's status as a member or non-member of the polity, the number and strength of competing interest groups, and the specific interests of the group (measured by the actually stated interests as well as inferred by its class position) determine a group's level of power. The balance of power between contenders and the government is the main determinant of collective challenge to the regime or government. However, the achievement of a given power level does not determine if or when it will be used to make a challenge. "Without some idea of the articulation of interest and power position, we can have no clear idea how the extent and character of challengers' and members' collective action differ from one another."⁶ A group must respond to the historical situation defined by the existing opportunities and threats to the interests of the group. Although we may heed Pinard's criticism of Tilly's definition or measurement of interests, Tilly clearly recognizes their importance as they are defined in the RM perspective. In any case, the 'supplemental' polity model (1978:112-114) does recognize that repression directly affects the likelihood of collective action by altering the tactical choices left open to dissidents. "Shifts in the pattern of repression and facilitation should have two related effects: depressing or raising the overall level of collective action, altering the relative attractiveness of different forms of collective action."⁷

Opportunity increases the probability of collective action as the degree of efficacy which a particular strategy holds for achieving a desired end increases. Similarly, an increase in the threats to a group's interests increases the probability of collective action in defense of the group's interests. However, according to Tilly the relationship between opportunities and threats is not symmetrical. He argues that a small increase in threats to a group's interests is more likely to cause a collective response than is a small increase in opportunities. In other words, collectivities tend towards conservatism. For example, it

⁶ Ibid. p.133.

⁷ Ibid. p.114.

is difficult to mobilize resources towards the achievement of a new opportunity such as land redistribution in a country which has traditionally experienced an extremely unequal distribution. The primary difficulty is establishing the legitimacy of a new claim (a perceived opportunity) which is sufficiently enticing to overcome the risks associated with the costs of action which threatens the status quo. Conversely, Tilly argues that is easier to mobilize a group against the threat of a loss in their existing material or social power base. To continue the land inequality example, it is easier for the group which is threatened with a loss of their land to mobilize resources against contenders because any change in distribution would represent a loss of a tangible resource, a threat to the status quo.

The same argument applies to acts of repression. Since they increase the costs of collective action and limit tactical choices, acts of repression constitute threats to a group's interests (assuming a mobilized group is interested in challenging the regime) and should therefore directly affect the likelihood of collective action.

To sum up the predicted effects of repression within the RM model, the shape and direction of its effect follows from the logic of the cost-benefit analysis which is fundamental to the model. As stated above, repression should have an indirect, negative and linear effect on the level of mobilization for collective action as it increases the costs of participation. Similarly, in the basic polity model, repression has the same effect upon mobilized groups as it increases the cost of challenging the regime or government. In the more advanced or 'supplemental' polity model, repression has a direct effect on the level of collective action by altering the strategic options available to challengers, and indirect effects through the determination of costs, opportunities and threats to a group's interests.

Pinard's critique of the definition or measurement of interests used by the RM perspective is directly relevant to the focus of this paper -- the predicted effects of acts of repression upon dissident reaction. By discounting the direct effect of grievances upon the mobilization of challengers, the RM perspective also excludes the possibility that acts of repression in themselves could be the focus of a dissident response. As we shall see in the next section, it is precisely this possibility which emerges from the frustration-aggression dynamic of the Relative Deprivation perspective.

2. Deprivation Theories.

Although they may accept the proposition that struggles over material and social resources may be the tangible focus of collective action aimed against established authority, proponents of the **Relative Deprivation** perspectives (referred to hereafter as RD) argue that psychological factors must be used to determine the formation of values which are in opposition to those maintained by a government or regime (Feierabend and Feierabend, 1972, Gurr, 1970). Other scholars (notably Jenkins, 1982, Midlarsky, 1982) focus upon **Absolute Deprivations** (AD) which stem primarily from structural inequalities, blocked mobility, or lasting and extreme hardship. This perspective argues that the degree of collective action or violence is directly related to the degree of discontent or violence rather than indirectly related through the evaluation of expectancies as defined in the RD perspective. In other words, AD theorists, like RM theorists, treat the motivation dimension as a black box and concentrate on the effects of structural discrepancies between groups within the polity (Marx and Wood, 1975). Since the RD perspective also considers the effects of structural inequalities or hardships and is more elaborate in its treatment of the motivation or decision making process of individuals and groups, we focus on the RD perspective while keeping in mind the importance of absolute structural conditions.

In any case, both deprivation perspectives imply that 'interests' can be significantly affected by grievances (the expression of subjective deprivation) and that variations in levels of grievances can significantly affect the likelihood that groups will act violently against a regime or government. Since repression by a regime or government can be viewed as acts which 'frustrate' dissidents by prohibiting certain actions⁸, or simply as acts which cause anger due to their severity, RD theorists treat repression as having a direct effect upon levels of subsequent collective violence. As we shall argue in this section, the

⁸ Taylor and Jodice (1983) define Negative Sanctions (one of our repression indicators) as "actions taken by the government to neutralize, to suppress, or to eliminate a perceived threat to the security of the government, the regime, or the state itself." These are clearly events which could lead to frustration among dissidents as their means of challenge are eliminated.

difference in the predicted shape of this effect from that predicted by the RM perspective is due not only to a different definition of 'interests' but more fundamentally, to a different formulation of the decision-making process used by individuals or groups involved in collective action. Simply stated, RM theorists emphasize that both individuals and mobilized groups make cost-benefit analyses before acting collectively (including aggressive, violent actions), while RD theorists argue that aggression is a form of short-circuited rationality, or a direct product of frustration. Thus, the frustration-aggression nexus serves as a parallel to the RM cost-benefit mechanism and is indicative of the fundamental difference between the two perspectives.

Both the Feierabends and Gurr derive their psychological approach from Dollard et al's deprivation-frustration-aggression thesis (Feierabends, 1966: 249-71; 1972). According to this thesis, subjectively defined deprivation leads to frustration and, depending on the severity of deprivation, to aggression towards the perceived source of deprivation. The cause of deprivation is broadly defined as processes of modernization which cause imbalances between 'wants' and means of satisfying them.⁹ The target of aggression is naturally the state since its role is to provide access to means of status attainment through fair taxes, judicious fiscal policy, control of corruption and collusion by elites. Acts of repression by the state are clearly negations of the state's protective role and therefore are considered as significant contributors to both deprivation and frustration.

The Feierabend's (1971,1972) focus upon political and economic structural conditions as the sources of deprivation. Their version of the 'deprivation-frustration-aggression' theory states that the severity, frequency, and magnitude of political violence is directly related to the degree of disparity between a group's socially defined expectations and the degree of attainment offered them within the socioeconomic framework. More specifically, an increase in the economic prosperity of a nation causes people to collectively acquire an increased level of expectation for the attainment of goods

⁹ For an elaboration of this relationship see Dollard, John, Leonard Doob, Neal E. Miller, O.H. Mowrer and R.R. Sears. 1939 Frustration and Aggression. (New Haven: Yale University Press)

and the opportunities needed to better their socioeconomic position. Repression or 'Governmental Coercion' is proposed to have an intermediary effect on levels of civil strife as it is alleged to enhance the frustration caused by deprivation, leading to anger and violence.

James C. Davies also views macro-level aggression as aggregated individual 'reactions' to disparities in wants and needs. While he does not consider the specific impact of repression, Davies formulation of the relative deprivation argument is useful in describing the connection between deprivation and violence. The Davies J-curve is more specific concerning the timing of a revolution. It predicts that the potential for violent reaction to adverse economic or social conditions will be sufficient to cause revolution only after expectations have risen considerably. "Revolutions are more likely to occur when a prolonged period of objective economic and social development is followed by a short period of sharp reversal."¹⁰ However, Davies does not offer a single historical example where rising expectations followed by a drop-off have lead to a revolution. Counter examples are given which merely demonstrate that reaction to a sudden decline is not revolutionary when those suffering have not experienced rising expectations. Still, the notion that deprivation is relative rather than absolute (at least in its effect on revolutionary behaviour) is consistent with the Parsonian notion that expectations are determined by prevailing norms. When this continuum takes sudden turns for the worse normative constraints on aggressive behaviour are alleged to be removed and individuals are likely to react violently against the perceived source of deprivation.

The role of deprivation or grievances is also considered in at least a strand of the ethnic conflict literature (Hechter, 1975, Hewitt, 1977, Pinard, 1986:227-228). In his 'Internal Colonial' theory, Michael Hechter (1975) treats the effects of inequality, exploitation, and domination by the dominant ethnic core over the subordinate ethnic periphery as causing grievances which contribute to the likelihood of 'reactive' ethnic conflict (1975:41-42). In a varied sample of 19 nations with significant ethnic cleavages, Christopher Hewitt presents empirical evidence to support the claim that ethnic violence

¹⁰ Davies, James C. 'Toward a Theory of Revolution.' American Sociological Review vol.27, June 1962. pp.5-19.

is significantly associated with the size of the disadvantaged minority group (1977:160). Although these are examples of studies citing absolute structural disadvantages, other scholars incorporate the effects of grievances into multidimensional models which specify how the grievances resulting from these disadvantages (or deprivations) affect the motivation of participants in collective action (Schermerhorn, 1970; Oberschall, 1973; Breton et al. 1980).

Ted Gurr (1970) provides the most complete elaboration of the RD approach to the study of collective violence. While the Feierabends and Davies argue that frustration leads to aggression, Gurr refines the analysis by distinguishing between types of reaction to frustration.¹¹ The distinction between utilitarian and normative justification of violence implies that individuals are making rational choices as to the use of violence. But 'rational' for Gurr is far from the objective calculation of costs and benefits which James Coleman describes (1974) in his treatise on collective choice. Instead, Gurr treats violence as having a dual utility (1970:210-211). On one hand, violence by dissidents is considered useful in achieving a group's goals, whether these be long-term advantage through attrition of the enemy or short term, individual advantage through, for example, looting a store during a riot. On the other hand, Gurr states that:

"Utilitarian motives often are contingent upon and secondary to the "irrational" motivation to act violently out of anger...If the angry man values the emotional satisfaction he gets from satisfying his rage more than the satisfaction he would get from alleviating the situation that caused his rage, then it may be more "rational" in his terms to act violently for its own sake than to use violence to remedy his situation."¹²

While Gurr argues that rational decision making can be short-circuited, the addition of utilitarian motives is a refinement of the strict deprivation-frustration-aggression theory which implies that individuals act aggressively as an irrational response to deprivation. It also appears to bring the RD approach into closer agreement with the

¹¹ Gurr adapts Berkowitz's (1962) reformulation of the frustration-aggression nexus which specifies that anger causes reaction only when its perceived cause is available for retaliation.

¹² Gurr, Ted. 1970. Why Men Rebel. (Princeton University Press) p.210

rational decision-making processes emphasized in the RM approach. However, the emphasis upon the frustration-aggression response mechanism clearly distinguishes the RD from the RM approach by emphasizing the effect of anger upon the decision making process. Gurr is essentially proposing a refinement of the definition of rationality towards a continuum from 'cool' to 'hot' This is especially relevant to the discussion of short term reactions to repression since these acts are likely to be responses to actions which occur in heightened stages of conflict.

As we shall see, the different predictions made concerning the shape of the relationship between repression and reaction stem ultimately from the distinction between 'cool' and 'hot' versions of decision making rationality and more generally from the degrees of importance attached to grievances as determinants of motivation for collective action or violence. In order to show how these decision making mechanisms emerge from the respective theories, we turn to a discussion of the elements of the respective models which address the factors which determine how individuals and groups decide to act collectively in response to specific conditions or situations.

3. Points of Contention: Values and Interests.

For Gurr, the reaction to deprivation is determined by the extent of the disparity between value aspirations and value capabilities. While the opportunity/threat dimension of Tilly's RM theory acts as a loose parallel to this idea, the RM version is more static in terms of what constitutes opportunities and threats which are significant enough to incite collective action or collective violence. To recall Tilly and the followers of the Resource Mobilization school, collective action is ultimately determined by the degree of opportunities and threats to collective interests. In turn, these interests are treated as relatively constant since they are determined primarily by relation to means of production but also according to the stated interests of the group in question. Although these interests may vary from one group to another, Tilly makes no provision for the variability of interests as reactions to either specific acts of opponents (like acts of repression) or grievances as expressions of subjective deprivations. As we discussed in the previous section, and in agreement with Pinard (1983a) this is due to a lack of attention paid to the

motivations of individuals acting collectively.

While Tilly does consider that assembled crowds may act violently when met with repressive tactics by authorities, and that this reaction may be due to fear or anger, he limits the effect of specific acts of provocation by merely saying that anger etc were not the cause of the collective action which followed (1978:182). This loose application of the concept of causality is troublesome because by denying the causal role of heightened emotions in the determination of collective action, Tilly does not consider that although the "rage, the exhilaration, or the resentment" may not cause the action, it may, as Gurr and Pinard have argued, cause participants to alter their interests, and in turn their cost-benefit evaluations. As a result, individuals or groups whose interests may have previously led them to one type of action (or inaction) may lead them, due to anger and resentment at the actions of authority, to support action that was previously considered too costly, or serving an interest that was less emotionally charged. As we have stated above, the reason that Tilly does not consider rationality as a continuum affected by degrees of emotion is that his theory of interests relies on a form of economic determinism prevalent among Marxist analysts which leaves little room for short-term value changes which result from, among other actions, acts of repression.

In contrast, while Gurr includes measures of resource capability and potential for mobilization (measured by variables such as 'scope of population in dissident organizations', 'complexity, cohesiveness of dissident organizations' 'value stocks of dissident organizations') they are not used as simultaneous definitions of a group's interests. Instead, the Parsonian notion of the primacy of value orientations is used to argue that interests between a regime or government and other social or economic classes outside of the government are not necessarily at odds. In Johnson's terms, it is possible to achieve 'homeostatic equilibrium' between value aspirations and capabilities

"since values are an independent variable, but one that interacts with the concrete requirements of adaptation to the environment, the homeostatic capacity of a system will be determined by value sharing and by the potency of these values with respect to the given environment."¹³

¹³ Johnson, Chalmers. 1966. Revolutionary Change. (2nd Edition, Stanford University Press, Stanford Ca) p.56.

Gurr accepts a broader definition of salient value orientations than that proposed by Tilly. As a result, he defines a less rigid cost/benefit decision making process. Gurr assumes that values (and by extension, interests) can be determined primarily by economic class, but only in societies which adhere to a zero-sum perspective on value stocks. He argues that in many Latin American nations, value gain tends to be regarded as another group's value loss; "groups with rising expectations can be satisfied only by seizing what they want from those who have it."¹⁴ This sounds remarkably like Tilly's interpretation of resource mobilization as the struggle to gain control of limited commodities. But for Gurr, not all societies perceive value stocks as fixed sums. He argues that it is possible for individuals to perceive, whether justifiably or not, that opportunities are limitless. In this case, those in lower economic positions do not necessarily have to struggle for a larger piece of the pie if they believe that the pie itself is getting larger. That this belief may be based on 'false consciousness' does not mean that its effect on perceptions of deprivation is not real. As Gurr argues, deprivation must be judged in relation to perceived rather than absolute value capabilities and aspirations. He argues further that this perception is affected by factors such as previous experience of value loss, Lasswellian welfare value factors (well-being, skill, enlightenment) emergence of alternate belief systems (changing moral codes), and status hierarchies (Gurr, 1970:92-154). Whatever the source of deprivations, Gurr argues that they do vary considerably both among and between socio-economic classes, and most importantly, that this variance significantly affects the propensity of individuals and groups to participate aggressively in reaction to these deprivations.

While Tilly may consider the effects of non-resource based value capabilities, he would argue that they are either not crucial in determining propensity to collective violence or that their effects are subsumed by measurements of socio-economic class. Indeed, it is not difficult to cite examples of status differentials which only become salient when they parallel economic class distinction or inequalities. Olorunsola and Muhwezi (1984) describe how these inequalities manifest themselves in the internal political

¹⁴ Gurr, Ted R. 1970. op.cit. p 126.

struggles throughout sub-Saharan Africa. For example, ethnic hostility in Rwanda, Nigeria, and the Sudan (among others) were heightened by parallel cleavages along ethnic and socioeconomic lines (1984:141-154).

We have argued in this section that the RM and RD perspectives disagree on the fundamental decision-making process used by individuals or groups to participate in both collective action and collective violence. In turn, these different processes emerge from the basic premises of each theory. Interests are static in the RM model since they emerge primarily from socio-economic class. Even if other interests are given attention, the RM model does not discuss how these interests affect mobilization. As a result, the determination of collective action or violence is affected by static cost-benefit analysis. Specific interactions with authority (such as acts of repression) affect only the costs and strategic repertoire available to dissidents; they do not affect interests. In contrast, interests vary considerably in the RD model since they are determined by value aspirations and capabilities which vary across societies, within socio-economic class and in reaction to acts by authorities which frustrate or anger (such as acts of repression). More importantly, the RD perspective assumes that the level of frustration or anger caused by deprivation directly affects the likelihood of an aggressive response.

In order to resolve these competing claims it is necessary to test the foundations of the entire models in order to judge whether the repression effect, as it stems from the logic of the entire model, is likely to behave as predicted. These tests examine whether the causal mechanism is working. i.e., RM--cost benefit analysis, RD--frustration-aggression.

4. Empirical Tests of Social Movement Theories.

a. Resource Mobilization Hypotheses. The most common approach to operationalizing the concept of mobilization is to use indicators of the costs of mobilization. In turn, several studies specifically focus on costs as they are affected by the degree of restriction on communication among potential dissidents (Snyder and Tilly, 1972; Sanders, 1981; Muller, 1985). These studies roughly measure Tilly's concept of 'Netness'. Another approach is to focus on the number categories which are likely to make challenges

against the state (Cartwright, Delorme and Wood, 1985). Finally, Douglas Hibbs (1973) uses a combination of the two approaches.

Snyder and Tilly (1972) find that national political activity (an indicator of power struggles) and the amount of government repression (defined as any act by the government which increases the costs of collective action) exerted stronger effects than measures of relative deprivation upon collective violence in France from 1830 to 1960. (1972:529)

Muller (1985) uses regime repressiveness as an indicator of the opportunities and costs of mobilizing against a regime. He finds that regime repressiveness has a strong, curvilinear affect upon levels of deadly political violence (Muller, 1985 p.58)

Sanders (1981) uses 'Press Freedom' as an indicator of potential network formation which will "exacerbate political divisions and conflicts, and encourage criticism of the incumbent regime, thereby increasing the likelihood of political instability."¹⁵ Sanders reports a strong direct effect for this variable upon government change instability in the sub-Saharan African sample (1981:183) and a strong effect upon regime change instability when in linear combination with democratic performance (1981:184).¹⁶ This suggests that well organized dissidents under non-democratic regimes are successful in causing instability.

On the negative side, Cartwright, Delorme, and Wood (1985) found that the percentage of organized labour had no significant effect upon the probability of revolution in the African and Asian sample (see above). Contrary to Muller (1985) military expenditures as a percentage of GNP had no significant effect upon the probability of revolution, suggesting at least that the increased costs of mobilization against superior government forces did not affect the probability of revolution in the African and Asian samples.

Douglas Hibbs (1973) provides among the most comprehensive tests of theories of political violence. Unfortunately, he does not test RM theories specifically since they had

¹⁵ Sanders, David. 1981. Patterns of Political Instability, (New York, St. Martin's Press) p.177.

¹⁶ Sanders uses Easton's (1965:21) six-fold classification of changes and challenges within political systems. A government encompasses judicial, legislative and executive authority whereas a regime is vested primarily with executive authority.

not been clearly formulated until a few years later. Nevertheless, Hibbs does tap part of Tilly's mobilization dimension while testing Deutsch's concept of Social Mobilization (Deutsch, 1966). Hibbs uses an additive index which includes measures of population density, number of males in nonagricultural occupations per 1000, newspaper circulation, radios per 1000 and literacy rates. While these indicators do not fully represent Tilly's concept of categories and networks, they do measure the communication capabilities used by dissidents to organize collective action or violence. Overall, Hibbs finds that levels of social mobilization are not correlated with levels of collective violence (Hibbs, 1973:62).

The pattern of findings is relatively clear. Models which emphasize factors which increase the costs of collective action find evidence to support the general RM claim that dissidents rely on strict cost-benefit analysis to determine if collective action or violent challenge is cost-effective. On the other hand, the approaches which infer the propensity to challenge from the existence of categories alone find little evidence to support the RM perspective. This is not surprising since such inference is based on a vague estimate of the interests of these groups. We pay more attention to the studies which use indicators of the cost of collective action since these more directly measure the factors involved in the decision making process of potential dissidents. These studies provide fairly unanimous support for the RM perspective.

b. Deprivation Hypotheses. Empirical tests of both Relative and Absolute Deprivation hypotheses have been presented in the literature. RD approaches are divided among those which measure imbalances between aggregate indicators of 'expectancies' and 'achievements' (Feierabend and Feierabend, 1971,1972), and those which simply infer relative deprivation from changes in economic performance from year to year (Snyder and Tilly, 1972, Hibbs, 1973). Both versions implicitly invoke the frustration-aggression thesis as the specific form of reaction to either imbalances or poor economic performance. AD approaches usually focus upon indicators of economic inequality (Muller, 1985) or rate of inflation (Cartwright, Delorme and Wood, 1985). As expected, the variety of approaches to measuring deprivation produce a variety of empirical results.

The Feierabends (1972) test the frustration-aggression hypothesis on a cross-national sample of nations for the period 1948-1962. 'Want Satisfaction' was measured by

literacy rates and urbanization (Bill/Hardgrave, 1973; Lerner, D., 1963). Their results support the hypothesis that increases in systematic frustration within a polity will lead to increases in the level of systematic aggression ($r=.66$ for the model). Specifically, the Feierabends found that a high percentage of the population receiving primary education (supposedly an indicator of high 'want formation') and a slow growth rate of GNP per capita (low 'want satisfaction') is most likely to lead to political instability. These findings are particularly suspect since the measurements of both 'want formation' and 'want satisfaction' are so far removed from stated grievances expressed by the participants which caused political instability.

Testing what could be labelled 'structural motivation determinants' of collective violence, Hibbs finds no support for grievance level hypotheses relating to imbalance in government performance (either non-defense spending or measures of social welfare) or economic growth rate. Contrary to Gurr's hypothesis, aggregate measures of likely causes of economic deprivation show no correlation with levels of collective violence in the cross-national sample (Hibbs, 1973:62).

Despite the lack of empirical support for imbalance hypotheses, Hibbs argues that their theoretical value should not be discounted. He points out that multi-collinearity among indicators of imbalance prevents the true interaction from being tested. In other words, there are too few cases where a significant imbalance exists between social mobilization and economic growth (Hibbs, 1973:62-63).

Snyder and Tilly (1972), use economic indicators such as prices of food, manufactured goods and an index of industrial production to measure hardship. Relative deprivation is then extrapolated from deviations in these hardship measures from the actual trends of preceding time periods. They find that grievance level explanations do not explain significant variation in levels of civil strife in France from 1830 to 1960.

Turning to AD approaches, Muller (1985) summarizes the macro-level approaches which use various forms of inequality measurements as indicators of deprivation. Overall, income inequality appears less important than level of economic development.¹⁷ In his

¹⁷ Muller cites the studies of (Nagel, 1974; Sigelman and Simpson, 1977; Hardy, 1979, and Weede, 1981) as supporting the claim that income inequality is an insignificant or weak predictor of political violence once economic development has been controlled (Muller,

own cross-national analysis, Muller finds that income inequality does have a positive effect upon levels of political violence. However, "The U-curve effect of regime repressiveness appears to have stronger impact on variation in rates of deadly political violence than the positively accelerated effect of income inequality."¹⁸

Cartwright, Delorme and Wood (1985) found that rate of inflation positively affected the probability of revolution in a sample of 54 African and Asian nations from 1955 to 1975. They argue that individual decisions to participate in an ongoing revolution are affected by the current state of the economy.

To summarize the findings of empirical tests of Deprivation approaches, RD theories which stress the link between deprivation and frustration-aggression do not receive much empirical support. However, as we will argue below, these approaches may not be adequate tests of the theories, mainly because they are approaches which attempt to infer individual feelings or psychological states from macro-economic and political indicators.

Overall, while the Resource Mobilization models hold up better than the Relative Deprivation models, we are not in a position to dismiss deprivations as significant determinants of collective action or violence. Nor are we ready to support either of the competing decision-making processes described in the previous section, simply because the evidence presented thus far, though tending to support the RM perspective, tells us little about the decision-making process itself. For this reason, we turn to a discussion of approaches which have synthesized the RM and RD theories in an attempt to show how groups or individuals actually decide to take part in collective action or violence.

c. Interaction Models. Pinard's review (1983a) of empirical tests of both Relative Deprivation and Resource Mobilization theories offers an interesting interpretation. He argues that a lack of support for grievances as a determinant of collective action is due to a reliance in the literature on ecological data. These data can only measure grievances

1985, p 47)

¹⁸ Muller, Edward N. 1985. "Income Inequality, Regime Repressiveness, and Political Violence" American Sociological Review, Vol. 50 (Feb.):p.47.

indirectly but measure factors relating to resource mobilization directly¹⁹. Therefore, such studies are biased a priori due to methodological restrictions. He argues that survey research is needed to determine the level of grievances and that these cannot be inferred from aggregate data. Secondly, Pinard argues that a more serious problem in empirical tests of the theories is that they do not measure the interaction between deprivation and resource mobilization. This is a serious limitation because many of the theories being examined such as those proposed in both Relative Deprivation (Feierabend, 1972, Gurr, 1970, Gurr and Duvall, 1973; Smelser, 1963) and Resource Mobilization (Tilly, 1978) assume explicitly (Smelser, 1963) or implicitly (Gurr, 1970, Tilly, 1978) that the components of collective action are interdependent. Smelser's model of collective action clearly rests on the assumption that all components (structural conduciveness, structural strain, generalized beliefs, precipitating factors, mobilization and degree of social control) are components of a value-added process. For this reason, Pinard argues, analyses testing the effects of grievances versus resource mobilization indicators should consider both dimensions in their independent as well as interactive role.

In his study of the rise of the Social Credit Party in Quebec (Pinard, 1971:110-111; 123-124; 207n) found that "mobilization exerted weaker effects when the level of deprivation was low than when it was high."²⁰ Pinard's hypothesis concerning the interaction between grievances and resource potential is substantiated by Hibbs' finding that the effect of Group Discrimination on Collective Protest or Internal War is mediated through Political Separatism (Hibbs, 1973:77-79, 169). In other words, grievances associated with ethnic or cultural divisions may become more salient influences on collective violence when they occur within a segmented society. Hannan and Carroll (1981) also find that a combination of ethnic divisions and corresponding political representation of these divisions, has a significant impact on political instability, measured

¹⁹ See also Sanders, David (1981:27-38) for a critique of psychologically oriented approaches. In agreement with Pinard, Sanders argues that to use macro-level data to measure a micro-level process is an act of theoretical miss-specification.

Snyder and Tilly (1972:530) also admit that "other, more direct representations of the 'expectations' side of the argument (need to be examined)."

²⁰ Pinard, Maurice. 1983a op cit. p.37.

as changes in formal leadership. "Apparently, states with both a high level of ethnic diversity and a political structure that legitimatises political organization of such diversity are especially unstable"²¹ Likewise, Morrison and Stevenson (1971) found that elite instability has a significant lagged effect on communal instability in a sample of sub-Saharan African nations from 1955-1969.²²

The obvious problem in applying the synthesized approach to the study of collective violence and political instability is that determinants of relative deprivation are difficult to measure. The ideal method would be to use surveys to determine if individuals are sufficiently aggrieved by economic or social conditions. Muller (1977, 1979; Muller and Jukam, 1983) used similar surveys to measure the relationship between 'just deserts' frustration and 'aggressive political participation' at the individual level. The results offer qualified support for a positive relationship between frustration and aggression. Just deserts frustration was found to exert a moderately strong effect on aggressive political participation in the West German sample (Muller, 1979) and a minimal but positive effect in a public and university samples in New York City (Muller and Jukam, 1983). Conversely, Barnes et al. (1979) find little if any relationship between 'just deserts' frustration and aggressive political participation in samples from Britain, United States, Austria, Holland and West Germany. To my knowledge, no similar surveys have been conducted which specifically measure the relationship between grievances, frustrations and the degree of individual aggressive political participation in African nations.

d. Discussion of Previous Findings. Muller, like Pinard, attributes the ambiguous findings concerning the relationship between deprivation and collective action (Muller specifically testing aggression) to the failure of previous research to account for interaction between deprivation and class position. Muller tests Gurr's theory concerning

²¹ Hannan, Michael T. and Glenn R. Carroll. "Dynamics of Formal Political Structure: An Event-History Analysis," American Sociological Review, Vol.46 (Feb.):p.28.

²² Morrison and Stevenson define 'Communal Instability' according to three dimensions. Rebellion, Civil War, and Irredentist movements. They use the term 'communal' to describe attachments which are primarily ethnic (1971:347-349). It should also be noted that their study employs 5 year intervals to measure lagged effects. Limitations of this approach will be discussed in Part Three

the distinction between normative and utilitarian justifications for the use of violence. As stated previously, Gurr argues that societies and groups within them differ in their perception of the legitimacy of violence within political processes. Muller (1980:97) finds that deprivation will lead to aggressive political participation when either normative (violence is commonly used to achieve political ends in that society, measured by frequency of occurrence of a given 'type' of violence over time) or utilitarian (violence is the most efficacious form of political action) justification is present within a group, but that deprivation is secondary to the degree of efficacy.

But what determines the presence of normative or utilitarian justifications for violence? According to Gurr, the intensity and scope of normative justification for political violence, all of which measure what Gurr calls a 'culture of violence', is determined by historical magnitude of political violence, frequency of occurrence of particular forms, experience of regime reactions, regime legitimacy, and clarity of target (Gurr, 1986:55-57).

Utilitarian justification refers to the efficacy of a particular strategy as a means of relieving relative deprivation. For Gurr, the extent of utilitarian justification for the use of political violence is determined by factors such as: past effectiveness of political violence within a given society and by other societies, the balance of regime and dissident institutional support and coercive control, and the degree to which symbolic appeals (ideology) prescribe political violence as the most effective means of increasing value positions.

While Gurr does agree with Tilly in terms of the importance of the balance of control of resources between regimes and dissidents, he argues that the balance of power through resources is not assessed by individuals according to the same rational criterion, therefore cannot be generalized from. As a result, collective action cannot be easily interpreted through frameworks of game theories as Tilly implies where individuals make cost-benefit analyses of the potential gains and losses resulting from their contribution to collective action (Tilly, 1978:Chp 3, esp pp. 85-90). Gurr argues that even if sufficient information were available for making rational calculations, individuals base their decision to participate in violent activity according to their perceived role in the struggle and their

subjective feelings of deprivation. As a result, leaders and followers do not use the same rational approach in deciding to join in collective violence. Gurr argues that leaders may well use more rational, cost-benefit analyses than followers because their function within the group is more strictly utilitarian. He cites the writings of revolutionaries such as Mao Tse Tung and Che Guevara to argue that leader's goals are substantially different than movement followers. For example, a common strategy in revolutionary warfare is to use terror or sabotage to incite repression by a regime. This will in turn alienate more people from the regime and will mobilize more support. This implies that the decision by potential challengers to join in an anti-regime movement is determined by the strength of their reaction to regime violence. Gurr argues that the strength of their reaction to regime violence is ultimately determined by their subjective level of deprivation and the degree to which ideology identifies violence as a means of relieving it

Followers depend upon ideologies to convince them of the utility of their action. This is especially true in decisions to participate in violence because the immediate goals sometimes require risking one's life. With less tangible goals to be weighed against costs of action, followers rely on "divergent instrumental beliefs," which vary with their level of discontent. Gurr cites evidence from samples of peace demonstrators to support his contention that individuals participate in collective action for varying reasons (Gurr, 1970:215). The only common cause being the perceived source of their subjective discontent.

Is this compatible with Tilly's argument concerning the collective interests of participants in collective movements? No, the fundamental difference is that the Resource Mobilization school assumes that acts of political violence are necessarily collective challenges to authority caused by perceptions of opportunities or threats perceived by groups of individuals with shared interests. The goals of anti-regime behaviour are clear - to achieve control of the means of authority, and in turn, the means of production necessary to sustain authority. Conversely, the Relative Deprivation approach assumes that political violence is not necessarily a collective challenge to authority but merely a collective reaction to frustration caused by aggregated feelings of deprivation.

For instance, each school uses different reasoning to explain the difference between

collective political violence which is sporadic verses that which is systematic and sustained. For the Resource Mobilization school, sporadic violence is a result of miscalculated resource potential, i.e., resources necessary to sustain pressure fizzle out. The Relative Deprivation approach argues that sporadic violence is a result of immediate reactions to deprivation which are not sufficiently strong to sustain the degree of frustration required to enhance the aggression.

Pinard offers a more specific explanation in his 'Motivation Model' (1983b) where he differentiates between 'relevant grievances' (those which a movement addresses specifically in an attempt to correct them) and 'generalized anxieties' (frustration from broad sources) (1983b:32). The former would be hypothesized to lead to sustained collective action while the latter would lead to sporadic protest or action meant to alleviate immediate frustration.

While Eckstein (1980) finds that neither the Resource Mobilization nor the Relative Deprivation models is clearly 'better' than the other, Pinard's explanation of the interaction between deprivation (measured by grievances) and resource mobilization accounts for many of the ambiguous findings (for example, Snyder and Tilly, 1972; Snyder, 1978; Muller, 1980) concerning the role of grievances in mobilizing individuals toward collective violence.

5. Conclusion.

While Relative Deprivation hypotheses receive less empirical support than those of Resource Mobilization, several qualifications suggest that the former should not be excluded from any analysis of political violence. First, RM analyses benefit from 'better' or more direct forms of measurement. Second, the effects of economic deprivation have stronger impacts when combined with the effects of ethnic divisions. The separate results of Pinard and Hamilton (1986) as well as Hannan and Carroll (1981) suggest that the 'organization of discontent' (Muller, 1985:p.48) is an important factor in the transition from collective action to political violence. Third, as will be elaborated in the next section, the effects of both relative deprivation and resource mobilization upon political violence can be mediated by historical factors which Gurr refers to as the 'Culture of Violence'.

Finally, the two main theories which emerge from the social movement literature are too general to account for specifically violent or de-stabilizing events which occur within polities. For this reason, we now address theories which examine processes which Lichbach and Gurr (1981) refer to as the 'Conflict Process.'

II-B. From Mobilization to Violence: The Role of Repression.

So far we have compared two theoretical approaches which attempt to explain how individuals and groups become involved in collective action or collective violence. We have concluded that the main point of contention between the two perspectives involves the role of grievances in the decision making process. While the empirical evidence supports the RM perspective, evidence exists which suggests that grievances do play an important role in the decision making process. This is important for our purposes because it affects the interpretation of the effect of acts of repression. If grievances are important determinants of dissident response, then acts of repression potentially affect more than just the costs and strategy choices of dissidents. In order to understand what dissidents are really reacting to when they react to acts of repression, it is necessary to consider behaviour and characteristics of the state as, in the eyes of challengers or aggrieved masses, a coercive or even repressive counter-force to a mobilized group.

1. Determinants of Regime Repression.

a. External Factors. Dependency Theory has been applied to phenomenon such as level of democracy (Gollen, 1983), and economic growth and inequality (Jackman, 1982; Bornschier and Chase-Dunn, 1985). These are factors which are hypothesized to have indirect effects upon both coercion/repression as well as overall levels of political instability (Hibbs, 1973, Kick, 1980, Sanders, 1981; London and Robinson, 1989). Dependency theory has also been applied specifically to the study of elite coercive behaviour within nations (Jackson et al. 1978; Weede, 1978; O'Donnell, 1979; Timberlake and Williams, 1984)

The basic theory emerges from World System Position theories which analyze the effects of a nation's position within the world economic system upon the internal political,

economic and social dynamics (Wallerstein, 1974; Bornschier et al, 1978; Kick, 1980, 1983) Dependency theory is based upon the assertion that as poor nations become dependent upon rich nations, their economic structures become distorted as the concentration of income and economic opportunity tends to become focused on a small elite which has close economic ties with the foreign 'host' nation. These 'host' or core nations then exert pressure upon the elites to maintain stable labour markets and resource flow in order to protect core nations' investments. As external and domestic pressure increases, the ruling elite tends to become authoritarian and is prone to use coercive means to maintain its authority (Kick, 1983:187-188). Economic disproportion, slow economic growth rate due to trade imbalance, and reaction to coercive control evolve into a chain reaction which causes dissidents to increase the use of violent means to bring about change

Kenneth Bollen (1983) has examined the potential consequences of dependency on political democracy. Borrowing from other dependency theorists (Chirrot, 1977; Jackson et al., 1978; and O'Donnell, 1979) Bollen suggest that political inequality in peripheral, authoritarian governments "is maintained with the economic, political, and sometimes military support of the elites in the core countries."²³

Bollen stresses the differentiation between the external and internal factors of development on political democracy. He concludes that while internal economic development increases the likelihood of political democracy, external development, measured in terms of foreign investment, foreign debt, and trade dependency, has a greater effect on the level of political democracy within a nation "Different positions in the world system are associated with different levels of political democracy, even after controlling economic development."²⁴ Bollen further emphasizes the role of the specific relationship between the elites of the core countries and the elites of the dependent, non-core countries as they hinder the processes associated with socioeconomic development. As a common economic interest is formed between the core elites and the dependent countries' landowners, merchants and other traditional elites, the core provides the ruling

²³ Bollen, Kenneth A. 1983. "World System Position, Dependency, and Democracy: The Cross-National Evidence." American Sociological Review, 48, p.478.

²⁴ Ibid. p.468

elites with economic, political, and military support in order to maintain its authority over the lower classes.

Miles Wolpin (1985) finds less support for the effects of dependency upon levels of repression in a sample of third world nations. While violent repression was positively associated with 'open door' regimes (non-discriminating trading partners), actual rates of investment by outside nations were highest among the minimally repressive nations. The least this suggests is that investment can be associated with low levels of repression.

Michael Timberlake and Kirk Williams (1984) take this examination a step further as they test the hypothesis that the degree of penetration of peripheral countries by foreign capital contributes to the formal exclusion of non-elite political participation and to the greater frequency with which governments actively repress opposition. The work of Timberlake and Williams addresses some specific questions left unanswered by the work of Bollen. Their research focuses on the extent to which political systems formally exclude widespread participation in decision making, and the frequency with which regimes overtly repress political opposition through various sanctioning activities. Government repression is measured according to the amount and severity of sanctions imposed by the government "to neutralize, suppress, or eliminate a perceived threat to the security of the government, the regime or the state itself."²⁵

Timberlake and Williams conclude that when the level of foreign investment is greater in non-core countries, their political systems tend to be more exclusive. However, in agreement with Wolpin, their second hypothesis which states that high levels of foreign investment penetration will cause high degrees of government sanctions is not supported by the data. "Investment penetration appears to have no bearing on the frequency of repressive activity initiated by the government."²⁶ They do suggest that since political exclusion does positively affect government sanctioning, investment dependency may operate indirectly through its positive effect on political exclusion.

²⁵ Timberlake and Williams use the 'Negative Sanctions' indicator from Taylor and Jodice, 1983. World Handbook of Political and Social Indicators III:1948-1977. (Ann Arbor: The Inter-University Consortium for Political and Social Research.)

²⁶ Timberlake, Michael and Kirk R. Williams. 1984. "Dependence, Political Exclusion and Government Repression" American Sociological Review. Vol.49, No.1, p.146.

Paige (1975) presents historical evidence to explain the unintentional effects of foreign influence on internal market structures and subsequently to violent political challenge. In Angola, The sudden transition from subsistence level production to export production caused the mobilized wage earners to revolt against the propertied class in 1961 (Paige, 1975).

London and Robinson (1989) report evidence that dependence within the world economy "significantly affects collective political violence both directly and indirectly (through its effects on income inequality)."²⁷

Although theoretically plausible and with considerable empirical support, 'external' explanations describe mainly indirect effects upon internal political power struggles. For this reason we turn to studies which focus on internal balances of power, recognizing the need to incorporate theoretically important dependency effects into the final model.

b. Internal Factors. Theories which attempt to explain variance in levels of repression generally focus on the concept of 'institutionalization' (Hibbs, 1973; Duff and McCamant, 1976; Wolpin, 1986) or the degree to which institutions have emerged which are able to 'process' the growing demands of modernization (Huntington, 1968). Others address regime type, contrasting military and civilian regimes and their respective propensities to apply repressive tactics (Nordlinger, 1970; Tannahill, 1976; Wolpin, 1986). As we shall see, the evidence for the effects of both institutionalization and regime type is fairly convincing.

Hibbs operationalizes the concept of institutionalization in relation to the degree of social mobilization.

"For when the ratio of social mobilization to institutionalization is large, the burdens generated by high mobilization may have outrun the capabilities of sociopolitical institutions and as a consequence, elites may perceive the situation as sufficiently threatening to resort to repression as an alternative mode of social control."²⁸

This hypothesis is strongly supported in the empirical test on the cross-national sample of

²⁷ London, Bruce and Thomas D Robinson 1989(a) "The Effect of International Dependence on Income Inequality and Political Violence."--Research Note, American Sociological Review, Vol. 54 (April) p. 307.

²⁸ Hibbs, Douglas 1973. op cit p 110.

108 nations. Similarly, Duff and McCamant find strong support for the effects of institutionalization (measured by the degree of institutionalization of the Roman Catholic Church, Political Parties, and the military) alone, without interaction with degree of social mobilization, in a Latin American sample (1976:p.129). They also found that nations which spent more on education were less prone to resort to violent repression. In sum, this evidence suggests that regimes which attempt to provide adequate services and access to political representation are less prone to use repression since institutions exist which can relieve the pressures of modernization.

Theories concerning the effect of regime type argue that military regimes are more likely to apply repression than their civilian counterparts. There are two main reasons which emerge from the literature. First, because military regimes usually ascend to power with military force, they are prone to use such force to maintain their power since they will become the new target of praetorian power seizures (Barrows, 1986:85-88). Secondly, since military regimes are less accountable to civilians, the use of repression is less costly in terms of the effects on popularity (Nordlinger, 1970). The obvious problem with such proclamations is that the military as an institution can have considerable power within a civilian regime (Sarkesian, 1978:19-21). Despite these qualifications, the bulk of the evidence supports the hypothesis that military regimes are more repressive than civilian regimes. Wolpin finds a significant degree of association between military rule and violent repressiveness (1986:116-117). Tannahill reports evidence to show that military regimes are also more likely to impose political sanctions (1976:240).

Overall, the evidence suggests that repression is more likely in nations which are either modernizing at a pace which supercedes its ability to cope with rising demands or, similarly, are controlled by leaders which are unwilling or unable to cope with challenges through open political processes. Without attempting to measure all of the possible interactions between these internal and external factors, we will control for their independent effects as the data permits. For now, we turn to an examination of the effects of repression.

2. Effects of Regime Repression Upon Dissident Reaction.

Despite their opposing views on the motivating factors leading to mobilization, there is considerable consensus between the Resource Mobilization and Relative Deprivation approaches in their emphasis on the importance of the balance of power between challengers and the state in ultimately determining whether mobilized groups will make violent challenges.

Tilly (1978) is careful to distinguish between the effect of repression on collective action as opposed to its effect on the likelihood of collective violence. In the first case, repression affects collective action indirectly through its effect on the balance of power between the state and its challengers. Repression is used to increase the costs of either the mobilization stage or the collective action stage. For example, banning a newspaper would increase costs of mobilization by cutting off sources of communication. Jailing leaders of protest marches would increase the costs of collective action.

In the simple case, repression affects the level of collective action negatively by reducing the power of the group relative to the power of the state. Thus, Tilly predicts that a "negative partial linear relationship (exists) between governmental repression and the magnitude of collective violence."²⁹ But life is not so simple. Tilly subsequently argues that groups do not passively accept losses of power

"Members of the polity resist changes which would threaten their current realization of their interests even more than they seek changes which would enhance their interests. They fight tenaciously against loss of power, and especially against expulsion from the polity."³⁰

Further, Tilly predicts that the likelihood of a group being subject to repression is a function of the scale of its collective action and its relative power as a group. As the ratio of scale to power increases (i.e., large scale, low power) the likelihood of repression increases.³¹ This seemingly paradoxical relationship is justified with the assumption that groups with a large amount of power should, by definition, be sufficiently threatening to warrant compromise rather than outright hostility from a regime. Conversely, groups large

²⁹ Snyder and Tilly, 1972:527--quoted in Snyder, 1976. p 282.

³⁰ Tilly, Charles. 1978. op cit. p.135

³¹ In theory, this function applies equally to generalized collective violence (Protest or Riot) as it does to specific attacks (acts of Internal War)

in scale yet low in power should be more effectively controlled using repressive tactics. In any case, the negative linear hypothesis should ideally be evaluated while controlling for factors which measure the degree of challenge capability by groups approaching entry into the polity.

Gurr also argues that the balance between regime and dissident coercive control (his definition of power) is the crucial factor in determining whether a 'serious' challenge to the state will be attempted (1970:234). When dissidents' power appears to be equal to that of the state they are likely to act aggressively since their chances of victory are at their optimum relative to the cost of action. The likelihood then diminishes if dissident coercive control is greater than that of the regime because the regime should realize the futility of actively defending its dominant position. At the same time, less serious challenges, described as turmoil, are determined by an imbalance of power.

"Even in the absence of utilitarian motivations, and in the face of greatly superior force, intensely discontented dissidents sometimes initiate violent clashes or respond riotously to repressive measures."³²

As we argued previously, for Gurr, the rational calculation of the efficacy of violent action among marginal contenders can be 'short-circuited' by feelings of anger, frustration or desperation. However, he argues that more purely rational calculations are used by groups which are, due to their level of power, more serious threats to the state. Challenges by serious contenders are more likely to escalate into internal war than challenges by marginal groups. Gurr states that both the magnitude of political violence and the likelihood of internal war "increase as the ratio of dissident to regime control approaches equality"³³ In other words, groups weak relative to the regime and groups significantly stronger than the regime will not initiate violent challenges. Groups close in strength with the regime are likely to challenge

Once a challenge has been initiated, Gurr predicts that the short term extent of violent reaction varies curvilinearly with the extent of both potential and actual repression administered by the regime. As stated previously, this hypothesis results from a definition

³² Gurr, Ted. 1970. op cit. p.235.

³³ Ibid. p 235.

of rationality as a continuum from 'cool' to 'hot'. Low levels of coercion are not sufficient to provoke an angry response. High levels of coercion provoke intense anger but even higher levels of fear for the consequences of the threatened regime reaction "But if men anticipate or experience sanctions of intermediate severity, their anger is likely to outweigh their fear."³⁴ The result is a predicted inverted "U" function for the relationship between repression and subsequent levels of collective violence.

This is the conclusion of Gurr and Lichbach (1981) who find that over the long term, low levels of repression reduce the ability of dissidents to mobilize opposition because the target (the state) appears less responsible for the group's dissatisfaction. This is precisely opposite of the prediction of Tilly where dissatisfaction among dissidents is relatively constant, low levels of repression reduce costs of mobilization and in turn increase the likelihood of collective action. Again, the role of grievances appears as the point of contention between the two theoretical approaches.

In the long run, Gurr argues that severe repression will provoke groups to mobilize resources to counter unjustified or severe sanctions. The long run hypothesis is in agreement with the Resource Mobilization approach even though it predicts that the ability to maintain repressive sanctions is, by definition, the ability to maintain pressure which increases the cost of collective action by dissident groups. This apparent contradiction is partially resolved if we consider Tilly's prediction that increases in threats increase the likelihood of collective action. In this case, the threat of demobilization should, in the long run, provoke groups subject to severe repression into alternate courses of mobilization and action. To cite the example of the A N C. in South Africa, the act of moving outside of the polity and mobilizing international support is an example of long term reaction to extreme repression.

Apart from restating the general predictions made by the RM and RD perspectives, we have attempted to show that they basically agree on the importance of the balance of power between a regime and its challengers, especially concerning the long term reaction to repression as well as the likelihood of 'serious' challenges such as acts of internal war.

³⁴ Ibid. p.239.

Likewise, Gurr's proposition that turmoil is likely to result from short-circuited rationality is in agreement with Tilly's observation that assembled groups are likely to respond violently to coercion (repression) out of anger and frustration. But the points of agreement are not as salient as they appear. For Gurr, anger and frustration are still operating in the decision by dissidents to engage in organized acts of internal war. Although he argues that these groups are less prone to be swayed by such feelings of anger or frustration in their general consideration of the utility of challenge, the effects of repression are still considered to disrupt the rational decision making process. Gurr's point is that the discontent (whether it arises from economic deprivation or from specific acts of repression) is not sufficient to predict collective violence. Instead, the decision to react to such deprivations is made in the context of the balance of power between the challengers and the state. Tilly also views the balance of power between challengers and institutions of authority as crucial in the determination of collective action or violence. However, he discounts the role of deprivation in affecting the initial decision to challenge. In sum, the effect of anger and frustration as a reaction to repression affects the positive shape of the curve from low to medium levels of repression in Gurr's formulation. For Tilly, beyond the immediate reaction of assembled groups confronted with counter force, repression begins to increase the costs of collective action from the low to the medium level. After this, both curves descend but for different reasons. For Gurr, fear of reprisal outweighs anger. For Tilly, costs continue to increase beyond the value of benefits gained from making a challenge.

After demonstrating how the original dilemma concerning the effects of deprivations is sustained as the models become more complex, we turn to empirical tests which focus specifically on the relationship between repression and subsequent levels of political violence or instability. This is necessary in order to resolve the competing claims of the two perspectives.

3. Empirical Tests of Repression/Reaction Hypotheses.

Approaches to the analysis of the relationship between regime repression and political violence can be divided into two groups: Those which measure a regime or

government's potential or capacity to repress (Feierabend and Feierabend, 1966, 1972; Gurr, 1968a; Jacobson, 1973; Carter, 1988) and those which measure a regime or government's actual use of repressive means (Walton, 1965; Markus and Nesvold, 1972, Lichbach and Gurr, 1981; Muller, 1985). The most thorough analyses consider both capacity and actual uses of repression, either separately or with indexes that combine the two (Snyder and Tilly, 1972; Hibbs, 1973; Tilly, 1975, 1978; Sanders, 1981). As we shall see, findings concerning this relationship are almost as varied as the methods and definitions used by analysts over the years.

a. Repressive Capacity and Political Violence. Gurr (1968) found a curvilinear or "inverted U" relationship between 'Coercive Force Size' and 'Civil Strife,'³⁵ but a negative linear relationship between 'Coercive Potential' (force size weighted by frequency of previous coups) and 'Civil Strife.' David Snyder (1976) points out that Gurr essentially ignores the negative linear finding and emphasizes the curvilinear hypothesis in subsequent works (eg. Gurr, 1970).

According to Snyder, the Feierabends (1971, 1972) also present mixed evidence concerning the overall relationship. "Although the Feierabends report a linear correlation of .41 between coercion and instability for 84 nations, their cross-tabular analysis (1972:162) shows the expected inverted U association."³⁶ Like Gurr, they attribute more weight to the curvilinear finding despite evidence of significant linear effects.

In their analysis of collective violence in France from 1830 to 1960, Snyder and Tilly (1972) measure repressive capacity indirectly (and rather crudely) according to the size of the national budget. This is alleged to increase the costs of mobilization against the government and therefore reduce collective violence which is a by-product of such mobilization (1972:529). Their results support this argument as the linear coefficient for national budget is significant and negative. However, their indicator of regime capacity is less direct than the studies which use variations based on numbers of internal security

³⁵ Gurr defines 'Civil Strife' as "all collective, nongovernmental attacks on persons or property" (1968:1107).

³⁶ Snyder, David. 1976. "Theoretical and Methodological Problems in the Analysis of Governmental Coercion and Collective Violence." Journal of Political and Military Sociology. Vol.4 (Fall):p.281.

forces or overall defense spending. The relationship between national budget and defense spending could just as easily be attributed to a lack of relative deprivation, i.e, a large national budget could be an indicator of national economic prosperity which would in itself limit opposition to the state.

Jacobson uses Gurr's measure of "size of internal security force per 10,000 pop." as well as the role of the police as politically significant or not (Banks and Textor, 1963). While controlling for economic performance and political development, Jacobson finds a weak positive and linear relationship between coercive capacity and Gurr's measure of 'Civil Strife' (1973:73-74). Jacobson attributes the unexpected direction of the relationship to theoretical miss-specification and the inadequacy of capacity measures as indicators of repression.³⁷

Gregg L. Carter (1988) measures repressive capability by the number of uniformed police per 10,000 blacks to test the relationship between coercive potential and levels of violence in a sample of U.S. cities during the 1960's urban riots. Carter controlled for grievance-level factors (income inequality between black and white, political responsiveness of civic authorities and economic conditions) as well as black population size (alleged to measure resources with which a riot could be sustained). Carter reports an iaverse "U" relationship between coercive force size and riot severity.

On the negative side, Hibbs (1973) estimated both linear and quadratic equations to test the relationship between regime force capability and the magnitude of systematic violence. Regime force capability was measured by the number of internal security forces per 10,000 population and per 1000 sq./km. Hibbs finds no significant causal relationship between regime coercive potential and mass violence for either the linear or curvilinear equations. Although these results suggest that the strength of internal security forces fails to deter forms of mass violence (either collective protest or internal war) the results did suggest that a relationship exists between coercive capability and the frequency of

³⁷ Jacobson also argues that "a relatively high incidence of conflict in the past may influence military and governmental officials to expand the size of their security forces. From this standpoint, we would expect a positive correlation between coercion and societal conflict. (1973:74).

Negative Sanctions.³⁸ This could be due to a circular effect where coercive potential is built up in response to frequent calls for the implementation of sanctions.

Sanders (1981) found no significant relationship between capacity indicators and levels of instability outside of Europe and North America. "The level of potential government coercion consistently fails to offer any suitable regional basis for predicting the level of instability..."³⁹

Overall, the studies which report a significant association between repressive capacity and levels of collective violence use crude indicators (Snyder and Tilly, 1972; Carter, 1988) or are weak methodologically (Feierabend, 1966, 1972; Gurr, 1968, Jacobson, 1973). The two most methodologically sound studies of Hibbs (1973) and Sanders (1981) find no significant relationship between repressive capacity and collective violence. Hibbs (1973) does present evidence to show that the effect of repressive capacity could affect levels of collective violence indirectly through its positive effect upon the frequency of sanctions.

b. Repressive Acts and Political Violence. Markus and Nesvold (1972) use time-lagged, cross-tabular analysis on a small, regionally varied group of nations to test the relationship between actual coercive events and subsequent acts of instability. They find a negative linear relationship between current levels of coerciveness and levels of instability and a curvilinear or "inverted U" function between levels of coerciveness and subsequent (one month lag) levels of instability (1972:241).

Snyder and Tilly (1972) also test the effects of actual coercive acts along with the capability indicators discussed above. Using measures of "excess arrests" and "man-days of detention in jails during a given year" as indicators of actual repressive acts, they find that the latter variable exerts a significant negative effect upon levels of collective violence while the former (excess arrests) was insignificant in its effect on collective violence. Snyder and Tilly emphasize the negative linear relationship between "man-days

³⁸ It should be noted that the reliability of variables measuring internal security forces is highly suspect. (Taylor and Hudson, 1983).

³⁹ Sanders, David. 1981. Patterns of Political Instability (New York: St. Martin's Press). p.164.

Table 3.1 Empirical Findings Concerning the Relationship
Between Regime Repression and Political Violence

Author	Shape/Direction Of Relationship		Definition of Repression	Covariates				
	Tumult ¹	Internal War		Economic Growth/ Performance	Inequality	Political Development	History of Violence	Ethnicity
Gurr (1968)	inv U	inv U	capacity	pos	not tested	positive	positive	not tested
Feierabend (1972)	inv U	inv U	capacity	pos	not tested	mixed	not tested	not tested
Markus/Nesvold (1972)	inv U	-measured jointly	acts of rep	not tested	not tested	not tested	not tested	not tested
Snyder/Tilly (1972)	neg lin	-measured jointly	capacity and acts of rep	neg (weak)	not tested	not tested	not tested	not tested
Jacobson (1973)	pos lin (weak)	-measured jointly	capacity	neg (strong)	not tested	mixed (weak)	not tested directly	not tested
Hibbs (1973)	insig neg lin	mixed ²	-capacity -acts of rep			not tested directly	insig positive	mixed (strong) ¹ with Separatism
Tilly (1978)	neg. lin		capacity and acts of rep.					
Sanders (1981)	insig insig	insig curv linear ⁴	-capacity -acts of rep	inverted U across regions	mixed(weak)	negative	pos short term	mixed (strong) ³
Lichbach/ Gurr (1981)	insig.	U-shape	acts of rep	not tested	not tested	not tested	not tested	pos. (strong)
Muller (1985)	inv U	-measured jointly	deaths-domesti violence	pos (weak)	positive	not tested	positive	mixed ⁵
Carter (1988)	inv U	not tested	capacity	controlled not reported	controlled	controlled	not tested	pos (strong)

¹ Hibbs finds that political separatism accounts for nearly all of the effect of ethno-linguistic fractionalization. This means that only when ethnic cleavages are parallel to separatist movements does it significantly affect political violence.

² Hibbs finds that repression is positively and linearly related to outbreaks of Internal War in the short term and negative and linearly related to Internal War in the long term (1973-1985).

³ Sanders finds that ethno-linguistic frac reduces Govt change, and increases regime change in Latin America only. This suggests that ethno-linguistic frac is less divisive in formal political structures than it is in informal power struggles (1981-1992-200).

⁴ For the sub-Saharan African sample, Sanders found a significant positive, linear function between actual acts of coercion and all four instability indicators (Violent Challenge, Peaceful Challenge, Regime Change, Government Change). This contrasts sharply with the findings for the global sample.

⁵ Miller found that the effect of ethnic cleavages was positive and significant from 1963 to 1967 but insig. from 1973 to 1992 in a cross-national sample (1985-1992-200).

of detention" as supporting their hypothesis that the state's use of force and control of the balance of resources reduces the level of collective violence.

Hibbs (1973) examines hypotheses stating that actual acts of repression have a direct impact upon subsequent levels of mass violence. Hibbs used an index of 'Negative Sanctions' as an indicator of acts of repression or coercion initiated by a government. Sanctions include "acts of censorship against mass media, political publications, and the like, as well as restrictions on the political activity and participation of the general public, or specific person, parties, and organizations."⁴⁰

It is important to note that 'Negative Sanctions' as they are applied in Hibbs' analysis do not test hypotheses concerning the degree of coercion or repression from mild to severe. They are merely aggregate counts of the frequency of negative sanctions. Nevertheless, both instantaneous and lagged effects equations were estimated. Hibbs found that current Negative Sanctions had a strong, positive effect upon Internal War and Collective Protest, suggesting that repression of both forms provokes further violence in the short term. However, Lagged Negative Sanctions had a strong, negative effect upon Internal War but no significant effect upon Collective Protest, suggesting that repression is effective against more organized forms of collective action. The best partial equations produce R-square coefficients of .54 and .45 respectively for models regressing Collective Protest and Internal War on current and lagged negative sanctions, controlling for population.

These results lend tentative support for Gurr's basic hypothesis that groups frequently react violently to negative sanctions. The inhibitive effect of past negative sanctions appears to reject a variant of Gurr's hypothesis which states that in the long run, groups will react violently against repressive regimes. However, as we mentioned above, Negative Sanctions does not measure the continuum of coercive or repressive force applied by a regime or government.

When multi-equation models were tested, Hibbs found support for a reciprocal relationship between Negative Sanctions and both Collective Protest and Internal War

⁴⁰ Hibbs, Douglas. 1973. Mass Political Violence (John Wiley and Sons, Inc. N.Y.) p.89

"Mass violence typically engenders repression from elites and the short-term response to such repression is often more violence by its recipients."⁴¹

Tilly's hypothesis which states that the extent of repression is determined by the scope and degree of dissident power cannot be tested with Negative Sanctions as an indicator of regime reaction because direct military intervention against serious threats (such as internal war) are not captured by Negative Sanctions. However, Hibbs' analyses of the effects of Elite Electoral Accountability (the openness of electoral system and the degree of political participation--voter turnout) does indirectly measure the balance of power between a regime or government and opposition members of the polity. A high degree of electoral accountability indicates a more balanced power structure since elites are forced to be more responsive to competing interest groups. The results from the multi-equation model supports the hypothesis that a balanced power relationship between regime and opposition results in lower levels of elite repression. "Elites are less inclined to resort to repression in nations where political authorities are held accountable for their actions by free and competitive elections."⁴²

David Sanders (1978,1981) offers the most detailed critique of Hibbs findings. Two substantial methodological criticisms are presented. First, Hibbs' use of aggregate data comparing the frequency of political event types erroneously assigns the same magnitude of effect on political instability to incidences which occur in widely disparate contexts. Second, the use of cross-sectional data to measure causal sequences of short-run processes is susceptible to mis-specification. As a result of using time aggregates that are too large, "insufficient allowance is made for the possibility that the occurrences of the dependent variables may actually precede the occurrences of the independent variable."⁴³

In his own analysis, Sanders tackles the first problem by creating measures of political instability which reflect deviations from normal patterns within each nation. Recognizing that different countries have different "normalities" of instability, Sanders

⁴¹ Ibid. p.91.

⁴² Ibid. p.186.

⁴³ Sanders, David. 1981. op.cit. p.42.

argues that, for example, considering 12 deaths from domestic violence in Columbia as reflecting the same degree of instability as 12 deaths in Denmark does not consider important contextual differences affecting those levels. Sanders contextualized the data further by controlling for region of the world. This controls for effects of historical experience as well as a nation's position in the world economic or political system and, for the case of third world nations, the effects of dependency (Jackson et al 1978, Bollen, 1983, Kick, 1983, Timberlake and Williams, 1984)

The second problem was handled by using monthly time-series data rather than aggregate yearly or ten-year intervals. This allows for the detection of causal sequences which are more precise than those inferred from larger aggregates

Sanders' time-series estimates of the inter-relationship between the main event variables partially support Hibbs' finding that collective protest (Sanders' Peaceful Challenge) leads to Internal War (Violent Challenge) and then to executive transfer (Regime Change). The progression from peaceful challenge to violent challenge is more frequent in developing countries, supporting Huntington's thesis (1968:47) that institutional development is necessary to mediate domestic conflict. While actual government coercion was found to have a weak, curvilinear effect on all four instability indicators in the global sample, (Peaceful Challenge, Violent Challenge, Regime Change and Government Change) significant regional variation was found. The relationship between acts of coercion and instability was strong, positive and linear in the sub-sample of sub-Saharan African nations which we will be using as our sample. This suggests that high levels of repression in sub-Saharan Africa do not have the deterrent effect predicted by Gurr, although the curvilinear effect was detected globally.

Lichbach and Gurr (1981) measure regime repression indirectly according to levels of intensity of past conflict (number of deaths). They assume, in agreement with Snyder (1976) and Tilly (1978) and their own empirical findings, that the extent and intensity of conflict are determined primarily by the strength of the regime's response "It is widely observed that deaths in contemporary conflicts are often the result of governmental

reactions to challengers."⁴⁴ Their results for a cross-national sample (including 11 African nations) indicate a "U-shape" relationship between repression and Internal War (man-days of rebellion) and an insignificant relationship between repression and turmoil (man-days of protest). They interpret the former finding as evidence that as

"the coerciveness of regime response to rebellion increases from low to medium levels, it discourages rebels from future action. But as coerciveness (intensity) increases from medium to high levels it spurs rebels to still greater future efforts."⁴⁵

This finding supports neither of the classical "inverted U" or "negative linear" hypotheses proposed respectively by Relative Deprivation and Resource Mobilization theories. It does support the RD's frustration-aggression theory since it would predict that reaction is positively associated with the degree of repression. The strength of this study is the careful distinction made between extent and intensity of the different forms of instability and the use of relatively small time lags (one year) to estimate the relatively short term effects of regime repression.

Muller (1985) found a strong "inverted U" relationship between regime repressiveness (measured by Gastil's Political and Civil Rights Indexes) and collective violence (measured by total number of Deaths from Domestic Violence ⁴⁶) Muller aggregates over 5 year intervals instead of 10 year intervals used by Hibbs. Although this is an improvement in terms of uncovering short-run effects, it still does not specify the reaction to the magnitude of specific acts of repression. In any case, as Muller admits, his findings may not be applicable to the African context because of the limited representation of those countries in the sample. For the countries represented in his study, Muller's findings support a version of the Resource Mobilization argument concerning costs as obstacles to mobilization (The theoretical basis of his argument is discussed more thoroughly below)

⁴⁴ Lichbach and Gurr, 1981. "The Conflict Process: A Formal Model." Journal of Conflict Resolution. Vol.25, No.1 (March):p.5.

⁴⁵ Ibid. p.24.

⁴⁶ Both variables are from Taylor, Charles L. and David A. Jodice. 1983. World Handbook of Political and Social Indicators 1948-1977. Gastil rates countries from 1 to 7 (high to low) based on the degree of political and civil liberties which exist.

The studies reported above use widely disparate indicators of both repression and collective violence, control for different factors, use diverse methodology, varying samples and time periods and, not surprisingly, produce diverse findings. One study which emerges from Resource Mobilization perspective finds support for a "negative linear" relationship between acts of repression and collective violence (Snyder and Tilly, 1972) while another finds an "inverted U" relationship (Muller, 1985). Apart from the study of Lichbach and Gurr (1981) most of the studies analyzed above suffer from crude methodology (Markus and Nesvold, 1972) or use various indirect measures of regime repressiveness (Snyder and Tilly, 1972; Hibbs, 1973, Muller, 1985) and time lags which are too large to uncover the short-run effects of specific acts of repression upon subsequent dissident reactions (Hibbs, 1973; Muller, 1985). Although some studies consider the effects of repression upon turmoil and internal war separately, (Hibbs, 1973; Sanders, 1981) others treat collective violence as a single dimension (Markus and Nesvold, 1972, Snyder and Tilly, 1972; Muller, 1985). Clearly, there is room for improvement in each of these areas.

David Snyder (1976) offers a particularly enlightening critique of analyses which emerge from Relative Deprivation and Resource Mobilization perspectives. Two main points are relevant to this study. First, Snyder argues that the empirical evidence which Gurr uses to support his theoretical claims is not convincing. Second, Snyder argues that neither the "inverted U" nor the "negative linear" hypotheses emerges directly from the theories that propose them. We will treat each criticism in turn.

For the Relative Deprivation approach, Gurr offers historical evidence and other empirical evidence to show the positive relationship between coercion and subsequent violence. Snyder argues that the extension of this to the curvilinear function is dubious. The problem is that Gurr gives examples across polities while failing to control for situations unique to each. Gurr merely cites evidence which shows that minimally repressive and highly repressive societies have less collective violence than societies with medium levels of repression. He does not cite examples where minimal or high levels of repression in one nation did not result in violence whereas medium levels of repression within the same nation did lead to violence. As a result, factors affecting the level of collective violence could be causally prior to the effects of repression. For example, a

nation in transition from an authoritarian to a more liberal political structure would reduce its reliance upon coercive authority. During such a transition, it is likely that challenges to authority would arise (Huntington, 1968; Pye, 1966). In this case, a medium level of repression of challenge may not necessarily cause an increase in violence. Rather, both the transition to a form of authority which imposes a medium level of repression and the level of challenges to authority could be simultaneously dependent upon level of development.

Concerning the theoretical basis of the RD approach to the analysis of repression, Snyder argues that both Gurr and the Feierabends are mis-representing the theory as it was presented in its original form as an individual level psychological process. Snyder points out that in its original presentation by Buss (1961), the empirical evidence he cites supports a negative linear relationship (Snyder, 1976:284), especially when the source of punishment is an authority figure. Although Gurr does use this psychological evidence as the basis of his version of the frustration-aggression concept, Snyder's critique remains an essentially empirical issue since Gurr's theory explicitly adapts the frustration-aggression argument to the case of coercion by a regime against dissidents. In this sense, Gurr's theory is not dependent upon the formulation in its original form since he modifies it to include costs and benefits which interact with the emotional aspects of the frustration-aggression theory. As a result, Snyder's critique is too narrow to undermine Gurr's theoretical position.

Against the Resource Mobilization interpretation, Snyder argues,

"even if coercion raises the cost of collective action, it may increase the propensity for such action even more. In the longer run, coercion should decrease capacity for collective action and violence. This temporal process would produce a curvilinear relationship, yet remain consistent with the mobilization argument's emphasis on organizational and political factors"⁴⁷

While this may be a valid criticism of the RM long term prediction, it is irrelevant to the short term scenario which is the focus of this paper. In the short term, the RM approach clearly predicts a negative linear relationship.

While we have concluded that Snyder's theoretical criticisms do not undermine the

⁴⁷ Snyder, David 1976. op.cit. p284.

theoretical viability of the two social movement perspectives in question, his criticism of the unidimensional treatments of repression as pre-emptive rather than as potentially reactive is useful. In response to the shortcomings of previous approaches, Snyder (1976) offers a multiple-form approach which distinguishes between both violent and non-violent as well as responsive and pre-emptive forms of repression. This approach, "incorporate(s) differences in the strength and shape of any effects of coercion on violence according to both the form of official force employed and the type of partisan action toward which it is directed."⁴⁸

Muller (1985) proposes yet another variation upon the relationship between repression and collective violence. Citing the McAdam "political process model,"⁴⁹ Muller hypothesizes that collective violence should vary curvilinearly with the degree of regime repression. The argument is as follows: The degree of repressiveness affects opportunities for individuals to act collectively by increasing costs and reducing the efficacy of collective action in light of reprisal by the regime. Therefore, in open political systems (minimally repressive) violent collective action is unlikely because popular political processes are successful (and less costly) in achieving or at least representing a group's demands. In closed political systems (highly repressive) violent collective action is also unlikely because dissidents lack the opportunity to organize collective action. Even if these opportunities are found, the costs of action are prohibitive based on the likelihood of a severely repressive response by the state. However,

"under a regime structure of intermediate repressiveness...collective political violence should be most likely. Organization is possible, the cost of collective action is not prohibitive, but opportunities for effective participation are restricted. Consequently, dissident groups operating in a semi-repressive environment may regard civil disobedience and violence as both a feasible and necessary strategy for pressing their claims to a share of influence over political decisions."⁵⁰

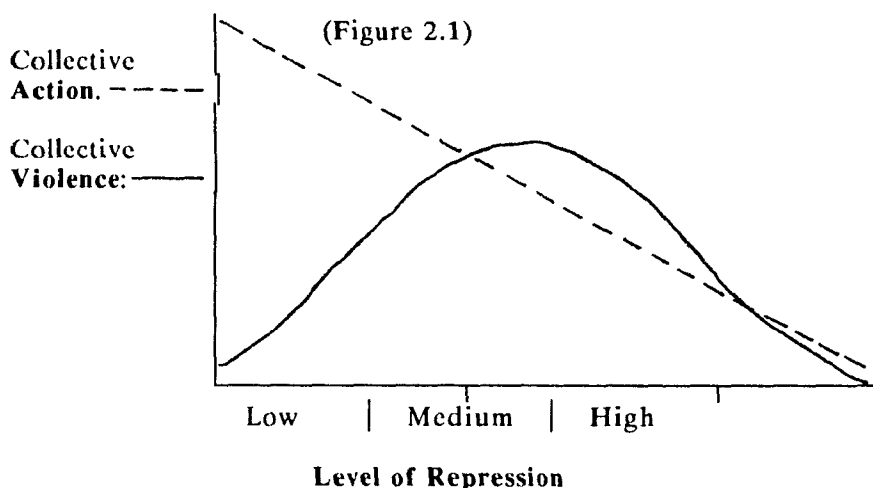
⁴⁸ Ibid. p.287.

⁴⁹ See McAdam, Doug. 1982. Political Process and the Development of Black Insurgency. (Chicago. University of Chicago Press.)

⁵⁰ Muller, Edward N. 1985. "Income Inequality, Regime Repressiveness, and Political Violence. American Sociological Review. Vol.50 (Feb): p 48.

Thus, Muller uses a Resource Mobilization argument to predict the same relationship as that proposed by Gurr using a Relative Deprivation argument! Clearly, Snyder is closer to the point by arguing that neither function emerges directly from a RM or RD perspective.

Adding to the confusion, Muller's findings call into question the relationship proposed by Tilly concerning collective violence as a by-product of collective action. As the Figure (2.1) shows, a high level of collective action in a state which is minimally repressive could reasonably be expected to occur if by 'action' we include institutionalized processes such as political parties, referenda, rallies etc.⁵¹ The availability of collective action eliminates the need for collective violence in minimally repressive systems since the former is more costly in terms of resources and risk. However, at some threshold approaching the medium level of repression, collective action, like collective violence, also becomes either prohibited or ineffective compared to its costs. As a result, the utility of collective violence increases in comparison to collective action. The utility of collective violence increases until some threshold where its costs become greater than its benefits. After this point, both collective action and collective violence decline as the level of repression increases.



Lichbach (1987) extends the analysis one step further by offering a 'Rational Actor'

⁵¹ While Tilly does treat collective action and collective violence separately, he clearly assumes that violence is a direct by-product of collective action. "...Collective violence serves as a useful tracer of collective action in general." (Tilly, 1978:p.92)

model of the decision by a group to choose what form of action to pursue in achieving its goals. Elaborate econometric formulae are constructed with factors representing the costs and benefits of violent vs. non-violent tactics. According to Lichbach, the primary determinant of both costs and benefits is the response of the government or regime to previous dissident events. Lichbach predicts that dissidents change tactics in response to the immediate history of regime reaction. For example, when non-violent collective protest is met with severe repression, the rational reaction is to change tactics and pursue action which confronts the regime with a tactic predicted by dissidents to avoid the same form of repression. Historical examples are cited where opposition groups have systematically altered their tactics from non-violent protest forms to violent internal war forms or from one type of violence to another in order to maximize their benefit. Examples include the Chinese C C P.'s adjustment from failed urban insurgency to rural insurgency, the reverse scenario of the A.L.N. in Algeria in 1956, Castro's shift in the same year from failed open attack to rural guerilla warfare, and the reaction of Irish nationalists following Bloody Sunday (where a peaceful march was violently put down) from tactics of demonstration to terrorism⁵². Finally, in the southern African context, Lichbach notes the transition within the A N C. from peaceful confrontation to sabotage and terrorism following the Sharpeville massacre of 1960.

Although Lichbach's theoretical model is simplistic (and arguably unwarranted) in its assumption that 'dissidents' are a unitary entity which chooses either violent or non-violent tactics, the main point of Lichbach's argument is illuminating: that repression itself can lead to either escalation or de-escalation of violence depending on which form or tactic is being repressed. Predicting escalation or deterrence solely from the level of previous repression is an over-simplification of the actual process.

4. Conclusion.

The empirical evidence concerning the relationship between repression and collective violence is inconclusive. Neither Resource Mobilization nor Relative

⁵² This transition is one in a long historical sequence from peaceful attempts at gaining accommodation to focused acts of internal war (Buckland, 1981:156-158).

Deprivation approaches achieve a consensus on either the effects of repressive capacity or actual acts of repression. Snyder (1976) and Lichbach (1985) offer criticisms and suggestions as to why both positive and negative as well as linear and curvilinear (and combinations of both) functions have been observed. Lichbach's 'Rational Actor' model challenges the 'black box' approaches which measure aggregate levels of repression and violence without considering the tactical choices being made by regimes and dissidents. Snyder also stresses the importance of considering the focus or purpose of action being initiated by regimes and dissidents. Previous approaches also fail to account for the short term relationship between repression and reaction by dissidents (Sanders, 1981:103). While we do not have sufficient data to specify the targets of repression, we do have data which reveals the short-term sequences and timing of both repressive and dissident acts. This approach should be useful in partially resolving the confused findings of previous research. While it is clear that specifying the function between different forms of repression and violence is not sufficient to resolve the overall debate between RD and RM schools concerning the causes of collective violence, we can control for the effects proposed by each to be important in the transition from repression to collective violence.

III. Proposed Hypotheses and Methods of Analysis

III-A Hypotheses:

1. **Inverted "U":** Both Relative Deprivation theorists (Gurr, 1970; Feierabends, 1966, 1972) and one theorist testing a version of a Resource Mobilization hypothesis (Muller, 1985) predict that regime repressiveness and collective violence are related curvilinearly. Thus we want to test the hypothesis that:

IU: The likelihood of an act of Turmoil or Internal War occurring should be greater following a medium level of repressiveness than following either a low or high level of repressiveness.

Beyond the bivariate relationship between repression and violence, Relative Deprivation theorists predict that collective violence increases with the level of grievances against a government or regime. As a result we test the hypothesis that:

RD1: Acts of Repression should be more likely to lead to both Turmoil and

Internal War in societies where deprivations are at a high level.

2. Negative Linear: Resource Mobilization theorists (Tilly, 1978; McCarthy and Zald, 1977; Muller, 1985) argue that repression increases the costs of both organization and participation in collective action. Snyder and Tilly (1972) specifically argue that collective violence is a by-product of collective action and therefore that both are affected negatively and linearly by levels of repression. Thus, we want to test the hypothesis that.

Negative Linear: The likelihood that low levels of repression lead to either Turmoil or Internal War should be greater than the likelihood that medium levels lead to either dimension of collective violence. And, the likelihood that medium levels of repression lead to Turmoil or Internal War should be greater than the likelihood that high levels lead to either dimension of collective violence.

Muller (1985) agrees that repression affects costs and opportunities as well, but that collective violence is an alternative strategy of action rather than a direct by-product of escalated collective action. As a result, this version of the Resource Mobilization approach predicts the same "inverted U" relationship as IU above.

In terms of factors related to overall levels of collective action and collective violence, Resource Mobilization theorists predict that conditions affecting the organizational ability of dissidents should positively affect the level of both collective action and collective violence. We test the hypothesis that.

RM1: The likelihood that acts of repression will lead to either acts of Turmoil or Internal War should be greater in societies where dissidents are able to organize and mobilize resources.

3. RD, RM Synthesis: The Role of Ethnic Grievances: Morrison and Stevenson (1971), Hechter (1975), Hewitt, (1977), Hannan and Carroll (1981) and Sanders (1981) argue (with evidence) that ethnic divisions exacerbate political conflict since these divisions usually imply inequalities along ethnic lines. Hannan and Carroll specifically argue that when ethnic divisions are paralleled by political divisions, states are particularly unstable. Thus we test the hypothesis that:

EPD: The likelihood that acts of repression lead to either acts of Turmoil or Internal War should be greater in nations where the ratio of ethnic to political divisions is high.

4. Regime Type: If, as Wolpin finds (1986:115-117), military regimes are more repressive, (in agreement with Nordlinger, 1970; McKinley and Cohen 1976; Tannahill, 1976 and others) the question remains whether the propensity of the military to use force has an effect on the transition from repression to Turmoil or Internal War, apart from its effect on level of repression. Since military regimes are more reliant upon force than civilian regimes, we would predict that:

RT1: The likelihood that acts of repression lead to either acts of Turmoil or Internal War should be smaller for military regimes than for civilian regimes.

Since 8 of the 38 nations in the sample changed regime type during the sample period, it is necessary to hypothesize separately about the effect of this type of change. To extend the previous hypothesis to the case of a transition, we would predict that:

RT2: The likelihood that acts of repression lead to either acts of Turmoil or Internal War should be smaller for regimes which change from military to civilian status than for those which changed from civilian to military status.

Political party structure is another feature which has been found to affect levels of instability in Africa (Unger, 1985). A particular feature of political change in Africa is the voluntary elimination of political parties in favour of a one-party structure with built-in representation for various ethnic and political factions. Examples include Zimbabwe, Kenya, and Tanzania (Unger, 1985). This has been a reaction to the violent struggles which have occurred among political parties representing ethnic factions. While we have already controlled for the effect of the interaction between ethnic and political fractionalization, it would be useful to also control specifically for the effects of single vs. multi-party political structures. If we assume that single party states are products of accommodation among political factions, we would predict that.

RT3: The likelihood that acts of repression lead to either Turmoil or Internal War should be lower in one-party states than in multi-party states.

This should be especially true in the case of Turmoil since the effect of multi-party politics should increase the likelihood of protests and riots around election times. Unfortunately, one of the major drawbacks of the present study is the inability to control for the specific effects of election timing upon the levels of instability in each country. Nevertheless, a portion of this effect should be picked up by the variable measuring

political party structure, i.e., violence surrounding elections should be greater in multi-party states since, by definition, such states should contain more formal political rivalries than one-party states.

5. World System Position: Dependency theorists argue that nations which occupy the periphery of the world economic system suffer from effects of both political and economic control by core nations (Wallerstein, 1974; Chirot, 1977; Jackson et al., 1978, O'Donnell, 1979; Bollen, 1983; Timberlake and Williams, 1984). Timberlake and Williams report evidence to suggest that such control makes the internal political system more exclusive to non-elites and further, that the level of foreign investment penetration indirectly affects the level of regime repressiveness through its effect on political exclusion (see also London and Robinson, 1989). As a result, we would predict that:

W.S.P.: The likelihood that acts of repression lead to either acts Turmoil or Internal War should increase as the level of potential exploitation by trading partners increases.

III - B. Methodology:

This section will describe the variables, sampling design, and statistical techniques which will be used to test these hypotheses.

1. The Sample: 38 sub-Saharan African countries are included in the sample. The main criterion for inclusion was the existence of data on the covariates entered into the model (See Appendix 1 for a list of all countries). Two countries, Mozambique and Angola were excluded from the study because of a lack of data on key variables. This is unfortunate since their inclusion in the block of countries which were experiencing Internal Wars of liberation would have increased the number of observed events considerably. Nevertheless, the sample represents the most and least repressive, richest and poorest nations, military and civilian regimes, the two main development orientations (Wolpin, 1986:155), one-party and multi-party states, the spectrum of ethnic and political diversity, and violent and peaceful nations.

2. Time Period: All events of repression, turmoil and Internal War which occurred between 1-1-1975 and 31-12-1982 were included in the analysis as the origin and

destination states for the proportional hazards model. The covariates which come from the World Handbook of Political and Social Indicators III are from 1975 or 1978, the latest update of the aggregate data file. This poses a problem in that changes in these values which occur between 1975 and 1982 are not taken into account. While variables such as GNP/Capita, Ethno-linguistic Fractionalization, Political Party Fractionalization, and Development Orientation do not change rapidly, or do not deviate from African-wide rates of change, other variables such as Military Regime Dummy, and Inflation could change significantly in the short term. Where possible, averages were computed between time periods which extended beyond 1975. For example, Civil Rights was averaged across the 1975-1979 period, and Inflation was averaged across the 1973-1983 time period for which it was available.

The classification of regime or government type was also variable during the sample time period. These countries were classified into categories representing constant civilian, constant military, civilian to military, and military to civilian in order to distinguish between forms of authority. Even so, the actual timing of the process of transition is theoretically important to our analysis because the events leading up to a transfer of power will be included as origin and destination states in the analysis. By omitting the actual timing of these transfers we are obviously losing important data. However, since the focus of the research is not transfers of power but the relationship between repression and collective action/violence, this complexity will only be addressed generally. For this reason, dummy variables are used to represent the different regime types and different regime transitions.

3. Event - History Analysis - - The Proportional Hazards Model: We concluded in the last section that previous approaches to the relationship between repression and collective violence fail to account for the actual sequences of transitions from one type of event to another. By aggregating the frequency and/or severity of events over 1, 5, or 10 year periods, previous researchers have not been able to answer the question, "Which came first?" i.e., the repression or the event? (Sanders, 1981:42). Analyzing event histories allows us to more carefully specify the relationship between repressive and violent events

by estimating the probability of events occurring in a particular order. In order to do this we will analyze the probability of **transition** from the time of an act of repression to the time of an act of Turmoil or Internal War. Because there was insufficient information on the targets of repression and the participants in dissident acts, we chose to limit the interpretation of hazard effects to those which occur within 30 days of an event of repression.⁵³ The primary reason to limit the analysis to this short period is simply because it becomes more doubtful that an event which occurs beyond this time is in fact a reaction to the previous level of repression.⁵⁴

The form of the model being estimated is called a Markov renewal or semi-Markov form of Cox's proportional hazards model (Allison, 1984:57).⁵⁵ It has the form (from Allison):

$$\log r_{ij}(t) = a_{ij}(t-t') + b_{ij} \cdot x$$

"where x represents a set (vector) of explanatory variables, b_{ij} represents a set (vector) of coefficients, t' is the time of the last transition, and $a_{ij}(t-t')$ is some function (as yet unspecified) of the time since the last transition."⁵⁶ The goal of the proportional hazards model is to estimate the effect of covariates (independent variables) upon the transition rate between an origin state (an act of repression) and a destination state (an act of Turmoil or Internal War).

The assumption involved in this type of model is that the likelihood (or hazard) of a given event occurring is equal for each member of the sample at a given point in time. From this baseline, the effects of covariates upon the hazard rate can be estimated. When

⁵³ hazard estimates of 60 and 120 days were estimated and are produced in appendix 4.

⁵⁴ Robert W. White uses similar justification for a one month lag from an event of repression in his study of conflict in Northern Ireland. "The choice of a one-period lag is made with the assumption that.. one month was the approximate time needed for an individual to respond to an event." (1989:1285).

⁵⁵ The proportional hazards model will be estimated with the procedure called, "Proportional Hazards General Linear Model" or PHGLM, developed by Frank E. Harrell, Duke University Medical Center. The program is a part of SAS institute User's Group International (SUGI) Version 5

⁵⁶ Allison, Paul D. 1984. Event History Analysis: Regression for Longitudinal Event Data (Beverly Hills: Sage Publications) p 58.

no covariates are entered into such a model, the estimates reduce to Kaplan Meier estimates of the baseline transition rate from the origin state to the destination state. The plots from these estimates can then be analyzed to reveal the shape that the likelihood function takes over time. This procedure will be utilized in order to test the RD and RM assumptions concerning the bivariate relationship between repression and dissident reaction.

The form of our data and the model we are estimating presents three problems which require attention (appendix 2 presents an example of the form of data we are analyzing):

Repeated Events The fact that each type of event can occur more than once presents a problem. Successive events (such as two acts of Internal War) can follow the same origin state (an act of repression). As a result, it is not clear if the time from the origin state to the first event is statistically independent from the time of the origin state to the time of the second event. The solution to the estimation problem is to divide each country's event history into separate observations for each transition from an act of repression to either an act of Turmoil or an act of Internal War. The problem with this approach is that one must still assume that sequential observations are statistically independent. In other words, we must assume that the hazard rate does not increase from the first event to the second, or from the second to the third. Lichbach and Gurr (1981) have shown that this assumption is probably unwarranted in an analysis of protest or rebellion. They find significant short-term persistence of the extent and intensity of both protest and rebellion for a cross-national sample from 1961-1970 (1981:19-21). Therefore, to assume that a second or third event of repression would not be more likely to lead to a dissident response than a first event is probably unwarranted. Recognizing that we are probably violating the independence assumption, we follow Allison's suggestion (1984:54) for limiting its consequences. This involves including variables in the model which account for the frequency of occurrence of the relevant events in the country's previous history. As described below, variables will be included indicating the total number of each destination event type (ie, the frequency of occurrence of acts of Turmoil and acts of Internal War) over the 10 years prior to the beginning of this study.

Time Dependence of Transitions. Interpretation of the hazard rates in this model assumes that the probability of an event of Turmoil or Internal War is not dependent upon time since the event of repression. In other words, we have no a priori basis for believing that the likelihood of an event changes from one day to the next during the month following an event of repression. The hazard rate may well decrease after this month or even after a few days, but without any theoretical basis for predicting that the probability is a decreasing function of time since event of repression, we are forced to assume that the hazard rate is constant.⁵⁷

Simultaneous Occurrences. This refers to the occurrence of different events on the same day. Without knowing the exact time at which an event occurred, it is impossible to tell which event came first. As a result, simultaneous events such as a protest and an event of repressive severity which occur on the same day will not be considered as an origin to destination interval with 0 as the number of days between events. Instead, such occurrences will be deleted from the sample. While this results in a loss of data, it is unavoidable since including them as either repression to violence or violence to repression sequences would require an arbitrary distinction.

Censoring. Since each country's history of events has been divided into separate observations, the first observed destination event (Turmoil or Internal War) will be censored "on the left" and the final observed origin event will be censored "on the right." This means that the first destination event will not be preceded by its hypothesized cause. Likewise, the final observed origin event will be stranded, i.e., its effect cannot be confirmed because there is no event following it. Because our model specifies a hazard rate which depends on time (i.e., days since previous event), we again follow Allison's suggestion (1984:57) of discarding the first destination event for each country. "While this represents a loss of information, it should not lead to any biases."⁵⁸ The right censoring

⁵⁷ This is especially true since RD and RM schools predict opposite reactions in terms of time from repression. An RD explanation would assume that the function would decrease, i.e., frustration-aggression at its highest immediately following the event (Gurr, 1970:350-351). An RM explanation would assume that reaction to repression would be dependent upon organization and mobilization (Tilly, 1978) and would therefore not be as dependent upon time since the event.

⁵⁸ Ibid p 57

problem is handled automatically by PHGLM which deletes such observations.

4. Origin States - - Acts of Repression: The form of event history being used in this study requires that we distinguish between origin states and destination states. As discussed earlier, the goal of the proportional hazards model is to estimate the effects of covariates on the hazard or probability of transition from one event to another. The origin and destination states can be thought of roughly as independent and dependent variables. For example, we would hypothesize that the occurrence of an act of Internal War or protest/riot is dependent upon the occurrence of an act of repression, controlling for the effects of other covariates. As a result, acts of repression are considered as 'origin states' while actions by dissidents which follow acts of repression are considered as 'destination states'.⁵⁹

In measuring repression, we combine part of Snyder's multiple-form framework (1976:284-285) and Lichbach and Gurr's method of measuring repression by the severity of previous encounters between a regime and a group of dissidents (1981:5). We also borrow from Hibbs' (1973) use of the variable measuring 'Negative Sanctions' imposed by the regime. This approach assumes that the regime's response is the primary determinant of the severity of a given conflict.⁶⁰

Snyder suggests that any measure of repression should distinguish between non-violent pre-emptive repression and violent pre-emptive as well as non-violent reactive and violent reactive repression. Each form should have a different effect upon the cost of mobilization and the choice of strategy which any group of dissidents will choose. While we do not have sufficient data to distinguish between pre-emptive and reactive forms specifically, we can distinguish between sanctions and acts of different levels of severity

⁵⁹ We do recognize that acts of repression might just as well be reactions to dissident behaviour and that it is therefore artificial to call such acts origin states. However, since the focus of the paper is dissident reaction rather than regime reaction, it is necessary to make such an artificial constraint. The inclusion of covariates in the model which account for the likelihood of repression should make up for the missing 'feed back' considerations of the model

⁶⁰ Lichbach and Gurr (1981:5) present evidence from one study to indicate that the ratio of deaths caused by soldiers and police to deaths caused by challengers was 2.5:1.

of conflict. In all, we will distinguish between four origin states

a. **Negative Sanctions.** (Taylor and Jodice, 1983); This is defined as "actions taken by the government to neutralize, to suppress, or to eliminate a perceived threat to the security of the government, the regime, or the state itself." We have also included acts of press censorship which are defined by Taylor and Jodice as "actions by the government to limit, to curb, or to intimidate the mass media, including newspapers, magazines, books, radio, and television." While both types of sanction could be interpreted as measures taken by the government or regime in reaction to a perceived threat, it is clear from the definitions that the purpose of such measures are pre-emptive. They are measures taken against threats in order to prevent some form of dissident behaviour.

Severity of Repressiveness Based upon the suggestion of Snyder (1976) and Lichbach and Gurr (1981) we have measured level of repressiveness according to the severity of the conflict which resulted from a given event of collective action or collective violence. A rank of severity was assigned to each of the daily events coded in the World Handbook of Political and Social Indicators III. (Taylor and Jodice, 1983) Any protest, riot, or act of Internal War (including an attack against the state, bombing, ambush, raid, assassination or its attempt, irregular executive transfer, or unsuccessful irregular executive transfer ⁶¹) was ranked according to the number of injuries and deaths reported for that event. Because a death which results from conflict is far more serious than an injury, a death was weighted as 20 times more serious than an injury. While this is an admittedly arbitrary weight, it is necessary to make some quantitative distinction between a death and an injury.

b. **Low-Level Repressiveness** Any protest, riot or act of Internal War which reported no deaths or injuries was coded as a low severity event. In agreement with Snyder (1976) we use this origin state to distinguish between non-violent and violent repressiveness. However, unlike the Negative Sanctions category, this category signifies

⁶¹ Following the work of Morrison and Stevenson (1971:347-350), and Hibbs (1973:16), we treat acts of collective action and violence along two dimensions, Turmoil and Internal War. Even though Hibbs treats coups separately, it is not clear that attempted power seizures should be considered separately from other attacks by insurgents. Since we do not have information on the motives of any form of attack against the state, it is safest to lump them together and not make any assumption about such motives.

a reactive event since it represents, by definition, the state's actions immediately following a given dissident event.

c. **Medium-Level Repressiveness.** After separating events which resulted in no deaths or injuries, the remaining events which did result in deaths or injuries were divided approximately in half to create the medium and high categories. As a result, any protests or riots which resulted in from 1 injury to a combination of 2 deaths/42 injuries were grouped in the medium category. Any act of Internal War which resulted in from 1 injury to a combination of 4 deaths/84 injuries was also grouped in the medium category. There were a total of 159 events in this category.

d. **High-Level Repressiveness.** Any protest or riot which resulted in a combination of 3 deaths/60 injuries or more was grouped into the high category. Any act of Internal War which resulted in a combination of 5 deaths/100 injuries or more was also grouped into the high category. There were a total of 171 events in this category.

5. Destination States: These are the instability events whose timing is alleged to be affected by the origin state and the covariates entered into the model. Political strikes were not included in the group of dissident events because of the difficulty in classifying them as dissident or legitimate in the eyes of the regime or state. While this is somewhat of an arbitrary omission considering the ambiguous nature of protests, for example, the occurrence of political strikes were infrequent and therefore should not significantly bias the results.

a. **Turmoil (PRORIOT)** This includes any event coded by Taylor and Jodice (1983) as a protest: "a non-violent gathering of people organized for the announced purpose of protesting a regime, a government, or one of its leaders, its ideology, policy, or intended policy, or its previous action or intended action." It also includes any event coded as a riot: "a violent demonstration or disturbance involving a large number of people." While the distinction between these two types of events could be relevant to any study which attempts to analyze collective political behaviour, we follow the strategy of Hibbs (1973: 16) by grouping riots and protests together as forms of collective protest.

b. **Internal War (IW)** This includes any event coded by Taylor and Jodice (1983)

as an armed attack: "an act of violent political conflict carried out by (or on behalf of) an organized group with the object of weakening or destroying the power exercised by another organized group." It also includes events coded as "a bombing, ambush or raid" as well as attempted and successful coups and assassinations.

6. Covariates: These variables account for characteristics of a given country which are hypothesized to affect levels of political instability or collective violence. The covariates will be described according to the theoretical perspective from which they emerge.

External Factors:

a. Concentration of Export Receiving Countries 1975 (CONEX). Source: Taylor and Jodice, 1983. This variable measures the degree to which a country's exports are dispersed among trading partners. "Concentration is higher the fewer the export divisions and the greater the value of the largest divisions" (1983:89). Since all of the countries in our sample are considered "peripheral" to the world economy, we use export concentration to differentiate between degrees of dependency. Following the reasoning of Timberlake and Williams (1984) and Bollen (1983:476) we would predict that the flow of exports to a small number of countries would make that country more prone to control by foreign nationals. Concentration ranges from 6.5 in countries like Kenya and Tanzania to a high of 55.5 in Niger. The mean score is 19.65.

b. Development Orientation (DEVOR). Source: Wolpin, Miles (1986:155). Wolpin defines countries practising "open door" development as those who favour monopoly capitalism. These countries are alleged to be more prone to control by transnational corporations and "as long as indigenous officials acquiesce in such relations, their domestic and even foreign policy choices tend to **depend upon** favourable reactions by such corporations and associated international financial institutions" (1986:155). The alternative in the sub-Saharan African context is "state capitalism." This "involves attempts to radically reduce dependency (enlarging policy alternatives) and simultaneous promotion of

nationally controlled industrial development."⁶² Dependency theorists would predict that "open door" regimes would be more prone to repressiveness. It remains to be seen if this affects the transition from repression to collective action or collective violence. Of the 38 countries in the sample, 27 are classified as "open door" and 11 as "state capitalist." None of the countries in the sample were classified as "state socialist."

Deprivation Indicators:

The limitations of the data force us to use absolute measures of economic prosperity as the primary deprivation indicators. The obvious problem with these indicators is that they give no indication of expectations which are necessary to evaluate the 'relative' nature of their effect. As a result, a variables measuring economic performance could cause expectations to outrun the capabilities of the economy, leading to dissatisfaction and a greater likelihood that dissidents will respond aggressively to acts of repression. Conversely, favorable economic performance could also enhance the legitimacy of the regime and make reaction to repression less likely. This point emphasizes the necessity of measuring relative deprivation with variables that account for both expectancies and capabilities.

a. **GNP/Capita growth rates 1970-1978 (GNPCG)** Source: Taylor and Jodice, 1983. This represents the annual average growth rates in \$U.S. using an exchange rate conversion. We would predict that the slow or negative growth rates would be an indicator of grievances which could be used by dissidents to justify acts of protest or violence, especially as a frustrated reaction to acts regime repression. Growth rates ranged from a low of .20 for Liberia, .70 for South Africa to highs of 9.3 and 13.20 for Lesotho and Botswana respectively. The mean growth rate was 2.64 % per year.

b. **Annual Inflation Rate 1973-83 (INFLAT)**. Source. Hodd, Michael--African Economic Handbook, 1986. This variable is weighted by current Gross Domestic Product in \$U.S. It is used as an indicator of grievances along with GNPCG because it is a better

⁶² Wolpin, Miles W. 1986. "State Terrorism and Repression in the 3rd World" in Stohl, Michael and George Lopez (eds.) Government Violence and Repression: An Agenda for Research. (New York: Greenwood Press).p 155.

indicator of the effect of economic stagnation upon average consumers rather than the state of the national economy. This is necessary for the Relative Deprivation approach which assumes that collective discontent results from aggregate feelings of individual deprivation.⁶³ Annual Inflation rates ranged from 4% (Guinea) to 51.6% (Ghana) and 62.7% (Uganda). The average inflation rate was 14.8% for the total sample.

c. **Ethnic/Political Division Ratio (ETHPOL)** This is a multiplicative interaction term between variables measuring ethno-linguistic fractionalization and political party fractionalization (both from Taylor and Jodice, 1983). For each variable, a score of 0 indicates complete homogeneity (ethnicity) or complete control of political seats (political). Conversely, a score of 100 represents extreme diversity or heterogeneity. This interaction term measures the combined effects of political party diversity and ethnic diversity. It is being used as an indicator of a specific form of ethnic competition which is alleged to increase as the ratio of ethnic groups to political parties increases (Morrison and Stevenson, 1971; Hannan, 1979; Nielson, 1980). For example a nation which has a score of 90 on the ethnicity scale and a score of 10 on the political scale would have a score of $90 \times 10/100 = 9$ on the interaction term. Conversely, a nation with two 90 scores (indicating heterogeneity on both scales) would have a score of 81 on the interaction term. The second country would be hypothesized to have a greater likelihood of ethnic conflict because the ethnic divisions are represented in the political power struggle. This interaction term captures this hypothesized effect.

Resource Mobilization Indicators:

a. **Ethnic Fractionalization (EFRAC)** Source: (Taylor and Jodice, 1983). As described above, this variable measures the degree of heterogeneity of a country's ethnic composition. It is a proxy for the degree of categorical potential for organization which

⁶³ One limitation of the event-history approach being used in this study is that covariates must be constant for each country over the time period 1975-1982. This forces us to include indicators which are averaged over that time. As a result, an indicator like inflation rate is used to predict the occurrence of an event in 1975 even though it is based upon rates of inflation which occur in the future. This is a serious short-coming but should not affect the estimates significantly since the rates do not change drastically from year to year.

exists in a country (Tilly's CATness). Since a low degree of fractionalization indicates a small number of extensive categories which should be more successful in mobilizing support for collective action, we predict that this variable will have a negative effect on the likelihood of violence. The scores range from a low (meaning homogeneous) score of 3.6 for Burundi to a high (meaning heterogeneous) score of 92.6 for Tanzania. The mean score in the sample was 65.2 indicating that the sub-Saharan African states have considerable internal ethnic divisions.

b. Political Party Fractionalization 1975 (PFRAC). Source: (Taylor and Jodice, 1983). As described above, this variable measures the degree to which seats in parliament, legislature or national assembly are divided among political parties (a proxy for Tilly's NETness). A low score indicates a political system which is represented by a small number of large parties. Theoretically, these parties should have more extensive network formation than small parties in a more fractionalized structure. As a result, we also predict that this variable will negatively affect the likelihood of violence, through its effect on mobilization. 23 of 38 countries in the sample had scores of 0 indicating no political parties. 4 of these 23 were simultaneously labelled as multi-party states, indicating either coding error or a situation where political parties exist but do not have any seats in the legislature.

A high score indicates that many political parties are represented in the national government. The highest score was 100 (Ethiopia) followed by 70 (Central African Republic) and 68.3 for Zimbabwe. The mean score in the sample was 18.76 which indicates that the sample is far more diverse ethnically than politically.

c. Organized Labour as % of Total Labour Force 1975 (ORGLAB). Source: Taylor and Jodice, 1983. This variable measures the percentage of all workers who belong to unions. Union membership implies access to resources needed for organization of collective action. While it is a direct measure of the propensity for engaging in actions such as strikes, it can be considered an indirect measure of the ability of a group to engage in a protest, demonstration or even more militant forms of action which we have defined as Internal War. It is also an indicator of existing networks (NETness). Niger, Lesotho, and Somalia had no unionized labour, while Guinea reports 100% unionized labour. The

mean percentage of unionized labour was 17.9%.

d. Civil Rights Index Avg. 75-79. (CRIGHT). Source. Taylor and Jodice, 1983.

"Civil rights are defined as the rights of the individual vis a vis the state. Particularly important are the freedom of the press and the other mass media and the independence of the judiciary. Countries are ranked from 1 to 7, i.e., from those with the greatest amount of civil rights to those with the least."⁶⁴

We follow the example of Sanders (1981:177) who uses press freedom as a proxy for measuring political institutional development in less developed nations. Muller (1985:50-51) uses the Political and Civil Rights indexes to measure the opportunity costs faced by dissidents in organizing collective action against a regime or government. The lowest score (indicating the most civil rights) was a 2 reported for Gambia. Eight countries achieved the maximum score of 7 (indicating the least civil rights). They included Mali, Guinea, Ethiopia, Somalia, Central African Republic, Equatorial Guinea, Benin and Uganda. The mean score was 5.

7. Historical, Political, Economic Attributes:

a. Length of Independent Statehood 1975 (DSLIB). Source: (Unger, 1985). This variable measures the length of independent statehood based on the number of months since independence or liberation. The length of independence is reported as the number of months since independence on the date of the first observation for each country. Countries which achieved independence after this date were given a negative value corresponding to the number of days from the first observation to date of independence. South Africa is the only country in the sample which had not achieved independence during the sample period.⁶⁵ It was assigned a value considerably smaller than that of Zimbabwe, the most recently independent nation. Although this is an artificial attribute, it allows us to distinguish between old, new, and not yet independent countries. The overwhelming majority of the countries in the sample (33 of 38) achieved independence

⁶⁴ Although we take this variable from the World Handbook of Political and Social Indicators, its original source is: Raymond D. Gastil, "The New Criteria of Freedom," Freedom at Issue, XVII (January-February, 1973):20-23. This variable is available for the years 1973-1979.

⁶⁵ See footnote 1, p 1.

between 1960 and 1965. Although there appears to be a lack of variation on this variable in terms of the number of countries which achieved independence around the same time, we can predict in advance that its effects will be important since two of the four 'Civil War' countries (described below) had not achieved independence at the beginning of the sample time period.

b. **Civil War Dummy (CIVWAR).** Source: (Unger, 1985). Four of the 38 nations in the sample experienced either a civil war (Chad, Ethiopia) or a protracted independence movement (Zimbabwe, South Africa) during all or a substantial part of the sample time period.⁶⁶ Not surprisingly, these nations contribute a disproportionate number of observations of Internal War. In fact, these four nations account for 334 of the 459 acts of Internal War (72.7%) which occurred for all 38 nations from 1975 to 1982. They also account for 175 of the 280 acts of Turmoil which occurred (62.5%). This variable should have a significant effect on transitions from all models, but more importantly, should control for the effects of civil war on domestic political struggles.

c. **Political Structure Dummy (PLSTRUC).** Source: (Unger, 1985). This variable distinguishes between one-party and multi-party political systems. There are 25 one-party states and 13 multi-party states in the sample.

d. **Regime Type (REGTYPE).** Source: (Unger, 1985). This variable distinguishes between Military and Civilian regimes whose status did not change from 1975 to 1982 as well as regimes which changed from military to civilian, and those which changed from civilian to military. There are 12 constant military regimes, 18 constant civilian regimes, 3 which changed from military to civilian (Benin, Congo, and Togo ⁶⁷) and 5 which changed from civilian to military (Central African Republic, Equatorial Guinea, Guinea, Liberia, and Nigeria).

e. and f. **History of Instability 1965 to 1975 (TPR and TOTATK).** Source:

⁶⁶ Zimbabwe achieved formal independence on April 18, 1980 and was therefore involved in an independence struggle for over five years of the eight which are covered in this study.

⁶⁷ Although Sudan changed from military rule to a "centralized presidential regime", General Jaafar el Nimeiry remained in control throughout the 75-82 period. (Unger, 1985:372-378).

(Created from W.H.B.III). These two variables are aggregate counts of the number of protests/riots (Turmoil) and events of Internal War respectively, which have occurred in each country from 1965 to 1975. At the suggestion of Sanders (1981:70-79) we use this variable to contextualize instability according to each country's own history of violence. Their inclusion is also necessary in order to solve the problem of repeating events which was described in the section above on event-history.

South Africa, Zimbabwe, and Nigeria had the highest number of events coded as Turmoil (58,36,35 respectively) while 7 countries reported no such events from 1965 to 1975. These countries were Gambia, Liberia, Gabon, Central African Republic, Rwanda, Somalia, Botswana, and Swaziland. The average number of Turmoil events was 7.2 over 10 years. Nigeria, Zaire, Sudan and Zimbabwe had the highest number of events coded as acts of Internal War (153,73,41,39) while 9 countries reported no events. The average number of acts of Internal War was 12.4 over 10 years.

g. **Gross National Product per Capita 1975 (GNPC).** Source: Taylor and Jodice, 1983). This is measured in \$U.S. with an exchange rate conversion. It is included in order to control for the effects of level of economic development. The highest GNP/C's were reported for Gabon \$2,540 and South Africa \$1,270. These were considerably above the sample mean of \$351.32. 15 of the 38 countries had GNP/C's of less than \$200.

h. **Population 1975 (LPOP).** Source: Taylor and Jodice, 1983). This is the natural log of population in millions. It is used to control for country size.

IV. Results from Eight Event - History Models

In this section, each hypothesis will be restated and then the results of the model will be discussed separately for the two dimension of violence, Turmoil and Internal War.

Inverted "U": The likelihood of an act of Turmoil or Internal War occurring should be greater following acts of medium-level repression than following acts of either low or high-level repression.

Conversely, Negative Linear The likelihood that acts of low-level repression lead to either Turmoil or Internal War should be greater than the likelihood that acts of medium-level repression lead to either dimension of collective violence. And, the likelihood that acts of medium-level repression lead to Turmoil or Internal War should be greater than the likelihood that acts of high-level repression lead to either dimension of collective violence.

Comparing the hazard rates (Figures 4.1 and 4.2) for the transition from different levels of repression indicates that the overall likelihood of a transition from each level of repression to either Turmoil or Internal War is relatively small. For instance, the largest hazard rate in any of the transitions is .030 for the transition to Turmoil on the first day following a Sanction. This means that the probability of an act of Turmoil occurring on the day after a Sanction is 3% over the entire sample. In this example, the hazard rate decreases to .003 by the 30th day, meaning there was a .3% chance of an act of Turmoil occurring on the 30th day. The small hazard rates are not surprising considering the obstacles to mobilization which any movement or group faces (Olson, 1965, Gamson, 1975; Oberschall, 1973, 1979).

Turmoil Visual examination of the plots of the hazard rates over the first 30 days from an event of repression shows that the primary differences between the hazard rates show up in the first ten days although there is an interesting jump in all three hazard rates on day fifteen (figure 4.2). On the first day the hazard of transition to an event of Turmoil is higher following an act of medium-level repression than the hazard following either acts of low or high-level repression. However, on the second day, the hazard from acts of low-level repression increases to .0165 which is higher than any daily hazard rate from the medium-level for the entire month. Besides the fact that the curve for medium-level repression declines almost linearly in the first 6 days while the curve for low-level repression alternates positively and negatively, there appears to be no significant difference in the hazard rate between the low and medium categories over the first 30 days.

FIGURE 4.1
HAZARD RATES FROM THREE LEVELS
OF REPRESSION TO ACTS OF INTERNAL WAR

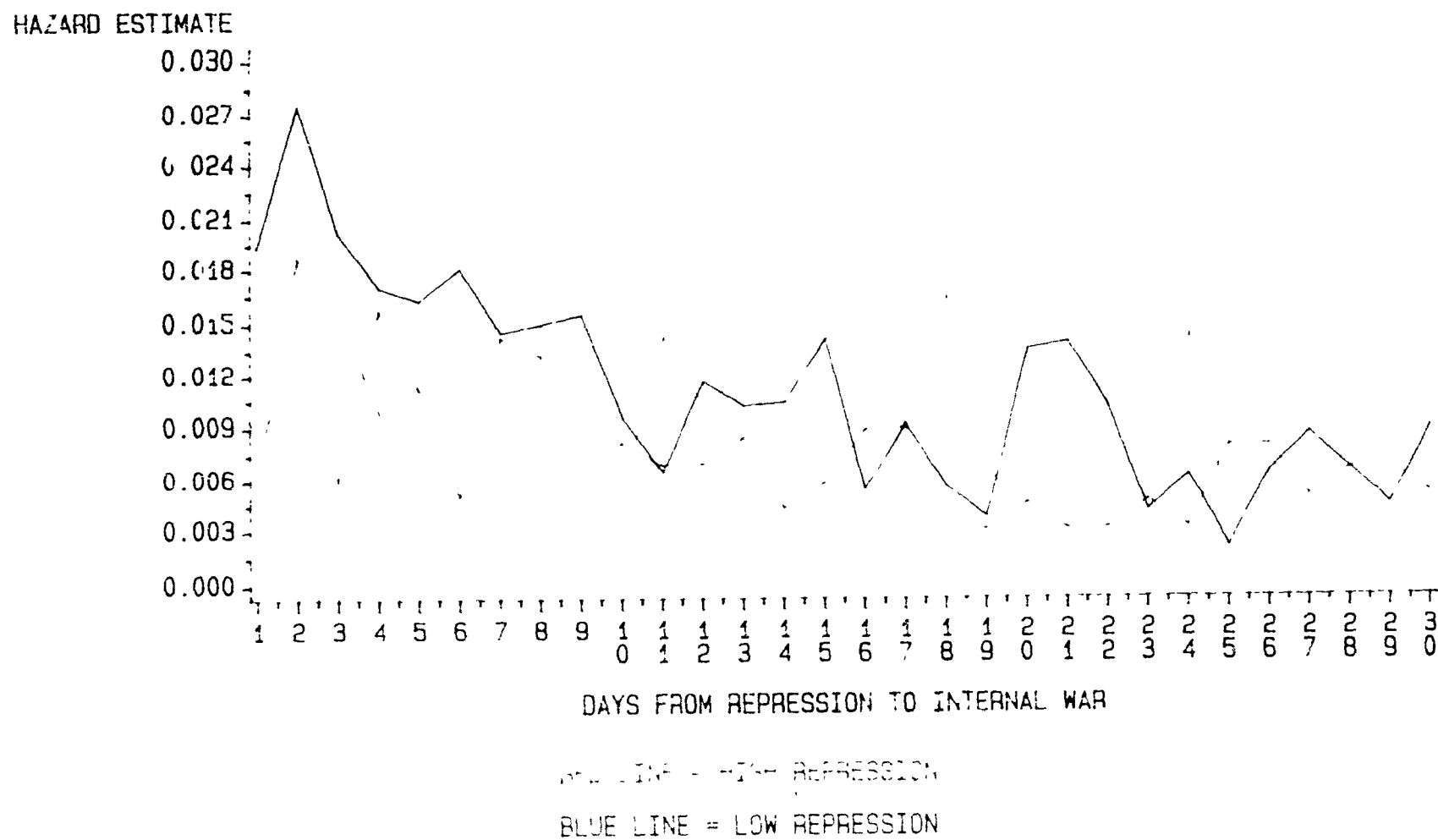
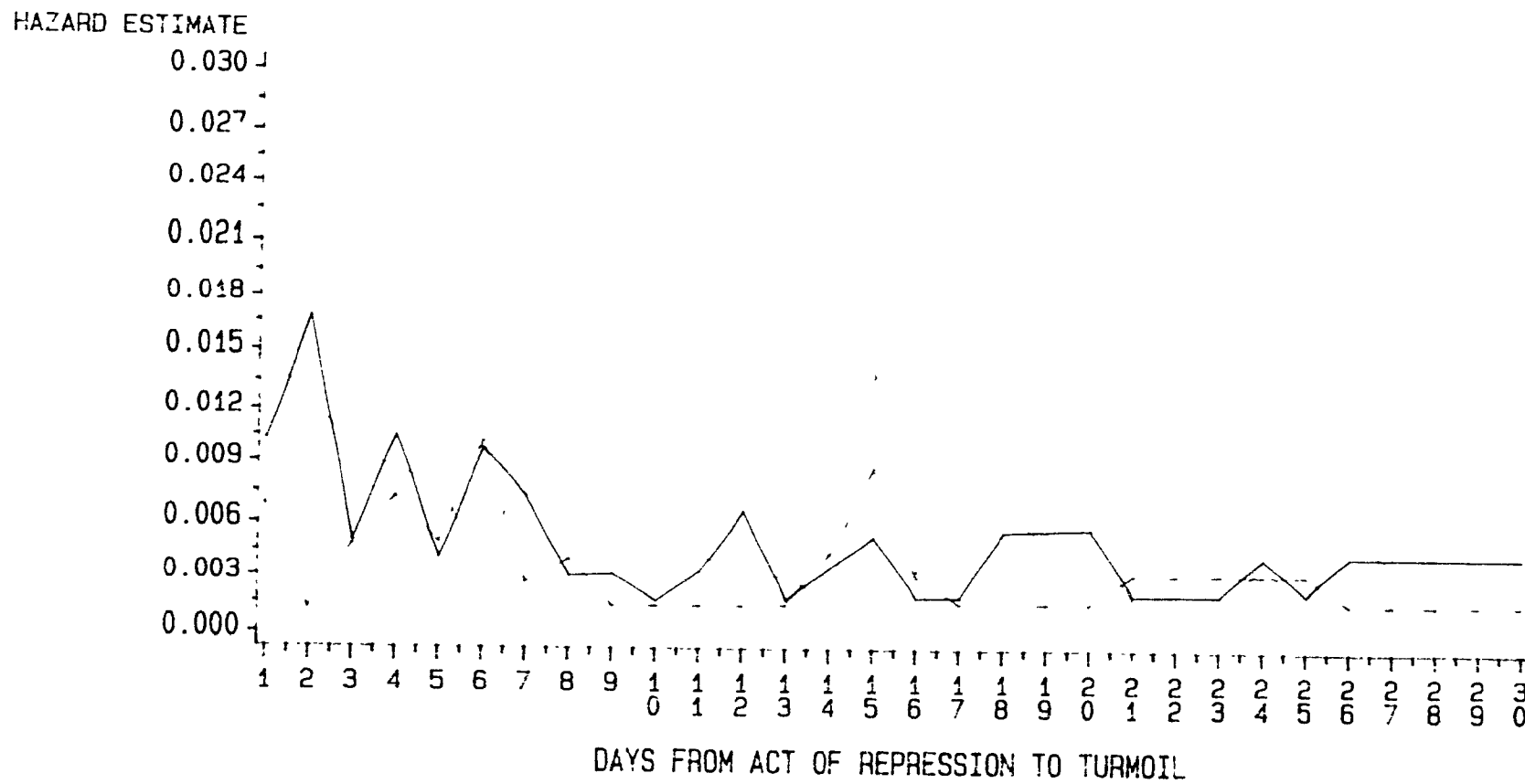


FIGURE 4.2
HAZARD RATE FROM THREE LEVELS
OF REPRESSION TO ACTS OF TURMOIL



RED LINE = HIGH REPRESSION

BLUE LINE = LOW REPRESSION

FIGURE 4.3
HAZARD RATES FROM A SANCTION
TO AN ACT OF INTERNAL WAR

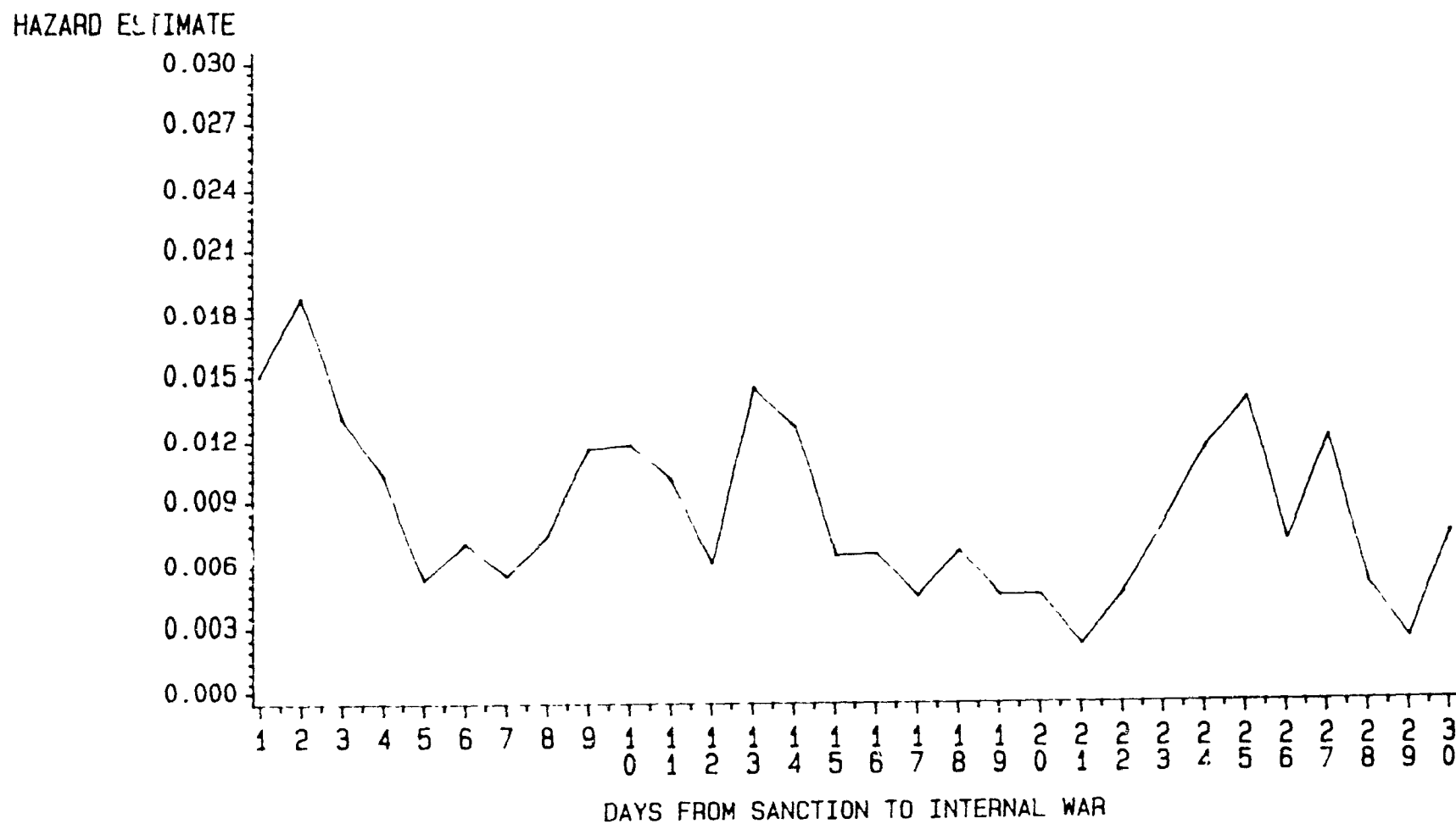


FIGURE 4.4
HAZARD RATES FROM A SANCTION
TO AN ACT OF TURMOIL

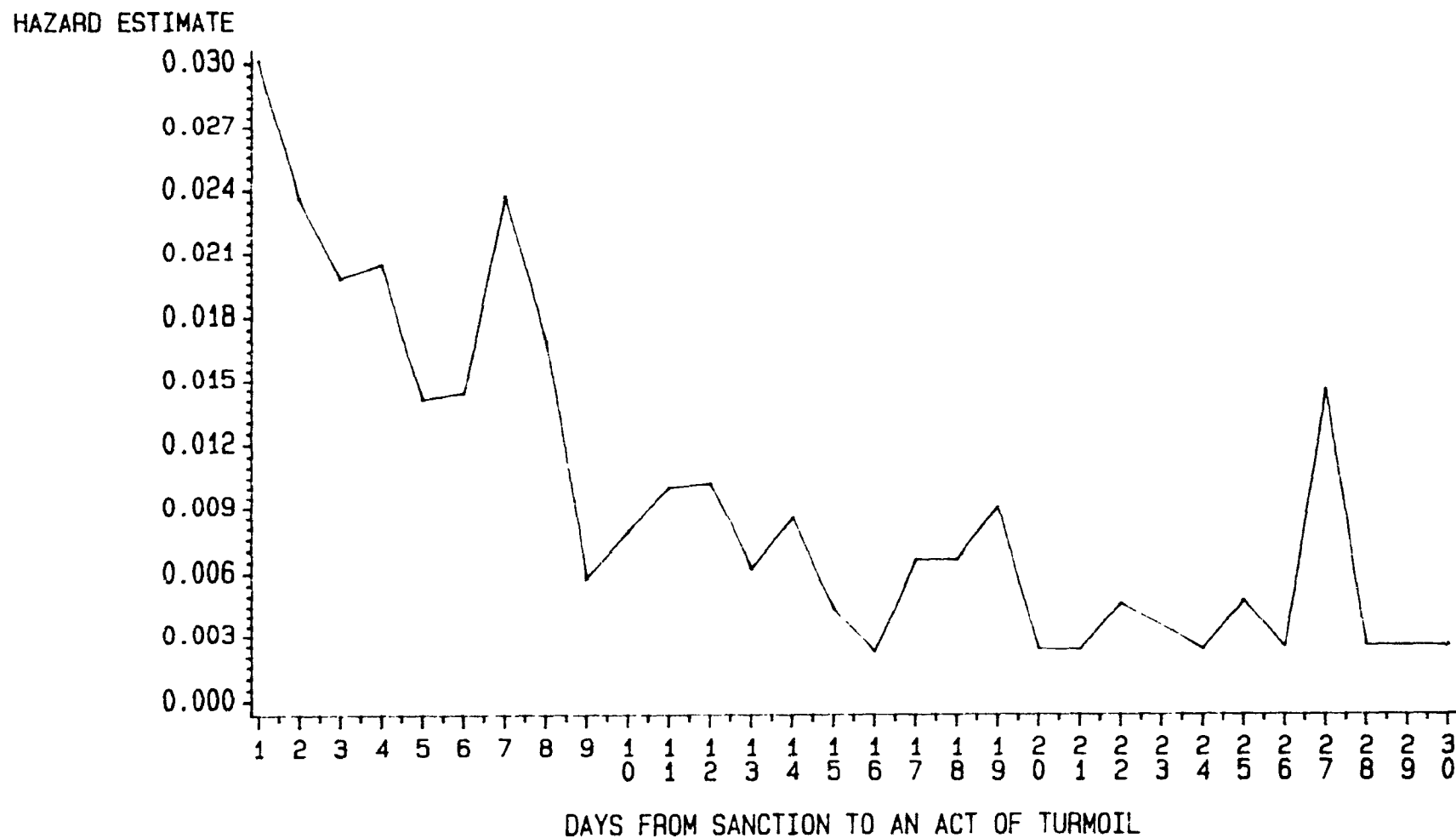


Table 4.1 Proportional Hazard Estimates for Transitions From
Four Levels of Repression

Destination	LEVEL OF REPRESSION							
	Low		Medium		High		Sanction	
	Tumult	Internal War	Tumult	Internal War	Tumult	Internal War	Tumult	Internal War
<u>LPOP</u> (ln)Population	368	- 504***	- 239	- 930*	- 062	- 988***	- 279	- 128
<u>GNP/Capita</u> 1978	000	- 007***	000	- 002	000	- 004***	001**	000
<u>TOTALK</u> Number of Attacks, 1965-1975	---	013***	---	008	---	016***	---	001
<u>TPR</u> Number of Protests/ Riots, 1965-1975	004	---	- 069**	---	048**	---	043*	--
<u>CIWAR</u> Civil War(D)	- 289	1 276***	---	-1 764*	- 623 (#)	5 243***	- 403	1 913***
<u>DSL75</u> Length of Independence	- 0001*	- 001***	---	- 001***	---	---	---	---
<u>MTLREG</u> Military Regime(D)	---	1 723***	---	5 457***	---	---	---	---
<u>MTLCIV</u> Military to Civilian Regime Transition	---	2 801***	---	6 335***	---	---	---	---
<u>CIWML</u> Civilian to Military Regime Transition(D)	---	---	---	---	---	---	---	---
<u>PLSTRUC</u> Political Party Structure	---	---	---	---	---	-2 226***	- 679**	---
<u>DEVOR</u> Development Orientation(D)	---	---	648	-2 44*	---	1 611***	---	---
<u>CONEX</u> Concentration of Export Receiving Countries	---	- 057*	131***	---	038 (#)	---	---	---
<u>EFRAC</u> Ethno-linguistic Fractionalization	---	---	---	- 018	- 004	---	043**	020*
<u>PPRAC</u> Political Party Fractionalization	---	---	---	028	029	---	018	---
<u>ETHPOL</u> Ratio of Ethnic to Political Fractionalization	---	025***	---	041	- 037	---	- 008	018
<u>ORGLAB</u> Organized Labour as % of Labour Force	---	---	---	---	---	---	016*	---
<u>CRIGHT</u> Avg Civil Rights Index, 1975-1979	---	---	---	---	- 084	- 426**	---	---
<u>INFLAT</u> Inflation, 1973-1978	---	047***	038**	077***	---	114***	043***	033***
<u>GNPOG</u> GNP/Capita growth rates, 1970-1978	---	---	---	---	---	532***	141*	151***

Note 1 Coefficients are equivalent to unstandardized regression coefficients

Note 2 No coefficients are reported for variables which were dropped in the first stage through backward elimination

Significance levels * = sig at < .05

*** = sig at < .01

*** = sig at < .001

(#) = < .05 < .10

Table 4.2
Frequencies of Daily Hazard Rate Ordinal Positions for
Internal War

		<u>day 1-10</u>	<u>day 1-15</u>	<u>day 1-21</u>	<u>day 1-30</u>
	<u>Order*</u>				
(Negative Linear)	L-M-H	4	7	8	9
(U-shape)	L-H-M	6	6	7	10
(Inverted U)	M-H-L	0	1	1	1
(Inverted U)	M-L-H	0	1	4	5
(Positive Linear)	H-M-L	0	0	0	2
(U-shape)	H-L-M	0	0	1	3
		10	15	21	30

Table 4.3
Frequencies of Daily Hazard Rate Ordinal Positions for
Turmoil

		<u>day 1-10</u>	<u>day 1-15</u>	<u>day 1-21</u>	<u>day 1-30</u>
	<u>Order*</u>				
(Negative Linear)	L-M-H	2	3	5	10
(U-shape)	L-H-M	0	0	0	0
(Inverted U)	M-H-L	2	3	4	4
(Inverted U)	M-L-H	5	7	9	10
(Positive Linear)	H-M-L	0	0	0	0
(U-shape)	H-L-M	1	2	3	6
		10	15	21	30

* For example, an order of L-H-M indicates that on a given day, the hazard rate for transition from an event of low-level repression was higher than the hazard rate for transition from an event of high-level repression and that the hazard rate for transition from an event of high-level repression was higher than that from an event of medium-level repression

It is important to note that these are ordinal measures which do not take into account the magnitude of each hazard rate or by extension the magnitude of difference between different hazard rates on a given day.

except for the jump on day fifteen when the hazard rate for medium-level repression returns to its high point of .015. However, the frequencies of the ordinal positions of the hazard rates clarify the picture (Table 4.3). Within seven out of the first ten days the hazard rate following an act of medium-level repression is higher than the rate following acts of high and low-levels of repression. Although this ordinal analysis does not take into account the magnitude of the hazard rates (important in day two as explained above), in combination with the large hazard rates on day one and day fifteen it does support the "Inverted U" hypothesis for the relationship between repression and acts of Turmoil.

It is also clear that the hazard rate from an event of high-level repression to Turmoil is lower than from the low or medium categories over the first two days. By the third day, the probability increases to the level of the low and medium rates but then declines and generally remains below the level of the low and medium categories. The frequencies of the ordinal positions support this interpretation as the hazard rate following an event of high level repression is higher than the rate from events of medium or low-level repression in only six days out of thirty. This suggests that a highly repressive event does limit either the willingness or capability of dissidents to respond with more Turmoil in the short term.

The hazard rate of transition from a Sanction to an event of Turmoil is higher in the first eight days than the rate from any of the other levels of repression (Figure 4.4). The rate declines from a high of .0300 (3%), the highest rate of all transitions) to .0142 (1.4%) by the sixth day, then rises sharply to .0240 (2.4%) on the seventh day. Thus, even one week after a Sanction, the probability of an event of Turmoil is higher than that following just one or two days after an event of low-level repression. While it is difficult to place Sanctions on a continuum with the low, medium, and high rankings of the severity indicators, it is clear that Sanctions are more likely to lead to an immediate response of Turmoil than previous events which have been met with repression.⁶⁸

⁶⁸ In order to distinguish between these types of repression indicators, the group of events which are coded according to the severity of conflict (LOREP, MEDREP, and HIREP) will be referred to as "severity indicators" or simply "severity" forms, i.e., those which stem from incidents of conflict with the regime. Negative Sanctions will simply be referred to as Sanctions.

Overall, the graphical representation and the frequencies of the ordinal positions of the hazard rates for Turmoil lends some support to both the "Inverted U" and "Negative Linear" hypotheses. Since the "Inverted U" relationship appears more frequently in the first ten days as well as the entire month more weight is assigned to this interpretation. However, without a more robust summary measure of the relationship between the hazard rates it is impossible to determine conclusively which hypothesis receives more support from the data.

Internal War Turning to events of Internal War (figures 4.1 and 4.3), the patterns of hazard rates are different from events of Turmoil and are somewhat more distinct. It is clear that the transition from an act of low-level repression to an act of Internal War is higher than from a medium level over the first ten days. This clearly refutes the RD hypothesis of an "Inverted U" relationship where the hazard rate following an event of low-level repression would be lower than that following an event of medium level repression. In fact, the frequencies of the ordinal positions in the first ten days (See Table 4.2) indicate that a "U shape" relationship exists since the probabilities of reaction following low and high levels of repression are generally higher than those from medium levels. The hazard rate from an event of low-level repression on day 1 is .0195, indicating a 1.95% chance of an act of Internal War occurring on that day. On the second day this increases to .0278 (2.78%) before decreasing to .0145 (1.45%) by the seventh day. This compares to rates of .0075 (.75%) on the first day, .0060 (.60%) by the seventh day following an event of medium-level repression and .0060 (.60%) on the first day increasing intermittently to .015 (1.5%) by the seventh day following an event of high-level repression.

This finding is in agreement with Lichbach and Gurr (1981). It appears that an event of repression where no injuries or deaths occurred does not dissuade dissidents from committing acts of Internal War as much as repression which results in a "medium" number of deaths or injuries. As the level of repression increases to the high-level the probability of an act of Internal War also increases suggesting that a medium amount of repression is enough to warn dissidents of reprisal but that after a certain threshold the repression incites dissidents to act despite the probability of meeting a high level of further

repression.

Considering just the first day, the hazard rates appear to be related negatively and linearly to the level of repression. Within the first eight days, it is clear that the transition from an event of low-level repression to an act of Internal War is higher than the hazard following either acts of medium or high-level repression and that the probability of an act of Internal War is also higher following an act of high-level repression than that following an act of medium-level repression. Added to this is an interesting pattern where, in five of the eight transitions observed, the hazard rate increases on the second day following an event of repression. This is especially true for transitions from acts of repression to acts of Internal War. The most obvious interpretation supports a Resource Mobilization argument where dissidents require a lag time in order to organize an attack in response to repression. The fact that such a lag time was not evident in the transition from acts of medium and high-level repression to more spontaneous events such as protests or riots (Turmoil) lends further support to this interpretation. While it is also possible that the time lag of one day merely represents the time needed for news of the repressive event to reach those responsible for subsequent dissident events, the time lag of one day exists for all four of the transitions to acts of Internal War and only one of the four transitions to Turmoil. Since there is no apparent reason why a one day lag caused by news delay should exist for Internal War and not for Turmoil this suggests that the time lag is indeed a result of mobilization processes rather than simply reaction to the news of the event.

The transition from a Sanction to an act of Internal War also follows the one day lag pattern. The rate increases from .0150 (1.5%) to .0190 (1.9%) from the first to the second day. It then declines to .0050 (.5%) by the seventh day, much like the other transitions to acts of Internal War.

The combination of the one day lag and the "U shape" relationship in the first eight days suggests that a combination of RM and RD factors affect the decision by dissidents to respond to different levels of repression. On the RM side, the one day lag supports the notion that dissidents take time to organize a response. On the RD side, the higher probability of reaction following a high level of repression compared to a medium level of repression suggests that "normal" cost/benefit analysis is potentially suspended in favour

of a revenge strike following high levels of repression. It is possible that both types of decision making process are used and are not necessarily incompatible.

RD1: Acts of Repression should be more likely to lead to acts of both Turmoil and Internal War in societies where deprivations are at a high level.

Turmoil: Only for the transition from Sanction to Turmoil and from acts of medium-level repression to Turmoil are the effects of grievance variables significant. Exponentiating the coefficient of .043 for Inflation tells us that as it rises by 1%, the hazard of a transition from a Sanction to an act of Turmoil increases by 4.4%. The coefficient of .038 from an act of medium-level repression indicates that a 1% increase in inflation increases the hazard of Turmoil by 3.9%. Both results support the hypothesis stated above. Exponentiating the coefficient of .141 shows that as GNP/Capita Growth Rate (GNPCG) rises by 1% the hazard of transition from a Sanction to an act of Turmoil increases by 15%. This positive effect is the opposite of that predicted by the RD hypothesis. On the contrary, it appears that increased growth rates, which should represent a decline in economic grievances, contribute to instability following sanctions by the regime. This will be discussed in the next section.

Internal War: In these transitions, Inflation (INFLAT) displayed a similar pattern as above, offering strong support for the hypothesis that economic deprivation has a positive effect upon the probability of transitions from repression to acts of collective violence. Inflation produced a significant, positive coefficient in all four of the transitions to acts of Internal War. Exponentiating the coefficient of .033 from a Sanction indicates that as Inflation increases by 1%, the hazard of transition to an act of Internal War increases by 3.4%. Exponentiating the coefficient of .047 from acts of low-level repression indicates that as Inflation increases 1%, the hazard of transition from an act of low-level repression to an act of Internal War increases by 4.8%. The effect of a 1% increase in Inflation from an act of medium-level repression to an act of Internal War is an increase in the hazard rate by 8%, and from an act of high-level repression to an act of Internal War by 12.1%. This also shows that the effect of Inflation upon the hazard of transition to acts of Internal War is positive and linear.

The effect of Gross National Product/Capita growth rate (GNPCG) on the

transitions to acts of Internal War was significant in transitions from acts of high-level repression and from a Sanction. From an act of high-level repression, the exponentiated coefficient indicates that as GNPCG increases by 1%, the hazard of transition to an act of Internal War increases by 70%. The effect from a Sanction is an increase in the hazard by 16.3%.

While the Inflation indicator performed as expected, lending moderate support to the RD hypothesis in its effect upon transitions to acts of Turmoil and strong support for the effects on acts of Internal War, the economic growth rate indicator (GNPCG) performed unexpectedly. Where it was significant, it suggests that increases in growth rate contribute to strong reactions by dissidents to acts of repression. The obvious interpretation is a form of the classic 'rising expectations' argument of Davies (1962) where increased prosperity met with sudden setbacks (in this case, regime repression rather than economic downturn) leads to dissident reaction. However, it is difficult to make a strong case for this argument since the effects were significant in only three of the eight models. Possible explanations for the unexpected effects will be discussed in the next section.

RM1 The likelihood that acts of repression will lead to either acts of Turmoil or Internal War should be greater in societies where dissidents are able to organize and mobilize resources.

Turmoil: The effect of organized labour (ORGLAB) upon transitions was significant in only one model, for the transition from a Sanction to an act of Turmoil. Exponentiating the coefficient of .016 indicates that as the level of organized labour increases by 1%, the hazard of a transition from a Sanction to an act of Turmoil increases by 1.6%. While this is a small increase, it does follow the direction proposed by the RM hypothesis. However, the effect was insignificant in every other model and was not even retained in any of the other final models after backward elimination. It is possible that this form of organization would be a better predictor of more "routine" forms of collective behaviour such as strikes rather than forms of dissident behaviour.

The next variable in the RM group is the Civil Rights Index (C'RIGHT). Its effect was insignificant in all of the transitions to acts of Turmoil. It appears that the degree of Civil Rights (such as freedom of the press and freedom of assembly) does not significantly

affect the ability of dissidents to mobilize towards acts of Turmoil, in the short term.

Ethnic Fractionalization (EFRAC) performed only slightly better than the other two RM indicators. The effect of EFRAC upon transitions to Turmoil is significant only in the transition from a Sanction where its sign was unexpectedly positive. Taking the exponent of the coefficient of .043 indicates that as the degree of fractionalization increases by 1% the hazard of transition from a Sanction to Turmoil increases by 4.4%. This suggests that groups with less categorical depth may be more prone to respond to sanctions than to more conflictual forms of repression. Although insignificant, the sign of the coefficient from acts of high-level repression to acts of Turmoil was negative, suggesting that the effect of a large number of ethnic cleavages may act to reduce the hazard from more severe forms of repression. While it is treacherous to interpret insignificant effects, theories of ethnic conflict suggest that ethnic cleavages promote the formation of the organizations necessary to reduce the costs of collective action. Conversely, the formation of organizations along ethnic cleavages could prevent the formation of broader, nation-wide coalitions necessary to react to more extreme forms of repression. It is more likely that an individual ethnic group would react to milder forms of repression such as Sanctions because the perceived costs of such action would be less than the costs of reacting alone to more severe repression. This could explain the negative and insignificant effects for the transitions from more severe forms of repression.

Political Party Fractionalization (PFRAC) was insignificant in all transitions to Turmoil. In the two final models where it remained (in the transition from acts of high-level repression to acts of Turmoil and from Sanction to acts of Turmoil), its sign was positive, contrary to the RM hypothesis but not significant enough to conclusively dismiss it.

Internal War. Civil Rights Index (CRIGHT) was significant only in the transition from acts of high-level repression to acts of Internal War. Exponentiating the coefficient of -.426 indicates that as a nation 'drops' in ranking by one point, the hazard of a transition from an act of high-level repression to Internal War is reduced by 34.7%⁶⁹.

⁶⁹ Keeping in mind that the civil rights scale is scored from 1 to 7 where the ability of dissidents to mobilize is lower in a nation ranked as 7 than a nation ranked as 6.

This supports the RM hypothesis since we would expect it to be more difficult for dissidents to mobilize opposition as the level of civil rights is reduced.

Ethno-linguistic Fractionalization (EFRAC) was significant only in the transition from a Sanction to an act of Internal War where its effect was to increase the hazard of transition by 2%. This relatively small effect is the opposite of that predicted by the RM hypothesis. However, since acts of Internal War could be carried out without broad popular support, it is likely that splintered ethnic groups would be likely to respond to repression with acts of Internal War.

The effect of Political Party Fractionalization (PFRAC) was positive but insignificant in the only Internal War model in which it remained, from acts of medium-level repression to acts of Internal War. Once again, its effect was in the unexpected direction but not significant enough to refute the RM hypothesis.

Overall, the RM variables explained little of the variance in the hazard rates of transition from repression to dissident reaction. While none of the variables were specific indicators of the ability of groups to mobilize for collective action, it is surprising that a variable like the Civil Rights Index, which has been used by Muller (1985) as an indicator of repression itself, produced only one significant effect (albeit a strong effect).

EPD: The likelihood that acts of repression lead to either acts of Turmoil or Internal War should be greater in societies where the ratio of ethnic to political divisions is high.

The variable ETHPOL measures the interaction between Ethno-linguistic fractionalization and Political Party Fractionalization. Its effect was significant only in the transition from acts of low-level repression to acts of Internal War where its effect was to increase the hazard of such a transition by 2.5%. Although this lends partial support to the EPD hypothesis, it did not approach significance in any of the other models. Where it was retained after backward deletion, its effect was varied. For transitions to acts of Turmoil, the sign of the coefficient was negative while in the other transitions to acts of Internal War, the signs were positive. Clearly, the data do not support the hypothesized effect.

RT1: The likelihood that acts of repression lead to either acts of Turmoil or Internal War should be smaller for military regimes than for civilian

regimes.

Turmoil The group of dummy variables representing regime type were insignificant in all transitions to Turmoil. Apparently, the likelihood of an event of Turmoil following repression is not significantly different under military regimes than it is under civilian regimes. Nor is the difference significant under regimes which changed status from 1975 to 1982.

Internal War: The effect of the dummy variable representing military regime (MILREG) was positive and significant in the transitions from two of the three "severity indicators" of repression. In the transition from acts of low-level repression, the hazard of an act of Internal War was 5 times greater than the hazard for civilian regimes (the reference category), and 234 times greater from acts of medium-level repression to acts of Internal War. It is clear that repression is more likely to lead to a dissident reaction in military regimes, especially repression of medium severity. Thus, for the transition to Internal War, there is no support for the hypothesis that military regimes should be more "successful" in using repression to thwart dissident reaction. On the contrary, repression appears to provoke such reaction, except in its most extreme form (high-level repression) where the effect was insignificant. The results do suggest that military regimes may have less legitimacy and therefore, that repression may provoke dissident response more than it does in civilian regimes. It is also possible that the occurrence of acts of Internal War in military regimes is simply an artifact of protracted wars which are more frequent in military regimes.⁷⁰

RT2 The likelihood that acts of repression lead to either acts of Turmoil or Internal War should be smaller for regimes which change from military to civilian status than for those which change from civilian to military status.

Turmoil: The effect of the dummy variable representing nations which changed from military to civilian rule (MILCIV), as well as from civilian to military (CIVMIL)

⁷⁰ As Appendix 3 shows, 30% of the 498 events reported for military regimes were acts of Internal War, compared to 18% of the events reported for civilian regimes.

were not retained in the final model of any of the transitions to Turmoil⁷¹

Internal War: The dummy variable representing nations which changed from military to civilian status (MILCIV) produced significant effects in two of the four spells or transitions. The hazard of transition from the acts of low-level repression to acts of Internal War was 16 times greater in these countries than it was under civilian regimes, and 564 times greater from acts of medium-level repression. Since the transition from acts of high-level repression to acts of Internal War was insignificant it is possible to interpret the overall effect as having an "Inverted U" shape since the hazard of transition is so much higher in the medium category. The dummy variable transition from civilian to military status (CIVMIL) was dropped in all four transitions to Internal War, indicating that, compared to civilian regimes, changes from civilian to military rule did not affect the likelihood of transition from acts of repression to dissident reaction. For nations which changed from civilian to military regimes the same "Inverted U" appears yet again except that the coefficients are insignificant in each case.

Overall, there is considerable support for the regime change hypothesis, at least in terms of those which changed from military to civilian regime. While it is difficult to discern the effects of the struggle for change itself from the effects of the new regime type, it appears that incumbent civilian regimes face more 'hazards' if they apply repressive force. Once again, this conclusion is especially tenuous since we have no way of distinguishing between events which occurred before, during, or after the change of regime.

RT3: The likelihood that acts of repression lead to either acts of Turmoil or Internal War should be lower in one-party states than in multi-party states.

Turmoil: The only significant effect for the dummy variable representing one-party (PLSTRUC) states was found in the transition from a Sanction to acts of Turmoil. In this case, the coefficient of - .679 indicates that the hazard for the one-party states was

⁷¹ The lack of significance of variables in these spells may be due to the small number of observations for nations which changed regime status from 1975 to 1982 (See Appendix 3). Only 2% of all 2303 observations took place in the 3 regimes which changed from military to civilian rule. 11% of all 2303 observations took place in the 5 regimes which changed from civilian to military status.

50.7% of the hazard for multi-party states. This supports hypothesis RT3 only for the transition from a Sanction.

Internal War The only significant effect for PLSTRUC was found in the transition from an event of high-level repression to an act of Internal War where the exponentiated effect of -2.226 indicates that the hazard for the one-party states was 10.8% of the hazard for multi-party states. This also supports the hypothesis stated above and is fairly consistent with the effect reported for Turmoil.

In general, the one-party states are less likely than multi-party states to experience more intense forms of dissident reaction when they apply high levels of repression. It is possible that the lack of formal political opposition allows regimes to behave more aggressively towards dissidents and that this dissuades dissidents from reacting to high levels of repression. One-party states are also less likely to experience acts of Turmoil following Sanctions. This effect is not surprising considering that it is these levels of repression which would be more commonly aimed at formal political parties. In these situations, one-party states are less likely to experience violence following acts of low-level repression than multi-party states simply because such targets of sanctions do not exist.

WSP1: The likelihood that acts of repression lead to either acts of Turmoil or Internal War should increase as the level of potential exploitation by trading partners increases.

Turmoil The variable CONEX measures the Concentration of Export Receiving Nations. Its effect was significant only in the transition from acts of medium-level repression to acts of Turmoil, where its exponentiated coefficient indicates that as the percent of concentration increases by 1%, the hazard of a transition to an act of Turmoil increases by 14.2%. From an event of high-level repression to an act of Turmoil the coefficient was positive but was not quite significant. In any case, dissidents in nations with fewer trading partners are more likely to respond to repression with acts of Turmoil, at least in reaction to acts of medium-level repression.

The effect of "open door" versus "state capitalist" development orientation is represented by the dummy variable DEVOR. Its coefficients were insignificant in all spells toward Turmoil.

The effect of CONEX lends only minimal support to the World System Position hypothesis. While nations which have limited trading partners and nations with "open door" development orientations would tend to be more prone to foreign domination of internal political processes, only the former produced a significant effect and then only in the transition from acts of medium-level repression to acts of Turmoil. As a result, opponents of a government or regime which allows limited access to legitimate political processes should be more likely to face dissident response to acts of medium-level repression. However, this support is limited since the effect was not significant across all levels of repression.

Internal War Concentration of Export Receiving Countries (CONEX) was significant and negative only in the transition from events of low-level repression to acts of Internal War. In this spell, the exponentiated coefficient indicates that as concentration increases 1% the hazard of transition to an act of Internal War decreases by .55%. It appears that the likelihood of an act of Internal War following an act of low-level repression decreases as the number of trading partners decreases. This lends partial support to the WSP hypothesis. In other words, nations which are more influenced by a small number of 'host' nations are more 'successful' in applying low levels of repression. Possible explanations for this effect will be discussed in the next section.

The effects of development orientation were mixed in the Internal War spells. In the spell from acts of medium-level repression to acts of Internal War, the exponentiated coefficient indicates that the hazard of an act of Internal War following an act of medium-level repression in "open door" regimes is .87% of the hazard for "state capitalist" regimes. From acts of high-level repression the hazard rate for "open door" regimes was 5 times that of "state capitalist" regimes. The mixed effects of this variable are difficult to interpret since the effects were both strong and in opposite directions. Overall, support for the WSP hypothesis is weak. While the coefficients had the correct sign for the Turmoil spells, their effects were limited to the transition from events of medium-level repression. In the Internal War spells, the coefficients produced strong effects but with mixed signs whose effects cannot be readily interpreted with the theories presented.

Effects of Control Variables

While no hypothesis were presented concerning the expected effects of the following variables, previous studies and/or conclusions drawn from the literature on the sub-Saharan African political and historical context suggest that they should be added to any model which attempts to predict levels of violence or instability. The following discussion of the effects of these control variables is meant to confirm their importance as components of each model rather than to suggest empirical "findings."

Civil War (CIVWAR) As discussed in the methodology, the sample of observations of acts of Internal War is disproportionately weighted by those which occurred in the four nations which were experiencing either civil war (Chad, Ethiopia) or protracted independence movements (Zimbabwe and South Africa). As expected, this variable significantly affected the hazard of transitions of all four Internal War models. The strongest effect was to increase the hazard of transition from acts of high-level repression to acts of Internal War by 189%. For transitions to Turmoil, its effects were consistently negative which means that dissidents are less likely to respond to repression with protests or riots in nations experiencing civil war.

Population (LPOP) The natural log of population was included following the example of Hibbs (1973) who suggests controlling for it in order to offset the effects of a nation's size. Since this variable was logged it is difficult to interpret the coefficient. However, they were consistently negative except in the transition from events of low-level repression to acts of Turmoil. The negative coefficients suggest that the hazard rates for transitions from different types of repression are lower for larger nations. These effects were significant in 3 of the 8 models.

Gross National Product/ Capita - 1975 (GNP/C) This was included in order to control for each nation's level of economic development. Like population, GNP/C was negative in all of the transitions from "severity" forms of repression. These coefficients were significant in only two transitions and were very small throughout. However, the coefficients for transitions from Sanctions were positive, suggesting that Sanctions are less tolerated as nations become richer.

History of Dissident Events 1965 to 1975 (TOTATK and TPR). As described in the

methodology, these variables were included in order to account for a nation's previous event history. This in turn facilitates the treatment of each nation's transitions as separate observations. TOTATK measures the total number of acts of Internal War which occurred from 1965 to 1975. TPR measures the total number of Protests or Riots (our definition of Turmoil) which occurred in the same period. Each was only entered into the model of its own event type i.e., TOTATK in the Internal War models. As expected, the effect of TOTATK was positive in each transition. It was significant in two of the four. Likewise, TPR was positive in each transition and positive in three of four. The minimum this suggests is that past levels of violence positively affect present levels.

Length of Independence - 1975 (DSL75) As predicted in the methodology section, this variable was significant in three of the eight models. Although the coefficients themselves are small, translating them into effects representing months or years instead of days since liberation brings them to life somewhat. For instance, the coefficient of -0.001 from an event of medium-level repression to an act of Internal War indicates that the effect is to reduce the hazard by 0.09% **per day**. This translates into a reduction of 36.48% **per year** which is more interpretable. Since all of the coefficients which were retained were negative, it appears that older states are less likely to experience dissident behaviour following repressive events.

V. Discussion and Conclusions

Event-history analysis has been used to explore the short term relationship between different levels of regime repression and dissident reaction in sub-Saharan Africa from 1975 to 1982. The primary advantage of event-history is that it takes advantage of information on both the order and timing of different events. This is particularly suited to the present analysis because it enables us to be more clear about the effects of repression and other covariates upon the actual behaviour of dissidents. This is an improvement over cross-national studies which use aggregates of from one month to ten years to estimate effects on phenomenon which actually occur from one day to the next.

After examining the theoretical approaches to the repression-dissent dilemma and the empirical studies which are derived from them, we concluded that the fundamental difference between the Resource Mobilization and Relative Deprivation approaches concerns the role of grievances in the decision-making process. This specifically affects the decision to respond to acts of repression since they definitely have the potential to cause anger and frustration (the crucial factor for RD) as well as to increase costs of mobilization (the crucial factor for RM). We have attempted to use the results to settle the competing claims of these two theories.

Our results concerning the much studied shape of the relationship between repression and collective political violence suggest either a "U-shape" or "Negative Linear" relationship between repression and acts of Internal War. Using repression indicators which combine most of the dimensions of previous studies and suggestions by their critics (Snyder, 1976, Lichbach, 1987) we found that the likelihood of acts of Internal War does decline as the level of repression increases, up to some threshold within our medium category where the likelihood either increases or continues to decrease. The strength of the "U-shape" relationship within the first ten days allows us to give slightly more weight to the "U-shape" relationship over the "Negative Linear" relationship. This ambiguity is actually in agreement with the previous findings of Hibbs (1973), Sanders (1981) and Lichbach (1987) and suggests that contextual factors not easily accounted for in a macro-quantitative analysis affect the probability of reaction to repression from the medium to the high level. As a result, we conclude that no clear pattern emerges beyond the existence of a higher hazard rate for Internal War following acts of low-level repression compared to hazards following acts of medium and high-level repression. Nevertheless, our results clearly do not support the RD predictions of a strong effect from events of medium-level repression.

Evidence for an "Inverted U" relationship was found between repression and acts of Turmoil, especially within the first ten days following an act of repression. Compared with the effect of repression upon Internal War, it appears that, in agreement with the RD hypothesis, dissidents or participants in more spontaneous events like protests and riots are provoked by medium levels of repression while they are insufficiently provoked by low

levels of repression and are dissuaded by high levels of repression.

Turning to factors which have been hypothesized to affect the relationship between regime repression and dissident reaction, mixed support was found for the Relative Deprivation hypothesis. Inflation proved to be a strong indicator of the likelihood of acts of Internal War following all levels of repression. Since inflation is a good indicator of individual level economic grievances, the strength and consistency of this indicator provide strong support for the RD hypothesis. **It appears that dissidents are more likely to respond to all levels of repression with acts of Internal War when inflation is at a high level.** Inflation also increased the likelihood of acts of Turmoil, but not as consistently as it affected acts of Internal War. These findings basically support Gurr's contention that subjective deprivation plays an important role in the decision by dissidents to engage in political violence. It is also in agreement with the empirical conclusions of Cartwright et al (1985) who found, in a sample of African and Asian nations, that individual decisions to participate in acts of revolution were significantly affected by the current state of the economy.

While Inflation performed as expected, significantly increasing the hazard of transition in all four of the Internal War models, the effects of GNP per capita growth rate (GNP/C-G) were consistently in the opposite direction from that predicted by the RD hypothesis. The strength of its effects where it is significant suggests that other factors may intervene in the relationship. For instance, as we mentioned above, it is possible that economic growth affects the likelihood of dissident behaviour in two off-setting ways. First, as in Davies' classic argument (1962), such growth could lead to rising expectations which make people less tolerant of regime repression. In this case, growth would have a positive effect upon the likelihood of dissident reaction to repression. On the other hand, as an indicator of performance, economic growth should increase the legitimacy of the regime or government. In the second case, growth would have a negative effect upon the likelihood of reaction to repression. Since both effects could occur simultaneously, this could explain the poor performance of this indicator in the transitions from low and medium levels of repression. It would be interesting to measure the interaction between the effects of economic growth and inequality since such a combination would 'fuel' rising

expectations. Unfortunately, no reliable inequality indicator was available for this study.

Turning to Resource Mobilization factors, our results are even less clear. What is clear is that our RM indicators did not measure the phenomenon of mobilization as well as our RD indicators measured sources of grievances. Where they did produce significant effects, the RM indicators only affected the hazard rate of transition from the lowest levels of repression (Sanction and low-level repression). Even so, their effects were small. The variables which measure the extent of Tilly's CATNET (categories and networks) also performed poorly. Ethno-linguistic fractionalization by itself significantly affected the transitions from Sanctions to both Turmoil and Internal War but was insignificant in the other models. This suggests that numerous ethnic cleavages affect the likelihood of response to 'formal' forms of repression but not to actual acts or 'severity' forms. Speculation as to the reason for ethnicity's limited effects will be avoided since our main concern is to evaluate its effects upon the ability of dissidents to mobilize. In this regard, while ethnic cleavages may increase the actual number of ethnic categories which could be used as bases of mobilization, they could also be divisive in their effects on mobilization of dissidents across ethnic divisions, as has been the case in struggles in Zimbabwe and South Africa.

Political Party Fractionalization (PFRAC) was insignificant in all models, indicating that the existence of multiple political parties does not necessarily improve the ability of dissidents to mobilize support for collective action against a regime. While it is possible that the degree of political party fractionalization would only effect the mobilization of legitimate forms of opposition, this should in turn reduce the probability of dissident response to repression. The fact that it was insignificant throughout suggests that it does not affect either type of response, in the short term.

The multiplicative interaction term measuring the ratio of ethnic to political fractionalization (ETHPOL) was tested separately and was significant in only one model (from low-level repression to Internal War) where its effect was moderately strong. Only in this limited case does the evidence support the conclusion of Hannan and Carroll (1981:28) that the combination of ethnic and political diversity produces instability. **Overall, the direct and indirect measures of the ability of dissidents to mobilize did not**

consistently affect the likelihood of dissident reaction to regime repression

The graphical representation of the hazard rates to acts of Internal War reveals a consistent rise from the first day to the second following an act of repression. This could be interpreted as evidence that dissidents require a short lag period to mobilize following an act of repression. But the motivation for such a delayed, rational reaction, could also be a result of frustration or anger stemming from the perceived injustice of a certain level of repression (Gamson et al, 1982). In other words, **the evidence of a lag period, combined with significant effects for grievance level variables and largely insignificant effects for Resource Mobilization variables, suggests that neither the RD or RM schools is independently capable of explaining the likelihood of reactions to repression.** This finding is in agreement with the work of Pinard (1971, 1983), Gamson et al (1982) Klandermans (1984) who critically synthesize the RD and RM approaches. There is also no indication that RM variables are better predictors of dissidents events which require more planning and organization, or conversely, that RD variables are better predictors of more spontaneous events such as acts of Turmoil.

Turning to the effects of regime type, the results indicate that military regimes as well as those in transition from military to civilian or civilian to military, are not significantly different from civilian regimes in their effect on the likelihood of Turmoil following acts of repression. **The results do show that both military regimes and those in transition from military rule to civilian rule are more likely to experience acts of Internal War following low and medium levels of repression than civilian regimes, but are not significantly different in terms of risk following a high level of repression or following a Sanction.** Thus, it is clear not only that more acts of repression take place in military regimes than civilian (Wolpin, 1986), but also that dissidents are more likely to respond to such repression with acts of Internal War. However, conclusions concerning nations which changed regime type during the time-period are tenuous since the effects for these nations may reflect the struggle for transition rather than the relationship of repression and reaction under these two different regime types. Without accounting for the timing of such transitions, it would be unwarranted to speculate about the effects of such changes of regime type.

Comparing one-party and multi-party states, it appears that the former are more 'successful' in applying both Sanctions and high levels of repression. One-party states are considerably less likely to experience acts of Internal War following high levels of repression and are also less likely to experience acts of Turmoil following a Sanction. **We surmise that one-party states may get away with applying more extreme forms of repression since no formal political opposition exists to officially counter such acts.** It is also more likely that the military is more consolidated under a one-party regime or government than under a multi-party regime where the loyalty of the military is more apt to be contested (Janowitz, 1964:29). As a result, dissidents may be more reluctant to act against a strong, centralized regime which has the support of the military.

The effects of World System Position indicate that as the number of trading partner's decreases, nations are more likely to experience Turmoil following acts of medium and high-level repression, but are less likely to experience acts of Internal War following acts of low-level repression

Finally, the effect of development orientation (DEVOR) suggests that "open door" regimes, those most vulnerable to internal political control, are less likely than "state capitalist" regimes to experience acts of Internal War immediately following acts of medium-level repression. However, "open door" regimes are significantly more likely to experience acts of Internal War following acts of high-level repression. It appears that the controlling effects of external economic/political interests are limited to acts of low and medium-level repression. Beyond this, repression by externally influenced regimes produces strong dissident reaction. If, as Timberlake and Williams suggest (1984), nations with limited trading partners are more politically exclusive, **these results modify this interpretation by suggesting that such exclusivity promotes less threatening forms of dissident behaviour (Turmoil) while it dissuades more threatening behaviour (Internal War), up to a point, where the effects of external influence actually increase the likelihood of threatening dissident response.**

Conclusion

From the beginning it was hoped that we would be able to discover when repression works to stifle dissident behaviour and when it backfired and actually provoked such behaviour. After analyzing the previous empirical approaches as well as the results of the present study, it appears that the shape of the relationship between acts of repression and spontaneous forms of dissident reaction (defined here as Turmoil) is different from the relationship between acts of repression and more organized forms of dissident reaction (Internal War). Specifically, acts of Turmoil are more likely to follow acts of medium-level repression while acts of Internal War are more likely to follow acts of low as well as high-level repression. However, these conclusions are somewhat tentative due to the existence of mixed evidence within each group of transitions. In both cases (Turmoil and Internal War) there is some evidence for a "Negative Linear" relationship which lends some support to the Resource Mobilization interpretation of strictly cost-benefit decision making where the likelihood of dissident response decreases as the cost of mobilization (measured here by perceived level of repression) increases. Without more detailed evidence of the context within which dissidents respond to specific acts of repression it is impossible to offer more precise conclusions.

Likewise, the explanatory power of the partial models indicates that a significant amount of variation in the hazard of transition from an act of repression to an act of Turmoil or Internal War has yet to be explained. There is little doubt that the relationship between repression and dissident reaction cannot be fully explained without an understanding of the actual context within which the events of this study occurred. Most importantly, this study lacked information on both the targets of repression and the actors involved. Without knowing whether the targets of the repression are the same as the dissident actors, it is difficult to verify whether the dissidents are actually responding to repression aimed at them. While this limitation is important it is not as damaging as it might appear. From a 'rational actor' perspective, it may not matter at whom the repression is aimed. 'Rational' dissidents use the observation of the regime or government response to estimate whether their own action will be met with repression, and if so, whether the expected level of reprisal will outweigh the possible benefits of their action.

Such information can be obtained by observing the repression of other targets. The same is true for the RD perspective. In this case, while the feelings of 'frustration and aggression' are alleged to be felt subjectively (Gurr, 1970:238-239) it is quite plausible that an individual or group could act upon deprivations experienced by one of their kind, though not personally.

The shortcomings of the approach used in this study are testament to the complexity of the relationship between repression and dissident reaction. The lack of explanatory power of the partial models indicates that the context of the interaction between a regime and its dissidents must be taken into account. The present study has attempted to account for some of the contextual factors by analyzing both the sequence and timing of events. By not doing the same, previous researchers examining the simple bivariate relationship between repression and political or collective violence have been exploring too complex a question with tools that are too simple. Yet even those who seem to realize the complexity of the function are quick to include repression in a larger equation of political violence without solving its internal secret (Smelser, 1963, Gurr, 1971; Hibbs, 1973; Hewitt, 1977; Tilly, 1978). Our results suggest that, in agreement with Lichbach (1987) more emphasis should be placed upon an understanding of the tactical choices facing both dissidents and regimes or governments. Only then can reliable predictions about the effects of repression be added to a model which explains political violence.

It also appears that while cost-benefit analysis appear to be important determinants of the decision to respond to acts of repression, grievances can affect the determination of these costs and benefits. Clearly, the combined strengths of the two primary theories are needed to explain more significant portions of the variance in collective action and violence.

Appendix 1

Countries Included in the Sample:¹

Benin, Botswana, Burundi, Cameroon, Central African Republic, Chad, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Ivory Coast, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Somalia, Sudan, Swaziland, Tanzania (formerly Tanganyika), Togo, Uganda, Upper Volta, Zaire, Zambia, Zimbabwe.

Countries Excluded Due to Missing Data:

Angola, Comoro Islands, Congo, Djibouti, Guinea-Bissau, Mozambique, Namibia, Reunion, Sao Tome + Principe, Seychelles.

¹ Source: Taylor, Charles L. and David A. Jodice 1983. The World Handbook of Political and Social Indicators III 1948-1982. (Ann Arbor The Inter-University Consortium for Political and Social Research)

Appendix 2

Description of Event History Data Set

The approach suggested by Allison (1984:51) for data with repeated events suggests that each interval between events for a given country are treated as an individual observation. As a result, the data set can be represented as follows:

obs	<u>date</u>	<u>country</u>	<u>durhi</u>	<u>durmed</u>	<u>durlo</u>	<u>Pro/Riot</u>	<u>IW</u>	<u>gnp/c</u>	<u>milreg</u>	<u>hirep</u>	<u>medrep</u>	<u>lowrep</u>
1	6481	552	.	.	.	0	1	350	0	1	0	0
2	6488	552	7	.	.	1	0	350	0	0	1	0
3	6505	552	24	17	.	0	1	350	0	0	0	1

The second observation indicates that for country 552 (Zimbabwe) on the 6488th day from 1960, an event classified as an act of Turmoil (Protest or Riot) occurred. It occurred 7 days after an event of Internal War which was classified as highly repressive (the variable "durhi" stands for "duration or number of days since event of high level repression).

Likewise, the third observation indicates that for country 552 (Zimbabwe) on the 6505th day from 1960, an event classified as an act of Internal War (IW) occurred. It occurred 24 days from the date of an event classified as highly repressive (the Internal War event in observation 1) and 17 days from an event of medium severity (the protest or riot in observation 2).

Appendix 3

Cross-tabulation of Regime Type by Dissident Act.

<u>Regime Type</u>	<u>Dissident Act</u>		Total*
	Turmoil	Internal War	
Military (Milreg)	27 (5%) (9.6%)	151 (30%) (32.9%)	498
Civilian (Civreg)	215 (14%) (76.8%)	272 (18%) (59.3%)	1508
Military-Civilian	2 (5%) (.71%)	10 (23%) (2.2%)	42
Civilian-Military	36 (14%) (12.9%)	26 (10.2%) (5.7%)	255
Total	280 (100%)	459 (100%)	2303

Key: Numbers in each cell represent frequencies of observations. The top numbers in parentheses are row percentages and the bottom number in parentheses are column percentages.

*Besides dissident acts, total observations include events like elections, regular executive transfers, regime support demonstrations, and strikes. Since they are not included in the analysis, these observations are omitted from the table.

BIBLIOGRAPHY

- Allison, Paul D. 1984. Event History Analysis: Regression for Longitudinal Event Data (Beverly Hills: Sage Publications).
- Andriole, Stephen J. and Gerald W. Hopple 1984. Revolution and Political Instability. Applied Research Methods. (Frances Printer London).
- Arlinghaus, Bruce E. 1984 African Security Issues Sovereignty, Stability, and Solidarity (Boulder: Westview Press)
- and Pauline H. Baker 1986. African Armies: Evolution and Capabilities. (Boulder: Westview Press Inc.).
- Aya, R. 1979. "Theories of Revolution Reconsidered," Theory and Society 8 (July) 39-99.
- Barnes, S.H., M Kaase et al 1979. Political Action, (Beverly Hills, Ca, Sage)
- Barrows, Walter L. 1986. "Dynamics of Military Rule in Black Africa." in Bruce Arlinghaus and Pauline H Baker, African Armies: Evolution and Capabilities. (Boulder: Westview Press Inc.) pp.84-94.
- Berkowitz, Leonard. 1962. Aggression: A Social Psychological Analysis. (New York. McGraw-Hill)
- Bienen, Henry. 1968. The Military Intervenes: Case Studies in Political Development. (New York: Russell Sage Foundation).
- 1989. "Time and Power in Africa." American Political Science Review. Vol. 83, No.1, pp.19-34.
- Bill, James A. and Robert L. Hardgrave. 1973. Comparative Politics: The Quest for Theory (Columbus, Ohio: Merrill.)
- Bollen, Kenneth A. 1983. "World System Position, Dependency, and Democracy The Cross-National Evidence." American Sociological Review 48: 468-479.
- Bornschier, Volker, Christopher Chase-Dunn and Richard Robinson. 1978. "Cross-National Evidence of the Effects of Foreign Investment and Aid on Economic Growth and Inequality: A Survey of Findings and a Reanalysis." American Journal of Sociology. 84, No.3.651-663.
- Bornschier, Volker and Christopher Chase-Dunn. 1985. Transnational Corporations and Underdevelopment. (New York: Praeger)
- Breton, Raymond, J.G. Reitz, and V.Valentine (eds.) Cultural Boundaries and the Cohesion of Canada. Montréal: The institute for Research in Public Policy
- Buckland, Patrick. 1981. A History of Northern Ireland. (Gill and Macmillan, Dublin).
- Buss, Arnold H. 1961. The Psychology of Aggression. (New York: Wiley)
- Carter, Gregg L. 1988. "Local Police Force Size and the Severity of the 1960's Black Rioting." Journal of Conflict Resolution. 31, No.4(December) 601-614.
- Carter, Gwendolyn and Patrick O'Meara (eds.) 1982. Southern Africa: The Continuing Crisis. 2nd Edition (Bloomington, Indiana University Press).

- Cartwright, Phillip A. Charles D. Delorme, Jr., and Norman J. Wood. 1985. The By-product Theory of Revolution: Some Empirical Evidence." Public Choice. 46:265-274.
- Coleman, James S. 1974. Power and the Structure of Society. (New York: W.W. Norton.).
- Collins, Randall and Michael Makowsky. 1972 The Discovery of Society. 3rd Edition (New York: Random House)
- Davies, James C. "Toward a Theory of Revolution " American Sociological Review. vol.27, June, 1962. pp 5-19
- Deutsch, Karl W. 1966. Nationalism and Social Communication. An Inquiry into the Foundations of Nationality, 2nd Edition. (Cambridge, Mass : M.I T. Press).
- Dollard, John, Leonard Doob, Neal E. Miller, O.H. Mowrer and R R. Sears. 1939 Frustration and Aggression. (New Haven: Yale University Press).
- Duff, Ernest A and John F. McCamant (with Waltraud Q. Morales). 1976. Violence and Repression in Latin America: A Quantitative and Historical Analysis. (The Free Press: New York).
- Easton, David. 1965 A Systems Analysis of Political Life. (New York. Wiley).
- Eckstein, Harold 1980. "The Approaches to Explaining Collective Political Violence, " pp.135-66 in T.R. Gurr (ed) Handbook of Political Conflict (New York, Free Press.).
- Falk, Richard A. 1980. "A World Order Perspective on Authoritarian Regimes," paper no.10, World Order Models Project (New York: World Policy Institute, 1980).
- Feierabend, I.K and R.L. Feierabend. 1971. "The Relationship of Systemic Frustration, Political Coercion, and Political Instability: A Cross-National Analysis." pp.417-440 in J.V. Giliesspie and B A. Nesvold (eds.) Macro-Quantitative Analysis. (Beverly Hills: Sage Pubns).
- 1972. "Systematic Conditions of Political Aggression An Application of Frustration-Aggression Theory" in I.K. Feierabend, R.L. Feierabend, and T.R. Gurr (eds) Anger, Violence, and Politics: Theories and Research (Englewood Cliffs, N.J ,Prentice Hall.)
- Gamson, William. 1975. The Strategy of Social Protest. (Homewood Ill.: Dorsey).
- Gamson, William, Bruce Fireman, and Steven Rytina. 1982. Encounters with Unjust Authority. (Chicago: Dorsey).
- Gastil, Raymond D. 1973 "The New Criteria of Freedom," Freedom at Issue. XVII (January-February).
- 1981. Freedom in the World Political Rights and Civil Liberties: 1981. (Westport, CT. Greenwood Press).
- Goldstone, J.A. 1980. "Theories of Revolution: The Third Generation" World Politics 32 (April): 425-453.
- Gurr, Ted R. 1968. "A Causal Model of Civil Strife: A Comparative Analysis Using New Indices." American Political Science Review, LXII (December). pp.1104-1124.
- 1970. Why Men Rebel. (Princeton University Press, Princeton, New Jersey).

- (ed.) 1980. Handbook of Political Conflict. (New York: Free Press).
- and R. Duvall. 1973, "Civil Conflict in the 1960s: A Reciprocal Theoretical System with Parameter Estimates," Comparative Political Studies 6 (July): 135-169.
- and M.I. Michbach (1979), "A Forecasting Model for Political Conflict Within Nations," in J.D. Singer and M.D. Wallace (eds) To Auger Well: Early Warning Indicators in World Politics, (Beverly Hills, Ca: Sage)
- Hannan, Michael T. 1979. "The Dynamics of Ethnic Boundaries in Modern States" pp.253-75 in National Development and the World System edited by J.W. Meyer and M.T. Hannan. (Chicago: University of Chicago Press)
- and G.R. Carroll. 1981. "Dynamics of Formal Political Structure: An Event-History Analysis" American Sociological Review, 46 (Feb): 19-35.
- Hardy, Melissa A. 1979 "Economic Growth, Distributional Inequality, and Political Conflict in Industrial Societies" Journal of Political and Military Sociology. 5:209-27
- Hechter, Michael. 1975. Internal Colonialism: The Celtic Fringe in British National Development, 1536-1966. (Berkeley: University of California Press).
- Hewitt, Christopher. 1977. "Majorities and Minorities. A Comparative Survey of Ethnic Violence." The Annals of the American Academy of Political and Social Science Vol.433, (Sept, 1977) pp.150-160
- Hibbs, Douglas. 1973 Mass Political Violence: A Cross-National Causal Analysis (New York: Wiley).
- Hodd, Michael. 1986. African Economic Handbook (London: Euromonitor Publications Ltd.).
- Huntington, Samuel P. 1968. Political Order in Changing Societies (New Haven, Ct: Yale University Press).
- Jacobson, Alvin L. 1973a. "Intrasocietal Conflict: A Preliminary Test of a Structural Level Theory," Comparative Political Studies 6, (April) 62-83
- Jackson, Steven, Bruce Russett, Duncan Snidal and David Sylvan. 1978. "Conflict and Coercion in Dependent States." Journal of Conflict Resolution 22:627-57.
- Jackman, Robert W. 1978. "The Predictability of Coups d'Etat: A Model with African Data," American Political Science Review, 72 (December) 1262-1275
- 1982. "Dependence on Foreign Investment and Economic Growth in the Third World." World Politics 34:175-96.
- Janowitz, Morris. 1964. The Military in the Political Development of New Nations: An Essay in Comparative Analysis. (Chicago: University of Chicago Press)
- Jenkins, J.C. 1982. "Why Do Peasants Rebel? Structural and Historical Theories of Modern Peasant Rebellions." American Journal of Sociology. 88 (November): pp. 487-514.
- Johnson, Chalmers. 1966. Revolutionary Change. (Stanford Press).

- Kerbo, Harold R. 1978 "Foreign Involvement in the Preconditions for Political Violence: The World System and the Case of Chile " Journal of Conflict Resolution, 21 (3): 363-392
- Kick, Edward 1980 "World System Properties and Mass Political Conflict Within Nations Theoretical Framework " Journal of Political and Military Sociology, 8:175-190.
- 1983. "World-System Properties and Military Intervention-Internal War Linkages." Journal of Political and Military Sociology, 11 185-208.
- Klandermans, Bert. 1984 "Social-Psychological Expansions of Resource Mobilization Theory." American Sociological Review 49:583-600.
- Kuper, Leo. 1981 Genocide: Its Political Uses in the Twentieth Century (New Haven: Yale University Press)
- Lerner, Daniel. 1963. "Toward a Communication Theory of Modernization. A set of Considerations," in Lucien W. Pye Communications and Political Development (Princeton University Press) 327-350.
- Lichbach, Mark I 1987 "The effects of repression Deterrence or Escalation." Journal of Conflict Resolution Vol 31,no.2 (June) pp 266-297.
- and Ted Gurr. 1981 "The Conflict Process A Formal Model " Journal of Conflict Resolution. Vol 25, No 1, March 3-29.
- Lockwood, David. "Some Remarks on the Social System" British Journal of Sociology, 7, no.2 (June, 1956) cited in Johnson, Chalmers, Revolutionary Change.
- London, Bruce and Thomas D Robinson. 1989 "The Effect of International Dependence on Income Inequality and Political Violence." American Sociological Review, 54:305-308
- Lopez, George A. 1986. "National Security Ideology as an Impetus to State Violence and State Terror. in Michael Stohl and George A Lopez, Government Violence and Repression (Westport: Greenwood Press)
- Markus, G. and B.A. Nesvold. 1972 "Governmental Coerciveness and Political Instability: An Exploratory Study of Cross-National Patterns " Comparative Political Studies. (July):231-44
- Marx, Gary and James L Wood. 1975 "Strands of Theory and Research in Collective Behaviour " Annual Review of Sociology 1 363-428.
- Marx, Karl. 1978. in Tucker, Robert C The Marx-Engels Reader. 2nd Edition (W.W. Norton & Co New York, London)
- McAdam, Doug. 1982 Political Process and the Development of Black Insurgency. (Chicago: University of Chicago Press)
- McCarthy, J.D and M N. Zald 1977. "Resource Mobilization and Social Movements: A Partial Theory " American Journal of Sociology. 82 (May) pp.1212-1241.
- 1979. The Dynamics of Social Movements: Resource Mobilization, Social Control and Tactics. (Cambridge, Mass.:Winthrop Publishers).
- McKinley, R.D. and A.S Cohen. 1976 "Performance and Instability in Military and Nonmilitary Regime Systems." American Political Science Review. 70:(Sept.):850-64

- Midlarsky, Manus I. 1982. "Scarcity and Inequality: Prologue to the Onset of Mass Revolution." Journal of Conflict Resolution 26 (March).3-38
- Mill, John Stuart 1950. Utilitarianism, Liberty, and Repressive Government (London: J.M. Dent).
- 1978. On Liberty (Indianapolis. Hackett) First published in 1859
- Moore, Barrington Jr. 1966 Social Origins of Dictatorship and Democracy (Boston:Beacon)
- Morrison, D.G. and H M Stevenson 1971 "Political Instability in Independent Black Africa: More Dimensions of Conflict Behavior Within Nations" Journal of Conflict Resolution 15. 347-368.
- Muller, E.N. 1977 "Mass Politics Focus on Participation," American Behavioral Scientist 21 (September/October).63-86
- 1979. Aggressive Political Participation (Princeton, N J , Princeton University Press.
- 1980, "The Psychology of Political Protest and Violence" pp 69-99 in R. Gurr (ed) Handbook of Political Conflict. (New York, Free Press)
- 1985 "Income Inequality, Regime Repressiveness and Political Violence." American Sociological Review. Vol 50 (Feb 47-61)
- and T.O Jukam 1983. "Discontent and Aggressive Political Participation" British Journal of Political Science 13 (April) 159-179
- Neilsen, François 1980. "The Flemish Movement in Belgium After World War II: A Dynamic Analysis," American Sociological Review 45 76-94.
- Nordlinger, Erik 1970. "Soldiers in Mufti: The Impact of Military Rule upon Economic and Social Change in the Non-Western States." American Political Science Review. 64 (December):1131-1148
- Oberschall, Anthony. 1973. Social Conflict and Social Movements (Englewood Cliffs, New Jersey:Prentice Hall)
- 1979. "Protracted Conflict" in M. Zald and J. McCarthy (eds) The Dynamics of Social Movements: Resource Mobilization, Social Control and Tactics (Cambridge, Mass.:Winthrop Press)
- O'Donnell, Guillermo A 1979 Modernization and Bureaucratic Authoritarianism (Berkeley: University of California Press).
- Olorunsola, Victor A. and Dan Muhwezi 1984 "Security and Stability Implications of Ethnicity and Religious Factors " in Arlinghaus, Bruce E 1984 African Security Issues: Sovereignty, Stability, and Solidarity (Boulder: Westview Press) _
- Olson, Mancur, Jr. 1965. The Logic of Collective Action (Cambridge, Mass: Harvard University Press).
- Paige, Jeffry M 1975 Agrarian Revolution, Social Movements and Export Agriculture in the Underdeveloped World, (New York: Free Press)
- Pinard, Maurice. 1971. The Rise of a Third Party-- A Study in Crisis Politics. (Prentice-Hall: Englewood Cliffs, N.J.)

- Pinard, Maurice. 1983a "From Deprivation to Mobilization: I. The Role of Some Internal Motives Reexamined " Unpublished paper presented at the Annual Meetings of the American Sociological Association, Detroit, September, 1983
- 1983b. "From Deprivation to Mobilization: II Incentives, Ideals, and a General Motivation Model " Unpublished paper presented at the Annual Meetings of the American Sociological Association, Detroit, September, 1983
- and Richard Hamilton 1986. "Motivational Dimensions in the Quebec Independence Movement: A Test of a New Model." pp.225-280 in Research in Social Movements, Conflicts and Change. Vol 9, (JAI Press Inc.)
- Pye, Lucian W 1966. Aspects of Political Development (Boston: Little, Brown and Co.).
- Randle, Michael 1981 "Militarism and Repression," Alternatives 7 (Summer, 1981): pp 67-81
- Russell, D E H 1974 Rebellion, Revolution, and Armed Force: A Comparative Study of Fifteen Countries with Special Emphasis on Cuba and South Africa, (New York, Academic Press)
- Sanders, David 1978 "Away From a General Model of Mass Political Violence: Evaluating Hibbs," Quality and Quantity 12 (June). 103-129
- 1981 Patterns of Political Instability (New York: St. Martin's Press).
- Sarkesian, Sam C 1978 "African Military Regimes: Institutionalized Instability or Coercive Development?" in Sheldon W Simon, The Military and Security in the Third World: Domestic and International Impacts (Boulder: Westview Press Inc.). pp 15-46
- Schermerhorn, R.A 1970 Comparative Ethnic Relations: A Framework for Theory and Research (New York: Random House)
- Simon, Sheldon W (ed) 1978. The Military and Security in the Third World: Domestic and International Impacts. (Boulder: Westview Press Inc.).
- Skocpol, T. 1979 States and Social Revolutions: A Comparative Analysis of France, Russia and China (Cambridge, Ma: Harvard University Press).
- Smelser, Neil J. 1964 Theory of Collective Behavior. (New York: Free Press)
- Snyder, David 1976 "Theoretical and Methodological Problems in the Analysis of Governmental Coercion and Collective Violence." Journal of Political and Military Sociology. 4(Fall). 277-293.
- 1978, "Collective Violence. A Research Agenda and Some Strategic Considerations," Journal of Conflict Resolution 22 (Sept.) pp 499-534.
- and C Tilly, 1972 "Hardship and Collective Violence in France, 1830-1960" American Sociological Review, 37 (Oct.) 520-532
- Stohl, Michael and George Lopez. 1986 Government Violence and Repression: An Agenda for Research (New York: Greenwood Press)
- Tannahill, Neal R 1976 "The Performance of Military Governments in South America." Journal of Political and Military Sociology. 4(Fall) 233-244.
- Taylor, Charles L. and David A. Jodice 1983. The World Handbook of Political and Social Indicators III: 1948-1977. (Ann Arbor. The Inter-University Consortium for Political and Social Research)

- Tilly, Charles, Louise Tilly and Richard Tilly 1975. The Rebellious Century 1830-1930. (Cambridge: Harvard University Press).
- Tilly, Charles 1978. From Mobilization to Revolution (Reading Mass Wesley)
- Timberlake, Michael and Kirk R Williams. 1984. "Dependence, Political Exclusion and Government Repression." American Sociological Review vol.49, no 1 pp.141-147.
- Tuma, Nancy Brandon and Michael T. Hannan 1979 "Approaches to the Censoring Problem in Event-History Analysis." pp 209-240 in K Schuessler (ed.), Sociological Methodology, 1979. (San Francisco: Jossey-Bass)
- Unger, Sanford J. 1985 Africa (New York Simon and Schuster)
- Wallerstein, Immanuel. 1974 The Modern World System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century (New York Academic Press)
- Weber, Max in Gerth, H.H. and C Wright Mills 1946. From Max Weber Essays in Sociology (Oxford University Press, New York)
- Weede, Erich. 1978 "U.S. Support for Foreign Governments or Domestic Disorder and Imperial Intervention, 1958-1965 " Comparative Political Studies 10 497-528
- 1981. "Income Inequality, Average Income, and Domestic Violence " Journal of Conflict Resolution. 25 639-53
- Welfling, M.B. 1975 "Models, Measurement and Sources of Error Civil Conflict in Black Africa," American Political Science Review 64 (Sept). 871-888
- Wells, Alan 1974 "The Coup d'Etat in Theory and Practice Independent Black Africa in the 1960's." American Journal of Sociology 79: 871-887.
- White, Harrison (n.d.) "Notes on Constituents of Social Structure" Unpublished paper, Harvard University, Cited in Tilly, 1978
- White, Robert. 1989. "From Peaceful Protest to Guerilla War Micromobilization of the Provisional Irish Republican Army " American Journal of Sociology. 94 (6) May:1277-1302.
- Wilkinson, Paul. 1971. Social Movement (London Pall Mall).
- Wolpin, Miles W. 1986. "State Terrorism and Repression in the 3rd World" in Stohl, Michael and George Lopez (eds) Government Violence and Repression: An Agenda for Research. (New York Greenwood Press)
- Zimmerman, Ekkart. 1983 Political Violence, Crises, and Revolutions Theories and Research. (Boston. Schenkman.)
- Zolberg, Aristede. 1968. "Military Intervention in the New States of Tropical Africa: Elements of Comparative Analysis." in Bienen, Henry (ed) 1968. The Military Intervenes: Case Studies in Political Development