

# **A General Theory of Societal Governance and Power Dynamics of Extremist Groups**

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## **Abstract**

How do extremist groups gain power in communities that aren't ideologically inclined to support those groups? This paper describes a dynamic theory of the general phenomena that give rise to active support for extremist groups. We focus on extremist groups seeking to garner support from the local community by providing services and dispensing their brand of justice and law. We describe the theory based on a nonspecific extremist-group model. We then transfer this general theory to a computational system dynamics model that can be used as a base for simulating a variety of scenarios and extremist groups.

## **INTRODUCTION**

How do extremist groups gain power in communities that aren't ideologically inclined to support those groups? This paper describes an initial dynamic theory of the phenomena that give rise to active support for extremist groups. The basis of this theory is that extremist groups will often seek to garner support from the local community by providing services and dispensing their brand of justice and law. This involves interacting with the local community and groups outside of the community. For this effort we are defining an extremist group to be composed of individuals that display preoccupation with an ideology, religion, or political cause to such a degree that it leads to pursuit of violence as a tactic or strategy for imposition of its members' views on mainstream groups (see also Finlay, 2010).

How extremist groups work within the culture and society of local communities can have a large effect on the internal support they receive. Accordingly, their interaction with established cultures, tribes, clans, and other indigenous populations is often an indication of their actual support in the community (Thaler,

et al., 2013). This interaction, however, can clash with more transnational objectives of expanding the influence of the group by focusing on broader international issues. For example, the use of a international extremist group presence within a country that is suspicious of foreigners may actually undermine support for indigenous extremist groups (Hansen, 2013). In addition, a nationalist focus can conflict with transnationalist ideologies. This nationalist/transnationalist tension can play a role in the overall stability of these types of groups. An understanding of the potential effects of these types of influences is important, since they can affect the support, and thus the strength and influence, of extremist groups.

When we study a society that is significantly influenced by an extremist group, it is often valuable to model the group’s interaction with the society. There are often competing influences within the group (as mentioned above) and between rival extremist groups. Moreover, many of the extremist groups that exist today are at least loosely affiliated with other international groups (Pillar, 2001). For these groups, local group dynamics often depend on interactions within and between people and leaders that can be greatly affected by external influences. External influences can range from the imposition of new government in the area of interest or in neighboring countries, to the influence of diaspora populations, to natural disasters or military incursions by foreign powers. The effect of these influences depends on the nature of the society being affected (See Figure 1).

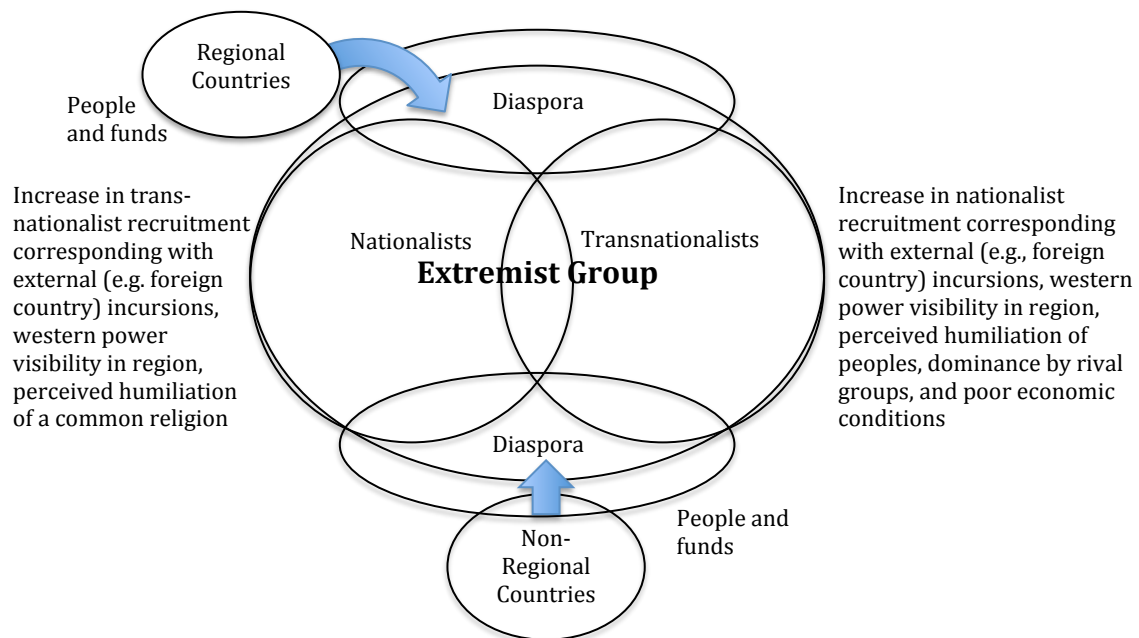


Figure 1. Broad influences on an extremist group

This theory is a first step in a project aimed at computationally modeling interaction dynamics within and between transnational extremist groups in response to military, social, economic, and political intercessions. To simulate the system, we created a data- and theory-supported cognitive-system dynamics capability, Behavioral Influence Assessment (BIA), to better understand and anticipate how the dynamics of allegiance formations between various groups and society are impacted by active conflict and by third-party interventions. We are also considering how and why extremist allegiances co-evolve over time due to changing geopolitical, sociocultural, and military conditions. We are currently working on transferring this general theory to a computational system dynamics model that can be used as a base for simulating a variety of scenarios.

### A GENERAL THEORY OF THE DYNAMICS OF EXTREMIST GROUP POWER

We are creating a general theory of the dynamics of extremist group power to use as a base for simulating and analyzing the influence of events and courses of action on extremist groups. Figure 2 shows a high-level overview of the actors that we might include in such a model. Economic and other exogenous factors influence the world political situation as well as the country or region of interest.

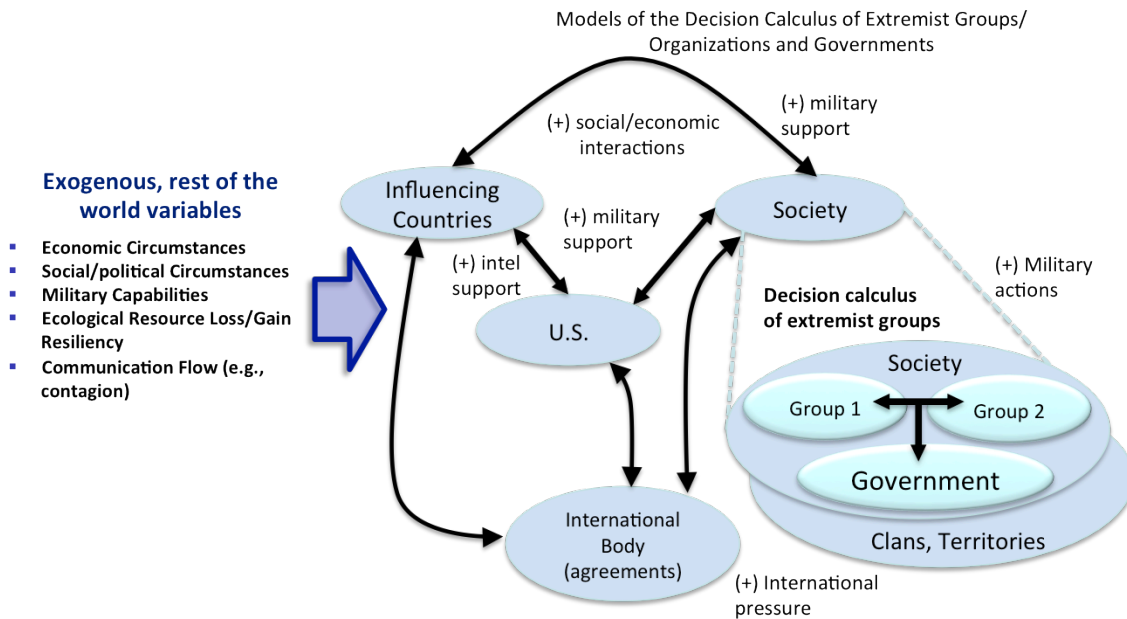


Figure 2. Conceptual view of the modeled interactions

Our general theory of societal governance and power dynamics of extremist groups is shown in the causal loop diagram in figure 3. The center of the causal loop diagram (figure 4) shows the conflict and security aspect of extremist group power dynamics. Some level of fractionalization of the society exists, so that internal conflict, if not controlled, will negatively affect people's lives and potential for satisfaction. This internal conflict can be controlled through public security provided by the government or extremist groups. It can also be controlled to some extent through private security paid for by businesses, but that control would be targeted and designed to protect the people or businesses funding the security. Fractionalization and internal conflict might also decrease if an externally-driven conflict (invasion, etc.) caused the society to band together in response. This sort of external conflict could also be controlled through public forms of security (military), whether provided by the government or by extremist groups.

In this model, two potential sources of authority exist: the government and the extremist group. The government might take different forms (national government, regional or local government, traditional, clan-based leadership, etc.), but it has the potential to provide security and other services and to tax the population. If the right conditions exist, the extremist group might take the same role. The extremist group can provide services and security, can demand resources from the population, and is more likely to do these things if the existing government is not.

The population can become dissatisfied because of high levels of conflict, low availability of services, or taxation (whether through formal or informal methods). If the population believes that the government holds power and should be providing services, it will blame the government for this dissatisfaction. Similarly, if the extremist group is powerful and demanding resources from the local community, that community will blame the extremist group if adequate services are not provided.

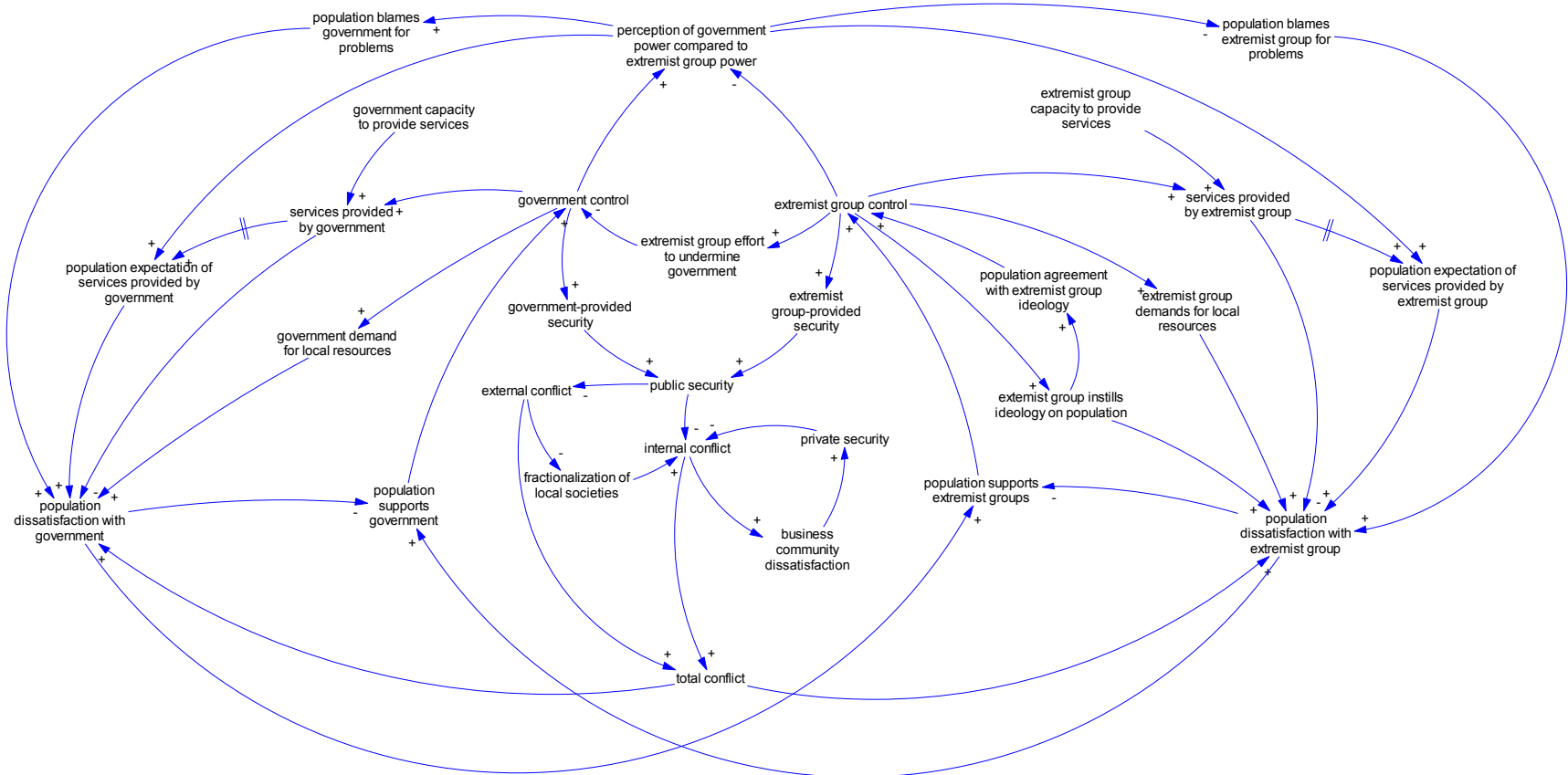


Figure 3. Causal loop diagram outlining the general theory of extremist group power dynamics

The extremist group seeks to gain power and support from the local community to further its ideology among the population. Even if the population does not tend to agree with this ideology, the desire for an authority that can help the population to meet its basic needs (safety, food availability, etc.) can cause it to support the extremist group. The power granted to the extremist group in this case allows it to evangelize its ideology among the population, which the extremist group hopes will lead to broader acceptance of this ideology. Evangelizing might also have a negative impact on the society's support for the extremist group, but if the society relies on the extremist group for basic needs, this might be overlooked. The extremist group also has an incentive to undermine whatever government exists, in an attempt to gain power and thus influence over the population.

We have implemented a simple version of the general theory model in computational form. The model is not calibrated to a particular society or situation, but we can alter the effectiveness of the extremist group's efforts to undermine the government, initial societal support for the extremist group, indicated fractionalization of the society, external conflict, and the government's and extremist group's capacity to provide services to assess aspects of the general theory in various situations. The model gives more dynamic insight when used as a base for a model of a specific situation, but this general theory model will provide a basis to work with many scenarios, and is potentially applicable in a variety of regions.

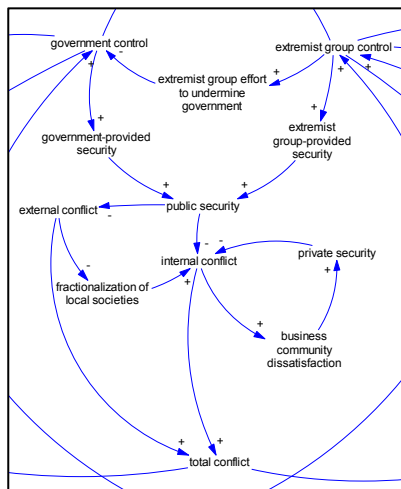


Figure 4. Conflict and security

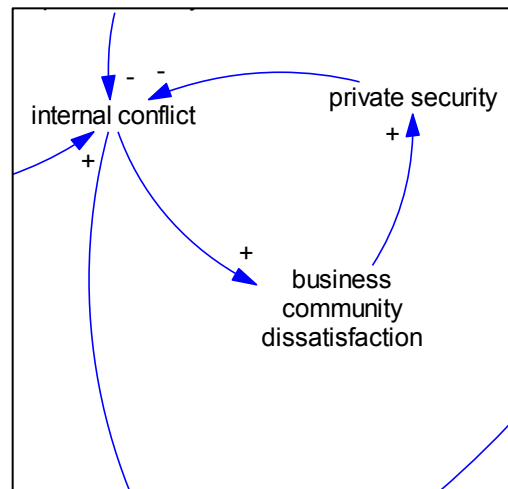


Figure 5. Conflict and private businesses

Figure 2 illustrates how the perception of who controls the reign of power (government or extremist group) affects the perception of security in the region. Here, the greater the degree of extremist control, the greater the perception that they are, in effect, the providers of security and a contributor to the instability of

government control. The government also seeks to provide security, and the greater degree of government control, the more extremist groups will seek to undermine the government. Thus, the government has the twin problem of seeking to increase security in the region and providing services while combatting the extremist group's actions to undermine the government. This provides an advantage to the extremist group whether or not they have control over the contested area. Generally, both the government and the extremist group are competing for control via security and services in the region.

As shown in Figure 5, businesses that operate in the region need to have some degree of security in order to both produce their products (e.g., agricultural foodstuff, livestock, etc.) and transport them to market. Larger businesses may hire their own security to help protect the production and distribution of their products. In some countries this can amount to very large investments in private security. This is particularly true for larger multinational firms, such as oil/gas and mining companies. These 'armies' can be quite large, even comparable or larger to the security forces of local governments (for example, see International Business Times, 2012). The greater the general conflict in the region and the more the government is perceived as not having control over the region, the greater the perceived need to have private security forces. This has the effect of potentially increasing the instability in the region if the private security forces are only protecting the interests of the company that hired them. This would occur if there were several—even competing—security forces that do not have a vested interest in the overall stability in the region. Moreover, if there was a perceived increase in the stability of the region—perhaps through greater government or extremist group control—there would be pressure to reduce the number of private security forces, which would place a greater number of potentially unemployed and armed people on the street. Of course, this could have the effect of increasing the instability in the region, causing a vicious cycle of instability, unemployment, and conflict.

Figure 6 illustrates how certain variables can affect the population's satisfaction with the government, which can ultimately affect the total conflict in this scenario. Here the perception of how fundamental government responsibilities, such as schools, health care, and safety, are carried out will greatly influence the population's confidence and satisfaction of the government. The greater confidence and satisfaction, the more easily the government can tax and control areas of the population. If these services are relatively new to a region, the government will have the benefit of receiving additional credit for these services. This will decrease the perceived need (as stated above) for private security forces.

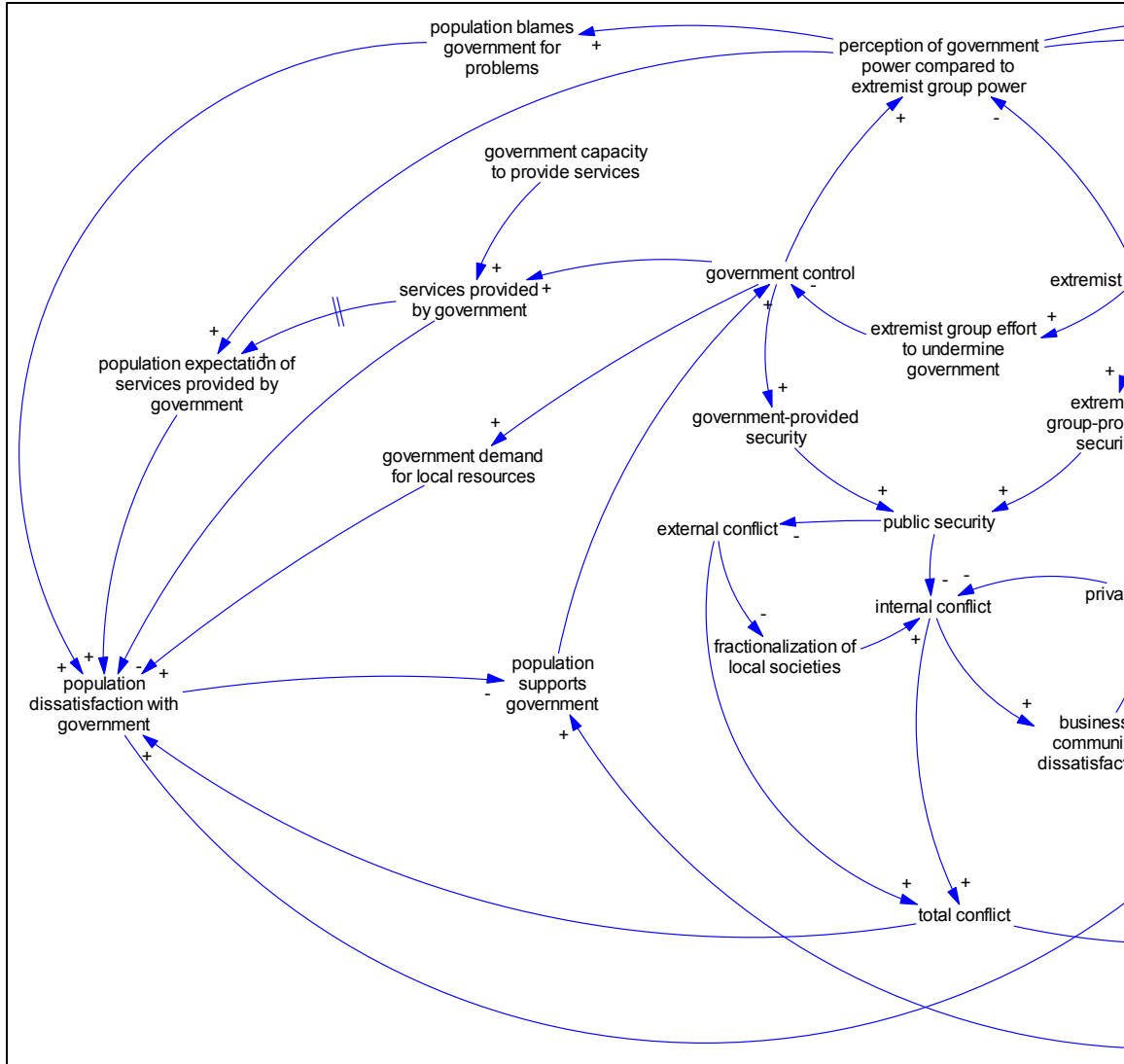


Figure 6. Governmental power and control

However, if the government does not do an adequate job of providing these services (especially in comparison to previous efforts by a previous government or extremist group), then support for the government will decline. The population may entrust their support to the extremist group instead. As discussed above, the government often has a particularly difficult task of providing services during conflict, especially when an extremist group actively tries to disrupt the government-supported services. A tactic that is used by the extremist groups is to fractionalize the population, create distrust between different regions, and to play off groups and clans against each other. This will extend the conflict and make it more difficult for the government to gain control over populations.

Figure 7 illustrates influences on the population's satisfaction with the extremist



group. Here, if the extremist group is assuming control over the population, the population will expect similar things from extremist group as they do from the government, and will become dissatisfied if those expectations are not met. Extremist groups can use their power to seize goods that were intended to go to other government-controlled areas for their benefit. They can also use their position to control how and what is taught in schools and how security is provided. If they are too draconian in the way they administer their brand of justice or how they control the population, they may lose vital support from the population—even if they are responsive to providing services. For this reason, extremist groups are typically careful to, at least initially, reside in areas of traditional support for their ideology and practices (Harper, 2012).

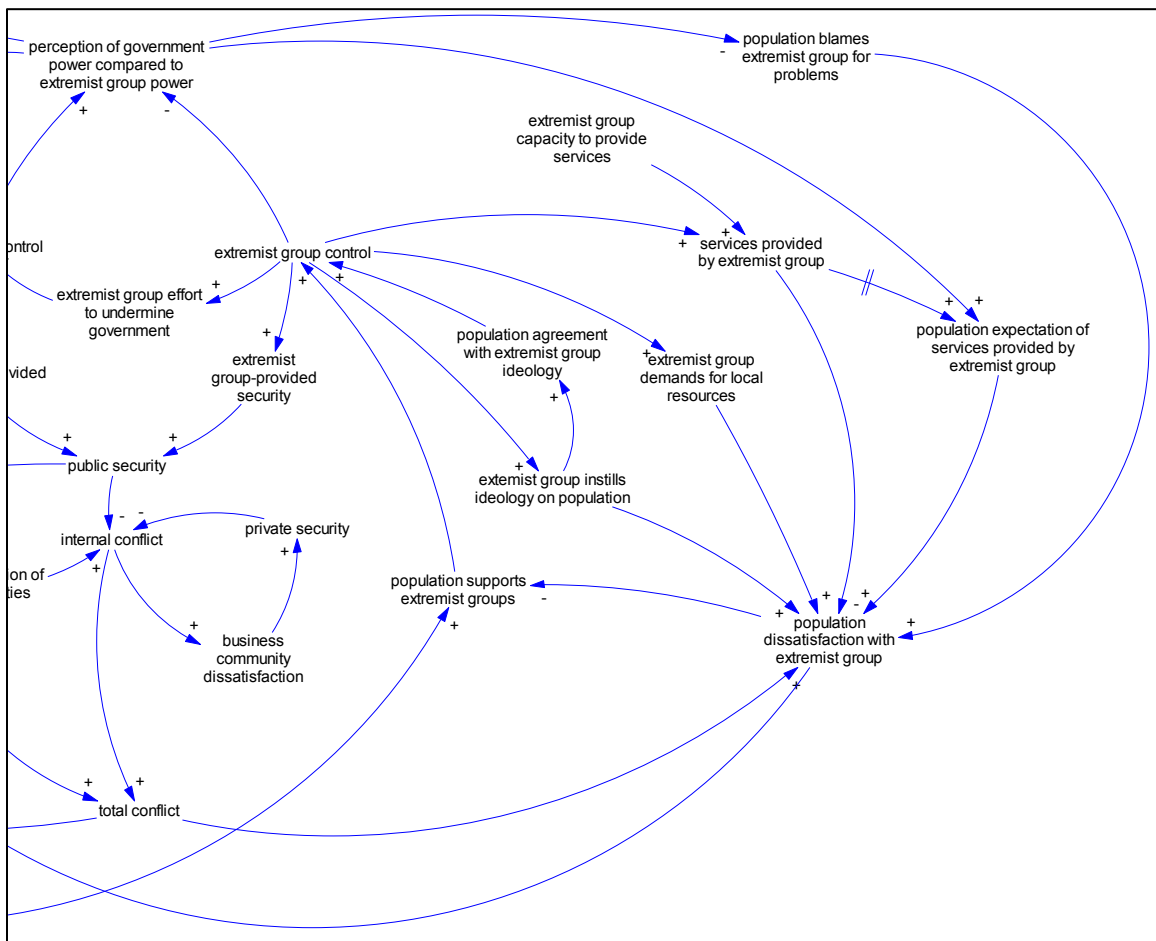


Figure 7. Extremist group power and control

Knowing this, governments may seek to reduce the extremist group’s capacity to provide services. In areas where there is traditionally little to no history of

government services, this might have a limited effect. Moreover, extremist groups often rely on government corruption to obtain needed material and foodstuff. However, there have been exceptions when the extremist group has disallowed United Nation groups to distributing foodstuff because of fear of their potential influence on the population. This act would, most probably, have a greater negative effect on the extremist group than any potential influence by United Nation personal.

## **MODEL**

### **Behavioral Influence Assessment (BIA)**

Behavioral Influence Assessment (BIA) is a system dynamics-based modeling framework for simulating systems that involve human behavior and decision making. The theoretical framework of the BIA is based on well-established psychological, social, and economic theories that have been incorporated into a single structure (figure 8) that is both self-consistent and dynamic. BIA uses a hybrid cognitive-system dynamics architecture. Cognitive models are implemented using system dynamics and embedded into an encompassing system dynamics model, which simulates interactions between people, groups, and physical, economic, or other system components.

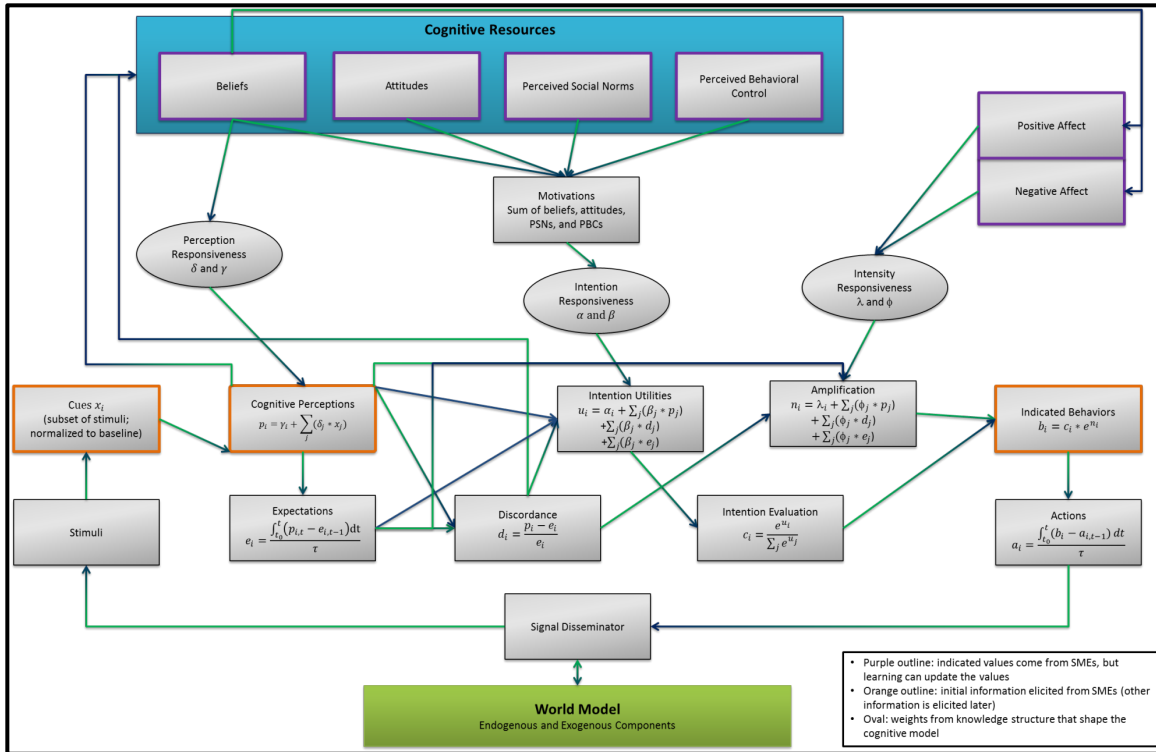


Figure 8. Behavioral Influence Assessment (BIA) structure

The cognitive portion of the BIA begins with individuals or groups being exposed to cues (stimuli relevant to the decision-maker). These cues are processed to create cognitive perceptions, the decision-maker's assessment of the world or situation. Over time, cognitive perceptions become expectations, which are compared to cognitive perceptions to determine discordance with the current situation. Intentions are calculated using utility functions, and a multinomial logit function (McFadden 1982) compares intentions to determine realized behaviors, which over time become realized actions.

One of these cognitive models is populated for each individual or group being included in the system. These cognitive models are connected to each other and to a world model sector using system dynamics. The world model sector includes all of the non-cognitive components of the system of interest, including physical systems, economics, etc. Outputs from the world model and the cognitive models act as inputs, or stimuli, for the cognitive model in subsequent time steps. Theoretical and mathematical details of the BIA are discussed by Backus et al. (2010).

## Model Results

We implemented the model structure shown in figure 3 using the Behavioral Influence Assessment framework. Our first scenario (figure 9) considers a case in which conflict initiated by powers outside the region rise sharply just a few months into the simulation. There is an initial nationalistic response, and internal conflict, including general crime and violence, decreases sharply. The overall level of violence in the region remains quite high due to the external conflict. The population blames both the government and the extremist group for this high level of violence, but places more blame on the government because it is perceived as having more power over external conflict. As the government loses support from the population, it becomes less able to provide services and prevent violence. The extremist group gains support, allowing it to provide more services to the population, which causes it to gain even more support. The population eventually expects more from the extremist group and becomes disappointed with the extremist group when violence continues. The population gives some support back to the government. When the extremist group has a large amount of power in the region, it attempts to instill its ideology on the population. Some people resist, but others adopt the ideology as their own, making it easier for the extremist group to gain and maintain support.

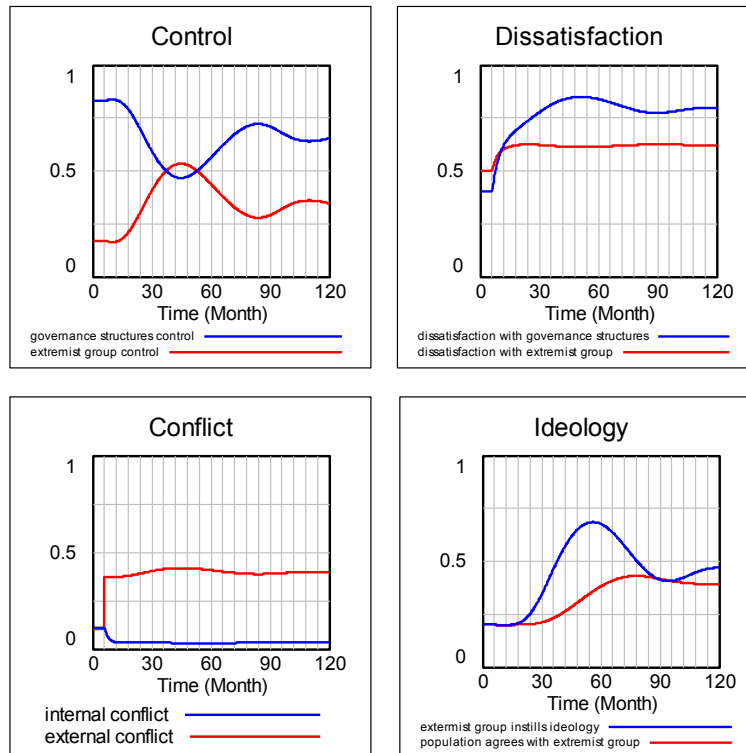


Figure 9. Initial results of the extremist group power dynamics model

## **CONCLUSIONS**

The intent of this effort is to investigate underlying attitudinal and behavioral shifts over time due to the influence of extremist groups. Our test case involves extremist groups in Africa. We are considering how certain decisions affect economic and social stability in different parts of Africa and how the resulting tension may affect this society. This region was selected because of the immediate and long-term threats posed by extremist groups.

This is a first step in creating a base theory for a much larger potential set of models. We believe that this theory is general enough to be applied in many situations where extremist groups attempt to win power and support by providing services to local populations. Further work will focus first on studying the general theory and applying it to more specific situations and on using the general theory model as a base to assess courses of action and other phenomena and their effects on extremist group power and growth.

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