

Terrorism and the State

Ignacio Sánchez-Cuenca
(pacho@ceacs.march.es)

(Juan March Institute and Universidad Complutense, Madrid)

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1. Introduction

Terrorist activity, particularly in its most extreme manifestations, such as suicide missions, is seen by many as the epitome of pathological, irrational behaviour. Even more traditional forms of terrorism are received by the media, the political establishment and public opinion with such strong feelings of repulsion that any attempt to explain terrorist violence is often misunderstood as an attempt to justify evil. These feelings have been exacerbated by Al Qaeda's 9/11 attack, the most lethal and spectacular deed in the long history of terrorism.

In the wake of Al Qaeda's attacks, international relations have changed dramatically. The United States' war on terror is the most visible consequence of this change (Holmes 2007, Shapiro 2007). It is no wonder then that scholars in many different fields have turned their eyes to terrorism. In fact, 9/11 has spurred a mammoth literature in the social sciences that tries to understand the motivations, strategies and rationality of violent extremist groups. Much of this literature is short-lived and opportunistic. But in the midst of this academic flurry, it is possible to find many valuable works that are reinvigorating the field of terrorism studies.

Despite the important contributions of recent years, our level of understanding of the terrorist phenomenon is not comparable to that of civil wars, guerrilla conflicts or genocides. To begin with, the conceptual boundaries of the phenomenon to be studied are not well defined. The field has been dominated by definitional disputes that have prevented serious theoretical developments. Given the lack of clarity about what counts as terrorism, it is hard to build systematic data sets. This has also fettered inductive, large-n comparative studies.

One possible solution to this unfortunate state of affairs comes from rational choice theory. First of all, we need a rationalist theory that generates a theoretically driven taxonomy of different forms of political violence, terrorism being a prominent one among them. Section 2 of this paper explores this issue. Drawing on Thomas Schelling's distinction between military power and the power to hurt, it is shown that terrorism represents an extreme form of political violence in which military power is almost non-existent. Terrorism, it is argued, constitutes a form of coercive violence carried out mainly by organizations that do not control a territorial base (unlike guerrillas and states). Given their material constraints, terrorist organizations cannot but resort to the kind of tactics that we tend to associate with terrorism. Terrorist conflict is characterized by the extreme asymmetry between the challenger and the state.

Once the actor that produces the violence has been properly described, a rational choice approach is adopted in Section 3, which consists basically of analyzing how the actor maximizes utility subject to certain constraints. Although the analysis in this chapter is carried out at the level of the terrorist organization, the issue of individual motivations cannot be completely overlooked, especially if we take into account that some organizations place exacting demands on their recruits, asking for sacrifices that may, in the extreme, entail death (suicide missions). As such, a brief discussion of motivations is also included. As in many other analogous collective action dilemmas, rational choice theory has not provided satisfactory explanations. The theory seems to work much better at the organizational level, once the previous, collective action problem is somehow solved.

Section 4 explores in depth the aims and behaviour of terrorist organizations in the strategic context of interaction with the state and with society. Game theoretical models play an important role here. Terrorist violence is carried out either to mobilize followers or to extract concessions from the state. Although these two aims are not mutually exclusive, usually one of them is dominant in the terrorist organization. One exception is Al Qaeda and its imitators, where mobilization and coercion seem inextricably linked. Yet, it is interesting to analyze each aim (mobilization and coercion) separately.

Revolutionary terrorist organizations kill with the expectation that killing will ignite a mass uprising. They do not aspire to negotiate with the state the demise of capitalism or the dictatorship of the proletariat. How violence is supposed to mobilize people is an intriguing question for rational choice theory. Two different mechanisms are explored. First, violence may affect the thresholds of participation of the masses. Second, violence may provoke a harsh response from the state that, under certain circumstances, induces people to join the violent movement.

Nationalist terrorist organizations understand violence as an instrument of attrition. They kill to break the resistance of the state. The point is to produce such pain that the state will consider that it is better off withdrawing from the territory under dispute. Here, violence as a signal about the resources of the organization (and the threat of future pain in the case that the state does not yield) is a crucial element.

Terrorist organizations very seldom produce as much pain as they could. Massive, indiscriminate Al Qaeda attacks, such as those of 9/11 in New York or 3/11 in Madrid, are rare in comparative terms. Many terrorist groups show a considerable

degree of self-restraint, both in their lethality and in the kind of targets they select. Section 5 examines the various constraints that affect these groups and that could help to explain self-restraint.

In Section 6 the issue of counterterrorism is approached. Should policy be based on negative or positive incentives? Negative incentives make violence more costly. Positive ones make violence less attractive vis-à-vis peaceful means. Most governments rely heavily on negative incentives. When the terrorist organization targets many countries, dilemmas of collective action rise for these countries. While each has incentives to protect itself at the cost of other countries that remain exposed to the terrorist threat, all of them would be better off if they refrained from partial protection and acted collectively against the terrorist enemy.

In the last section a general assessment is provided. Although there is no doubt that rational choice theory has made important contributions to the study of terrorism, dealing with such essential topics as the strategic interaction between TOs, States, and social groups, the consequences of State repression, the mobilizing effects of violence, the choice of targets and tactics (e.g. suicide missions), or the relationship between terrorists and their supporters, the fact is that many, if not most, of the formal models are disconnected from empirical research and study only partial aspects of the complex phenomenon of terrorist violence. In other words, we still need some middle range theory, based on rational choice assumptions, with power to integrate the various dimensions of the problem and to formulate testable hypotheses in a systematic way.

2. The nature of terrorism

The field of terrorism studies has been dominated by endless discussion about definitional issues (Badey 1998; Cooper 2001; Crenshaw 1972; Gibbs 1989; Schmid & Jongman 1988; Thackrah 1987; Weiberg, Pedahzur and Hirsch-Hoefler 2004). Schmid and Jongman (1988) collected more than a hundred definitions of terrorism, and their search ended in the mid-eighties. Whereas in the case of civil wars the problem has been solved through operational rules (an intra-state conflict with at least 1,000 fatalities, see Fearon and Laitin 2003; Sambanis 2002), in the case of terrorism the problem seems intractable.

The issue at stake is not merely terminological. Without an agreement about the boundaries of the phenomenon to be explained, theory building and empirical analysis are doomed. For instance, how can we select cases for comparative research if there is

no consensus about what counts as terrorism? In some cases there is almost universal agreement: nobody denies that the Red Brigades in Italy was a terrorist group. But what about other cases such as the Shining Path in Peru, the Tamil Tigers in Sri Lanka, the Resistance against Nazi occupation in the Second World War, the bombings of Hiroshima and Nagasaki or Pinochet's repressive regime? Depending on the definition that is privileged, the answer will vary, as we will see in a moment.

The main problem with existing definitions is that most of them are exercises in induction. They are not theoretically informed. Scholars try to establish some sufficient conditions based on their familiarity with the phenomenon. However, given the sheer complexity of terrorism, with high internal variation in its empirical manifestations, the ensuing definitions are either too general, covering not only terrorism but also many other forms of political violence, or too narrow, leaving out some important cases. Moreover, even if the definition provides a demarcation rule that works empirically, there is no guarantee that such a definition will shed any light on the nature of terrorism as a distinct and unique form of political violence.

Definitions are too general when they characterize terrorism in terms of coercion. For instance, it is often held that terrorism operates through the distinction between the target of violence and the main target (Krueger 2007: 14; Rosendorff and Sandler 2005: 172; Schmid & Jongman 1988: 28): the terrorists kill someone (the target of violence) in order to terrorize the many (the main target). However, this distinction applies also in many cases of coercion that have little to do with terrorism. When a small shopkeeper who refuses to pay for protection is killed by the mafia, this organization is sending a message to a larger audience (all those who can be potentially extorted). Most wars have elements of coercion that imply the distinction between the victims and the audience that observes the killing of the victims (Wagner 2000). As Schelling says regarding the two atomic bombs dropped on Japan in 1945, "the political target of the bomb was not the dead of Hiroshima or the factories they worked in, but the survivors in Tokyo." (1966: 17)

The attempt to terrorize an audience is not something unique to terrorism either. Although some definitions focus on the consequence of terrorist violence in terms of inducing fear in the population (Cooper 2001: 803; Hanle 1989: 104), fear is the generic consequence of coercion through violence. Terrorism is undoubtedly a highly refined manifestation of the power of coercion, but it does not have the monopoly over terror. States have a long record of terrorizing their own population through massive arrests,

internment, torture, summary executions or mass disappearances (Herrerros 2006; Walter 1969). And terror is also used in warfare (e.g. the bombing of London by the Nazi army).

On the other hand, definitions are too narrow when they identify a feature that only applies in some cases. For instance, it is often said that terrorism is violence against civilians or non-combatants (Goodwin 2006: 2028; Kydd and Walter 2006: 52; McCormick 2003: 474). This statement derives from what might be called the “international terrorism bias”. Most authors who study terrorism focus on international or transnational attacks, whose targets are mainly civilians. The paradigmatic example, of course, is the 9/11 attacks. Those familiar with domestic terrorist attacks, which are much more numerous than the international ones, know that some terrorist organizations kill combatants in a systematic way. For instance, police forces and the military represent 57.3 per cent of all fatalities of the Provisional IRA and 59.3 per cent of all fatalities of ETA (military branch) (Sánchez-Cuenca 2007: 294). These are not minor deviations. It would make little sense to consider that more than one half of those killed by the PIRA or ETA military are not victims of terrorism, or that these organizations are not terrorist ones.

Just as terrorism cannot be defined in terms of its targets, neither can it be defined in terms of its aims. Della Porta (1995: 107), for example, assumes that terrorism aspires to transform state institutions. But this is an unwarranted generalization from the cases she studies (revolutionary terrorist groups of the 1970s in Germany and Italy). If we look beyond these cases, we find all kinds of aims, from the collapse of civilization (Anarchists at the end of 19th century) to the defence of the status quo (Loyalist terrorist organizations in Northern Ireland, such as the Ulster Defence Association or the Ulster Volunteer Force).

To escape from the morass of inductive definitions, we need to derive the concept of terrorism from a theory of violence. Schelling’s (1966) distinction between military power and the power to hurt (or Kalyvas’s (2006) own one between extermination and compliance) provides an interesting point of departure. Military power corresponds to brute force and the power of destruction (extermination). The power to hurt, instead, is associated with coercion (compliance). Taking what you want is military power; making someone give it to you corresponds to the power to hurt. In modern warfare the power to hurt has become increasingly relevant. The whole idea of

nuclear deterrence is based on the power to hurt: the atomic weapon is used if the other party does not comply.

If we suppose that military power and the power to hurt define two extremes of a continuum, with many cases in between that combine in different proportions these two components, terrorism naturally falls in one of these extremes, namely the power to hurt. Unlike other forms of violence, terrorism can be characterized by the fact that it is never intended to destroy or annihilate the enemy. This is why terrorism, understood as a type of action, is associated with tactics that cause pain and terror: car bombs, assassinations, kidnappings, selective shootings against security forces or hostage taking.

In principle, any actor might carry out terrorist deeds. In practice, however, terrorism is mainly practiced by terrorist organizations. This is not tautological provided that we have an independent criterion about what a terrorist organization is. Obviously, the criterion cannot refer to terrorist tactics if it is to be truly independent. On the other hand, it should shed light on why these organizations resort in particular to terrorist violence and not to any other kind of violence.

The key point here is that TOs are clandestine. They act within the enemy's territory. TOs are not armies or guerrillas because they lack a territorial base liberated from the State they are fighting against. In the absence of a territory, there is no physical battlefield. In guerrilla conflicts or civil wars, insurgents break the monopoly of violence by creating territorially segmented monopolies of violence (Kalyvas 1999: 259). And when the control of the territory is under dispute, Kalyvas talks of "fragmented sovereignty", meaning by that that the control changes from one party to the other, sometimes in a brief span (for instance, the State controls the territory during the day, while the insurgents do so during the night). Terrorism, obviously, also breaks the State's monopoly of violence, but due to the absence of a liberated area, it does not bring about either segmented monopolies or even fragmented sovereignty. The situation is rather that of a duopoly, with two (or more) actors producing violence simultaneously within the same territory.¹

¹ Of course, in the real world the difference between TOs and guerrillas is not so clear-cut. For instance, the EOKA in Cyprus acted mainly in cities, but secondarily in the Troödos mountains; the FLN in Algeria acted mainly in Algiers, and to a minor extent in the Berber mountain areas (Beckett 2001: 152 and 161). The same holds for the ERP in Argentina (Moyano 1995: 51). Yet, I think these three groups were terrorist organizations rather than guerrillas because the main locus of their operations were urban, within the enemy's territory.

The lack of a liberated territory has far-reaching consequences for the dynamics of terrorist violence. Whereas TOs have very superficial contact with the population, guerrillas have to act as the new ruler in the liberated territory, establishing some sort of proto-State of its own to control the local population, extracting rents and imposing order. This is why guerrillas kill so many civilians in the areas in which they rule (Wickham-Crowley 1990). Given the absence of their own territory, terrorist organizations cannot get involved in fully military operations against the enemy. Whereas guerrillas may constitute lightly armed bands that penetrate the enemy's zone, terrorist organizations cannot aspire to launch military operations. Their aim is neither to weaken the State's army, nor to gain increasing portions of territory from the control of the State, making the State increasingly weaker. They can only try to inflict pain. Their feasible options are those compatible with the lack of a controlled area. Thus, they can hijack a plane, ambush a police patrol, put a bomb in a public place or shoot a politician. But they cannot maintain an open combat with a real army.

Terrorism is a certain kind of violent action aimed at hurting the enemy. In turn, TOs are those armed groups that, because they lack their own territory, cannot but engage in terrorist violence. Guerrillas can also carry out terrorist operations, particularly when they act out of their own territory and are subject to the same constraints as a terrorist organization. For instance, when the Shining Path exploded a car bomb in a bourgeois quarter of Lima on 16 July 1992, killing 25 civilians and injuring 155, that was a typical terrorist act. Since the perpetrators were in the enemy's territory, they did not wear uniforms or insignia, having to act in complete secrecy.

It is doubtful that States engage in terrorism. It is true, as said above, that States sometimes use violence to terrorize their own population. But the technology of repression is very different to that of terrorism. Repression, in its various forms, consists of massive arrests, torture or internment camps. I do not see what we gain in analytical terms if we call terrorism to State repression. State-sponsored terrorism is a different matter. Here, we have a terrorist (clandestine) organization that obtains financial support, information and logistics from the State and some of its members may be civil servants acting on a non-official basis.²

Henceforth, I focus on terrorist organizations, that is, insurgent groups that do not control a territory and act within the enemy's boundaries. Once an insurgent group

² A good example is the GAL in Spain during the 'Dirty War' against ETA (see Woodworth 2001).

without its own territory decides to use violence, it is constrained to resort to terrorist tactics such as the ones enumerated above.

The emphasis on terrorist organizations and not on terrorist violence is important. If it is considered that terrorism is a tactic that can be adopted by a host of heterogeneous actors acting under very different circumstances, it will be hard, if not impossible, to develop a systematic theory on terrorism. The explanandum will not be amenable to analytical scrutiny. What is to be explained if the dependent variable measures such disparate events as the two atomic bombs in the Second World War, the kidnapping and killing of Aldo Moro, and State repression in Argentina under General Videla? The only hope for an empirically relevant theory on terrorism is to study the kind of violence carried out by terrorist organizations.

3. Motivations

At the individual level, those who share the political ends that TOs pursue face a classical collective action dilemma. Given the high cost of becoming a terrorist, the free-rider temptation looms large. Joining a terrorist organization is a risky choice. The chances that the recruit will be arrested or killed are extremely high. Unlike guerrillas, there is very little safety in numbers: many TOs are indeed small organizations, with less than one thousand activists. Based on a sample of 1,118 arrested members of ETA between 1978 and 1992, Domínguez (1998: 27) calculated that the average duration of a recruit in the organization before the terrorist was arrested or killed was only 33 months. This is a very short period of time.

There is no evidence that terrorists suffer mental disorders (Victoroff 2005). If terrorists are ordinary people, why do they become terrorists? The empirical evidence shows that people who become terrorists act out of a feeling of outrage and injustice even if they are not necessarily the ones who suffer most exploitation, property or even occupation. For instance, members of Palestinian terrorist organizations (Benmelech and Berrebi 2007; Berrebi 2007; Krueger and Maleckova 2003; Krueger 2007: Ch. 1) and members of Al Qaeda (Sageman 2007) have educational skills well above the average. Krueger (2007) concludes from this fact that an improvement of economic conditions does not necessarily lead to a reduction of violence, since those who volunteer are not those who are most affected by economic backwardness. However, Bueno de Mesquita (2005a) has developed a model that accounts for this empirical pattern but reverses the policy implication. The mechanism he posits is the following:

the lack of economic opportunities in places such as Palestina pushes people with higher qualification into terrorism, since the economic opportunity cost of entering into a terrorist organization is lower. This means that economic development will certainly make terrorism less attractive.

If we go beyond this particular issue about the influence of social conditions on individual motivations, how can the decision to become a terrorist be explained in rational choice terms? Selective material incentives do not seem to play an important role in the terrorist setting. Qualitative evidence, in the form of memoirs, interviews and internal documents of TOs, shows that becoming a terrorist does not guarantee at all high standards of living. Terrorism is rarely a means of social mobility. Greed may be a powerful motivation in many civil wars in which the insurgents control natural resources or drug production in the liberated area (Collier and Hoefler 2004; Fearon and Laitin 2003), but it plays a minor role in clandestine organizations such as TOs. Perhaps the most important selective incentive is prestige within the peer group and the community of support. But is this benefit sufficient to compensate the enormous personal sacrifice that joining a terrorist organization entails?

The literature tends to assume that the collective action dilemma is somehow solved by focusing on the analysis of the decisions made at the organization level.³ In fact, terrorists can easily be identified with the hard-core of unconditional participants that are assumed to exist in models of collective action (McCormick and Owen 1996: 381). The existence of this hard-core is taken for granted and is not subject to further analytical scrutiny.

However, the occurrence of such extreme acts of cooperation as terrorist suicide attacks makes a deeper analysis about motivations unavoidable. Suicide attacks challenge the assumptions usually made in the collective action literature, since the perpetrator cannot enjoy either collective or selective benefits after the deed. The expected benefits are zero if the agent is only moved by self-interest. It is no wonder then that suicide attacks have aroused great intellectual curiosity among those who defend the universal application of rational choice theory. There is a growing body of literature on the rationality of suicide actions.

³ A couple of examples will suffice. Siqueira (2005: 20): “assume that each faction solves the typical free-riding problem”. Bueno de Mesquita (2005a: 518) solves the collective action problem referring to Lichbach (1996).

One tempting suggestion to make sense of terrorist suicide attacks is afterlife rewards. Yet, religious motivations are neither a necessary nor a sufficient condition: we observe suicide attacks among people with no religious motivations (Russian anarchists ca. 1900, Tamil Tigers in Sri Lanka), and some fanatically religious groups abstain from suicide attacks (the GIA in Algeria). According to Hoffman and McCormick (2004: 252), only 60 per cent of all suicide attacks that took place between 1983 and 2003 were carried out by religious organizations. Pape (2005: 210) provides an even lower figure, 43 per cent.

It has also been suggested that the payment that the families of the suicide bomber receives in Palestine or Lebanon could explain this kind of action. But, on the one hand, many suicide missions in other parts of the world are not rewarded in this way. And, on the other, this afterlife payment is not strictly speaking a selective incentive, since the perpetrator does not enjoy it. It presupposes some altruist motivation, even if it is only kin-altruism. In fact, altruism has been the dominant motivational mechanism used in rational choice explanations.

Azam (2005) considers a two-period utility function in which the agent is concerned about her own consumption level and the future consumption of her community. Under certain circumstances, it may be rational to give up all personal consumption with the aim of increasing (probabilistically) the consumption of the community. A terrorist suicide act becomes thus an extreme form of saving. Likewise, Bernholz (2004) suggests a Cobb-Douglas utility function $U = Ax^{1-\beta}y^\beta$ where x represents a private consumption good and y is the proportion of believers in the population. The agent engages in terrorism with the aim of increasing y . When $\beta \rightarrow 1$, y becomes what Bernholz calls a supreme value and the utility function represents in the extreme a lexicographic preference order in which ideological concerns trump self-interest and make suicide behaviour rational.

Wintrobe (2006) proposes a more elaborate model. Agents derive utility from autonomy and solidarity (or adaptation to the social group the agent belongs to). The agent may trade autonomy for solidarity, adapting her beliefs to those of the group. The more the agent adapts to the group, the greater the solidarity reward. Wintrobe derives a multiplier effect of solidarity: once the agent trades autonomy for solidarity, the agent recalculates the optimal mix of the two goods. He establishes the conditions under which the multiplier produces interior and corner solutions. In the corner solution, the

agent goes all the way down and renounces autonomy completely, identifying her utility with that of the group. Suicide behaviour, understood as a total sacrifice for the group, is then a rational solution.

The problem with all these models is that they tinker arbitrarily with preferences. Although at its most abstract level rational choice theory does not necessarily assume selfish motivations, the fact is that empirical applications always start from the self-interest assumption for methodological reasons. It is often considered that if the modeller can choose selfish or altruistic preferences at their convenience, all behaviour is immediately rendered rational (see Green and Shapiro 1994). Why should we make room for altruistic preferences in the case of terrorist behaviour but not in many other cases of collective action? And if altruism is always a possibility, what is the explanatory power of rational choice theory?

Ferrero (2006) has developed a simple model in which altruism plays no role. Everything hinges on selective incentives. Let b_i be the benefit the agent receives for belonging to the terrorist organization in period i , $i = 1, 2$. Let p be the probability that the person is asked for martyrdom in period 2. And, finally, let s be the stigma the agent obtains in the case she reneges and does not commit suicide when asked to do so. If the agent commits suicide in period 2, the benefit is 0. The expected utility of accepting martyrdom (M) is:

$$EU(M) = b_1 + ((1 - p)b_2 + p0). \quad (1)$$

In turn, the expected utility of reneging (R) is:

$$EU(R) = b_1 + (b_2 - ps). \quad (2)$$

The contract for martyrdom between the organization and the agent is efficient when it meets both the participation and the incentive constraint. If $U(N)$ represents the utility of not joining the terrorist organization (the reservation utility), where $U(N) > 0$, the participation constraint is simply $EU(M) > U(N)$. The incentive constraint is

$$EU(M) - EU(R) \geq 0.$$

The incentive constraint boils down to the condition $s \geq b_2$. That is, if the stigma is big enough, the person is better off committing suicide. This explanation seems to be just the opposite of those based on altruistic preferences. The utility function only incorporates selective incentives, with no room for ideological, moral or religious convictions. Thus, any person who obtains expected benefits greater than the reservation utility, should volunteer for suicide missions, regardless of their political

ideas.⁴ Empirically, Ferrero cannot explain the cases of the anarchists in 19th century, since there was no contract between the organization and the perpetrator and, as the author admits (2006: 866), there was no stigma associated with defection. Moreover, there are many other cases of political suicidal behaviour, such as those of self-immolation (dying without killing, see Biggs 2005), that are carried out without contracts of any kind and without selective incentives.

All these models, either based on altruistic preferences or on selective incentives, are disappointing for a deeper reason. It is one thing to describe certain behaviour in the language of rational choice theory; it is quite another to explain that behaviour. These models do not tell us much about why in some conflicts motivations for suicide missions are absent or present. They simply show that if preferences have some determinate features, suicide is not necessarily irrational. But what we need to understand is the conditions under which a conflict induces motivations that move some people to commit suicide for the cause.

4. Terrorist strategies: mobilization and attrition

What do TOs aim at when they engage in violence? What is terrorist violence supposed to achieve? TOs may pursue several ultimate goals, but these can basically be reduced to two for the sake of simplification: regime change and territorial independence (Hoffman and McCormick 2004: 245-6). Regime change, for instance, is what anarchist, communist, fascist and some Islamic TOs aspire to. They want to overthrow the existing regime and replace it with a different one that fits their political preferences.⁵ Many cases belong here. For instance, the Red Army Faction in Germany (also known as the Baader Meinhoff gang) (communist), Black Order (*Ordine Nero*) in Italy (fascist) or the Salafist Group for Preaching and Combat in Algeria (Islamic).

Territorial independence (or its prevention) is what nationalist TOs seek. ETA wants the independence of the Basque Country, Hamas and other Palestine TOs the independence of the occupied territories, the EOKA the independence of Cyprus, the IRA the independence of Northern Ireland from Great Britain (and integration with the

⁴ Suppose that p is 1 or close to it; which is not an unreasonable assumption in many cases. Then, the participation constraint is met when the selective incentives in the first period are greater than the reservation utility. But it is very unlikely that the selective incentives in the first period exceed the utility of continuing to live.

⁵ Some TOs have more modest goals, trying to change policy, not regime (e.g. anti-abortion or animal-rights terrorism). I will consider that the difference between regime and policy change is only a matter of degree, the underlying logic being the same in both cases.

Republic of Ireland), the UVF the maintenance of Northern Ireland in the United Kingdom, Irgun the independence of British Palestine, and so on and so forth.

Of course, the distinction between regime change and territorial independence is fuzzy in the real world. Hamas, for instance, wants to liberate the occupied territories, but also seeks to have an Islamic regime in these territories and, ultimately, the destruction of Israel. Likewise, the IRA and ETA have territorial demands (reunification with Ireland, independence for the Basque Country), but they also defend Socialism. The crucial point here is whether the terrorist organization has territorial claims or not, regardless of the political jargon employed to pursue their goals. While the aforementioned organizations have clear territorial claims, the Red Brigades in Italy or the Red Army Faction in Germany did not. As will be seen below, the territorial claim has far-reaching consequences for the understanding of violence dynamics.

Al Qaeda is perhaps the most difficult case. On the one hand, there is an element of territorial liberation: Al Qaeda rejects the presence of foreign troops on Islamic soil. Insofar as its attacks are aimed at the expulsion of foreign troops, its violence very much resembles that of terrorist groups with territorial claims. This is the perspective that Pape (2005) privileges in his analysis of suicide terrorism. But, on the other hand, Al Qaeda also wants to create massive popular support for the World Caliphate project and for the creation of Islamic States in Muslim countries. As Holmes (2005: 168-72) has explained in an illuminating essay, once different local fights are coordinated at the supranational level, the national liberation project becomes a global one of higher reach, in which terrorism is aimed at a more grandiose goal: the religious war against Western civilization. There seems to be here a unique, unprecedented mix of national liberation and revolutionary struggle.

If, despite the existence of important cases like Al Qaeda that do not fit well, I insist on the distinction between regime change and territorial independence, it is because each goal is associated with different strategies. When the goal is regime change, TOs understand that violence is mainly an instrument for mobilizing people. In contrast, when the goal is national liberation, violence is an instrument of attrition. Violence is supposed to impose such a cost to the State that the State will opt for withdrawing from the territory under dispute.

In this classification, I have not mentioned, for good reason, violence as a mechanism of compliance. When ETA kills a civilian because the victim is an informer, or the IRA kills a Catholic involved in petty crime, or the Red Brigades kills one of its

own people in jail because the person has become a repentant, these killings are unrelated to the political goals that the TOs pursue. They do not advance the cause. Rather, they are, so to speak, “internal” or “defensive” killings that have more to do with the security of the organization (more on security in Section 5).

Not everyone agrees with the point that the two basic goals of violence are attrition and mobilization. Kydd and Walter (2006) suggest a longer list: attrition, intimidation, provocation, spoiling and outbidding. It is remarkable that they omit mobilization, as this is perhaps the most often sought end of terrorist violence. But, more importantly, if we leave out intimidation, which is just another name for compliance, the other three goals, provocation, spoiling and outbidding, are all clearly instrumental with regard to a more basic goal. Presumably, terrorists provoke the State to induce an excessive State’s reaction that will turn many to the terrorists’ side. Here provocation is a tactic within the broader strategy of mobilizing people. In turn, spoiling and outbidding are goals that have more to do with the survival of the organization. Outbidding has to do with competition among terrorist organizations for gaining supporters (see Bloom 2004; Gupta and Mundra 2005); spoiling refers to an attempt to foil a peace agreement that would marginalize the terrorist organization (Kydd and Walter 2002). Both outbidding and spoiling are thus connected to the ultimate aim of mobilizing followers.

I explore next the logic of mobilization and the logic of attrition from a strategic point of view. In the case of mobilization, violence is intended to influence followers. Violence is often addressed against the state, but the ultimate addressee is the community of potential supporters. As we shall see below, the terrorists may consider that provoking state repression may contribute to their cause. In the case of attrition, violence is more directly directed at the state and the strategic element of violence is clearer. Violence is a signal sent to the state about the terrorist organization’s power to hurt in the case that the state does not yield.

4. 1. Mobilization

Why should the exercise of violence by an underground organization mobilize anyone? Revolutionaries of different ideologies (anarchists, communists, Islamists) have believed that violence could ignite a mass uprising. In its original formulation, that of the anarchist “propaganda by the deed”, it was considered that violence was much more effective in transmitting a message than leaflets, pamphlets or the press: violence has a

greater echo in society than written material. But, apart from the publicity effect, violence, according to the Italian delegates to the Bakunist International meeting on 3 December 1876, Errico Malatesta and Carlo Cafiero, is also useful “to involve these strongly alive forces of mankind in the struggle of the International.” (Quoted in Linse 1982: 202) Propaganda alone is not sufficient to induce people to join the struggle: violence is a crucial element in this endeavour. The Russian Nihilists of People’s Will came independently to the idea of propaganda by the deed. In their view, violence (and action more generally) has some power to organize revolutionary forces: agitation develops revolutionary feelings. Moreover, the State becomes “disorganized” when challenged in a violent way (Clutterbuck 2004: 157-8; De Nardo 1985: 233).

In more recent times, left-wing revolutionary terrorism elaborated the doctrine of propaganda by the deed. In the written materials of these groups, the following mechanisms are often mentioned: (i) violence polarizes conflicts, inducing more radical preferences; (ii) violence raises class consciousness, as workers learn the value of illegal forms of protest against the system; (iii) violence sets a path that others will follow; (iv) violence shows the fragility of the system, which is not as invulnerable as workers often think; and (v) violence forces the State to reveal its true repressive face.

The very same logic can be found in Islamic revolutionary organizations such as Al Qaeda. The 9/11 attacks were intended to humiliate the United States. The choice of highly symbolic targets, such as the World Trade Center and the Pentagon, shattered the myth of American superpower. Al Qaeda expected to boost its popularity and consequently to expand its base of supporters and its pool of recruits. The mobilization goal was obvious.

The case of fascist terrorism is somewhat different. The so-called “strategy of tension”, as practiced mainly in Italy in the period 1969-80, and to a minor extent also in Spain and Portugal during their transitions to democracy, consisted of creating, through indiscriminate attacks against civilians, such a climate of anxiety and apprehension that public opinion would approve a military coup and the establishment of an authoritarian regime. The most famous attack took place in the Bologna train station, where a bomb killed 85 people and injured more than 200 on 2 August 1980. The point was not to attract recruits, but to terrorize society and induce the army to intervene. Instead of mobilizing the masses, they sought to mobilize the army.

Rational choice literature has analyzed two different mechanisms by which violence could lead to popular mobilization. On the one hand, violence can affect the

threshold levels of potential participants. Violence is a signal about the resources of the challenger (the terrorist organization) and about the fragility of the state. On the other hand, violence may trigger a repressive reaction from the state that increases the popular backing of the terrorists. Each of these mechanisms is examined next.

Violence and participation

Terrorists seem to assume that violence has catalytic power. This may make sense in terms of the threshold models originally developed by Schelling (1978). In these models there is a distribution of types in the population. People are willing to cooperate provided that a large enough fraction of the population does so. Each type has a different threshold of collective participation beyond which she will cooperate. Some people, usually a small percentage of the population, cooperate regardless of what others do. They are the unconditional participants, the critical mass that triggers the cooperation of conditional participants.

There are some formal models that address this issue in the case of revolutionary violence (McCormick and Owen 1996, Ginkel and Smith 1999). The initial assumptions are rather restrictive, since the political regime is supposed to be autocratic. Given that most revolutionary TOs emerge in democratic countries (Sánchez-Cuenca forthcoming), this is a serious limitation.

McCormick and Owen (1996) adapted Schelling's model to the case of revolutionary, underground organizations. The value of rebelling against the regime is conditioned by two factors: the probability p that the revolutionary movement succeeds, and how much the individual weighs the value of revolutionary success. In turn, p is a function of how many people do join the movement. Given the parameters of the problem, it is possible to specify a reaction function $f(x)$ that tells us the fraction of the population that will cooperate if it is believed that a fraction x has joined the movement. Obviously, when x is such that $f(x) = x$, the process of mobilization reaches an equilibrium.

In a typical collective action problem, the reaction function has an S-shape that crosses the 45° line three times, as can be seen in Figure 1. The 45° line is the set of points at which $f(x) = x$. The problem for the revolutionaries is how to move from the first equilibrium to the second one. Here is where violence enters into the model.

[FIGURE 1]

According to McCormick and Owen, people are uncertain about the actual fraction of the population that supports the revolutionary organization. Let x stand for the fraction of population that is thought to support the organization. The crucial point is that the value of x depends on the behaviour of the revolutionary organization. More concretely, violent deeds may convey the impression that the revolutionary organization is more powerful than initially thought. Violence has mobilizing power because it affects the value of x . The higher the level of violence, the higher the expectations about the social support of the organization. And it is not only a matter of the quantity of violence. Quality may be also important, as the symbolic nature of certain targets may enhance considerably the perception of the effectiveness and power of the organization.⁶

However, if violence is merely a signal to compensate for the lack of support of the revolutionaries, it is not a credible one. If people are rational, they should not be misled by violence: were the revolutionary organization really powerful, it would not need to use violence to attract supporters. In a more elaborate model, Ginkel and Smith (1999) address this problem. There are three actors: the regime, the revolutionaries and the mob. The problem for the revolutionaries is the following: the easier it is for them to engage in violence, the less information the signal transmits to the mob about the weakness of the state. The signal is fully informative when the revolutionaries become violent despite a high risk of being repressed. It is then that the mob will join the revolutionaries.

This is an interesting result to understand the miserable failure of so many terrorist revolutionary organizations in the 1970s and 1980s. The Red Brigades (Italy), the Tupamaros (Uruguay), the Red Army Faction (Germany), the GRAPO (Spain) and the 17th November Revolutionary Organization (Greece) all failed completely in their attempts to mobilize the working class. The fact that all these organizations emerged in

⁶ The relationship between x and violence that McCormick and Own (1996: 396) propose is:

$$x = r \left[k \left(v + c \frac{dv}{dt} \right) \right]$$

where v stands for violence and r for the symbolic quality of v (k and c being constants). The introduction of the term $\frac{dv}{dt}$ implies that apart from the quantity and quality of violence, the rate of change of violence is also important. The organization needs to achieve a certain momentum to attract new recruits.

democratic countries may help to explain why people did not understand violence as a signal of the weakness of the state and of the bright prospects of revolution.

Whereas in these models the organizations are underground and have to communicate with the masses through violence due to the repressive conditions of the regime, it is worth noting that in democracy the logic is the opposite one: revolutionary organizations make the momentous decision of becoming underground because they consider that violence is the best instrument for mobilizing the masses.

Violence and repression

In most cases, the consequences of violence for popular mobilization are not independent of the state's reaction. The literature on state repression and protest has shown that repression does have ambiguous consequences regarding violence. Theoretical models establish different functional forms between these two variables (linear, U-shaped, inverted U-shaped, S-shaped) and empirical analyses reach non-coherent results (Davenport 2007, Francisco 1996, Gleditsch et al. in press; Koopmans 1997, Muller and Weede 1990). We know that the effects of repression vary under different political circumstances, but we do not know why. The literature on terrorism has also contemplated the possibility that state repression backlashes (Ross and Gurr 1989) but, again, we ignore the mechanisms in virtue of which the mobilization effects of repression may be greater than the deterrence ones.

The use of game theory has shed some light on this vexed issue. Two almost simultaneous articles by Bueno de Mesquita (2005) and Siqueira and Sandler (2006) have recently modelled the potentially contradictory effects of repression on terrorist violence. According to Bueno de Mesquita's model, repression has three different effects: (i) the usual deterrent effect that prevents supporters from joining the terrorist organization; (ii) a negative effect on the economy that decreases the opportunity cost of becoming a terrorist, making it therefore more likely that supporters join the organization; and (iii) a positive effect in the form of an ideological benefit derived from the fact that the person fights against a system that she considers repressive (the greater the level of repression, the higher the ideological benefit). Whether repression leads to lower or higher violence depends on the sign of the sum of these three effects. Obviously, a shortcoming of the model is that these ideological benefits are not measurable at all. We remain ignorant as to what sort of conditions may affect these benefits. It might be interesting nonetheless to develop this line of inquiry a bit further.

For instance, it could be argued that the more indiscriminate or arbitrary repression is, the higher the ideological benefit of fighting against the state.

Siqueira and Sandler (2006) do not contemplate ideological benefits. I present here a rather simplified version of their model to illustrate the application of rational choice theory to terrorism. The population is distributed according to an index φ in the interval $[0, 1]$: higher values of φ mean greater closeness to the terrorists. Let v be the level of violence by some terrorist organization and r the level of repression by the state. If the terrorist organization wins, supporters get payoff S (success); if it fails, they get payoff F (failure), $S > F$. The probability of failure is $\pi(v, r)$, with $\frac{\partial \pi}{\partial v} < 0$ and $\frac{\partial \pi}{\partial r} > 0$.

The state has a budget β for counterterrorism. This includes public goods g that could help to reduce the pool of supporters. If the per unit cost of repression is α , then the budget constraint of the state is simply $\beta = g + \alpha r$. Public goods may be excludable to a point. Let $\lambda \in (0, 1)$ be the degree to which public goods benefit the terrorists' supporters. The higher λ , the more universal public goods are (less excludable).

Terrorist violence can be represented as a lottery. The terrorists may fail with probability π and succeed with probability $1 - \pi$. The expected utility of actively supporting the terrorists is therefore

$$U_i^T = \pi(v, r)F + (1 - \pi(v, r))S + \lambda g + \varphi_i. \quad (3)$$

In (3) we have first the lottery of terrorism, then the level of public goods that cannot be excluded, and finally the satisfaction of being close to the terrorists. The utility of not supporting the terrorists is

$$U_i^{NT} = g + (1 - \varphi_i). \quad (4)$$

Here, the person has full access to public goods and pays an ideological cost for not supporting the terrorists (obviously, if $\varphi_i = 0$, then there is no such cost). We may want to express the likelihood of supporting the terrorists in terms of ideological closeness to them as measured by φ_i (φ_i is the threshold for participation). Thus, someone is indifferent between supporting and not supporting them when (3) and (4) are equal. In terms of φ ,

$$\hat{\varphi} = \frac{g(1 - \lambda) - \pi(v, r)F - (1 - \pi(v, r))S + 1}{2}. \quad (5)$$

When $\varphi_i > \hat{\varphi}$, the person is mobilized and supports the terrorists. When $\varphi_i < \hat{\varphi}$, the person does not support them. It is interesting now to calculate the derivatives in (5)

regarding violence v and repression r . If the resulting derivative is negative, that means that the ideological threshold of supporting the terrorists is lower and therefore support grows. First, we incorporate the budget constraint $\beta = g + \alpha r$ into (5), replacing g with $\beta - \alpha r$. The derivative with regard to violence is

$$\frac{\partial \hat{\phi}}{\partial v} = \frac{\pi_v(S - F)}{2} < 0. \quad (6)$$

What (6) shows is that an increase in violence implies an increase in mobilization. More violence means for followers a greater probability of the terrorists winning. This result parallels the main results of McCormick and Owen (1996) and Ginkel and Smith (1999) that we saw before, in which violence is a signal about the likelihood of victory.

More interestingly, Siqueira and Sandler (2006) show that the derivative with regard to repression may have different signs depending on the parameters of the equation:

$$\frac{\partial \hat{\phi}}{\partial r} = \frac{\pi_r(S - F) - \alpha(1 - \lambda)}{2} \begin{matrix} \geq \\ \leq \end{matrix} 0. \quad (7)$$

The ambiguity of the sign in (7) captures the two possible effects of repression. When the derivative is positive, an increase in repression brings about a reduction in violence (more people are deterred). And when the derivative is negative, repression has counterproductive consequences, generating more violence. The mechanism here is purely economic. The lower the value of λ (the degree to which terrorists benefits from public goods), the more likely that repression produces violence. The explanation provided by Siqueira and Sandler is the following: most money is spent on repression, followers do not benefit from public goods, and therefore their threshold for supporting the terrorists becomes lower. Their illustration is Israel vis-à-vis Hamas: the Israeli state invested heavily in the repression of Palestinians without providing them with public goods (low λ), inducing many of them to join the terrorists.

The authors expand these results in several directions. For instance, an interesting implication of their model is that repression will be particularly effective when supporters are not territorially concentrated (e.g. the Red Brigades in Italy versus Hamas in Israel). When supporters are spread all over the territory, it will be difficult to exclude them from public goods.

It is hard to say whether the role of access to public goods is as crucial as Siqueira and Sandler suppose. While it makes sense to suppose that the dramatic

worsening of life conditions in Palestine has fuelled support for organizations like Hamas, it is also the case that the tough counterterrorist policy of Israel has reduced the number of terrorist attacks against its population (regardless of other political considerations, the fact is that the separation wall and other repressive measures have been pretty effective).

In other cases of long-lasting terrorism, such as Northern Ireland or the Basque Country, it is difficult to ascertain whether public goods had any effect on the degree of support for terrorists. Other explanations are possible. For instance, it may be argued that the increase in support for TOs, particularly in the early phases of their activity, has to do with problems of information. When the state is challenged by clandestine organizations, it usually lacks information about the identity of the challengers and their networks of support. Under these circumstances, the state may engage in indiscriminate repression with the expectation that some terrorists will be captured. This was rather obvious in the battle of Algiers, in the Basque Country under Franco or when the United Kingdom dispatched the troops to Northern Ireland. But perhaps the most extreme manifestation is the war on terror launched by the United States against countries that have little to do with the terrorists. As Holmes (2007) has forcefully argued, this was the reaction of a state that did not know anything about the enemy, felt compelled to act, and acted as it used to do in the past, using military power.

Once the state obtains some intelligence and learns to infiltrate the organization or its external networks of support, repression can become more selective. As I have suggested above, it could be the case that Bueno de Mesquita's (2005) ideological benefits of fighting against a repressive regime are a function of how indiscriminate repression is, indiscriminate repression being the natural consequence of imperfect information.

Formal models of violence and repression have indeed introduced a great deal of analytical rigour. They distinguish the different effects that repression may have and thanks to comparative statics they derive hypotheses about which effects will dominate under various circumstances. Yet, these models are sometimes far removed from empirics. They are based on anecdotal evidence that fits their conclusions and not on serious testing of their claims. This is particularly worrisome when this kind of data is

used to motivate the model, since the bias of the evidence may be translated into the model itself.⁷

4.2. Attrition

In the case of national liberation terrorism, the main concern of the terrorists is to force the State to abandon the territory under dispute. Of course, national liberation TOs also want to have a strong base of support, but, to a point, this is an instrumental goal. The higher the popular support, the more powerful the terrorist organization will be in its fight against the state.

Violence now is supposed to impose such a cost to the State that it will opt for abandoning the territory. As TOs do not have military power to defeat the state in conventional warfare, they resort to a peculiar war of attrition against the state (Sánchez-Cuenca 2001: Ch.3). In the military field, a war of attrition refers to a protracted conflict with limited violence in which the party with greater resources wins. The losses of personnel, morale and weapons through constant battle lead one of the parties to eventually give up. In the context of terrorism, attrition is not produced through depletion of weaponry or personnel. Terrorist violence produces economic costs to the State (Enders and Sandler 2006: Ch. 9; Krueger 2007: Ch. 3). According to econometric estimations, the GDP of the Basque Country would be 10 per cent higher had it not been for ETA's violence (Abadie and Gardeazabal 2003). But the attrition of terrorism is ultimately psychological. Most people are revolted by terrorist violence. National liberation TOs, aware of these feelings of revulsion, kill in the hope of breaking the enemy's will to resist.

The strategy of national liberation terrorism is closer to the game theory model of a war of attrition than to the military concept. The model was first developed by the biologist John Maynard Smith (1984: Ch.3) in order to understand the interaction between two animals fighting over a territory. Here, instead of animals, we have a terrorist organization and the state, but the prize is still the control of a territory. The

⁷ Sometimes this anecdotal evidence is wrong or biased. For instance, Bueno de Mesquita (2005b) opens one of his formal articles with the following empirical puzzle: "For instance, beginning in 1979, ETA engaged in a massive campaign of terror despite the fact that the newly democratized Spanish government granted partial autonomy to the Basque Country in 1978." Yet, the campaign started in 1978, before the Spanish constitution was approved. Moreover, the number of killings fell dramatically after 1980, the year in which the first Basque Parliament and Government were constituted (supposedly, big concessions to the terrorists.) There is no basis for stating that ETA increased its killing at the time because of concessions. The ironic point is that Bueno de Mesquita uses this distorted fact to motivate the need for a formal model that concludes that concessions may lead to an increase in violence.

terrorist organization hurts the state by killing, kidnapping and extorting people and by destroying infrastructure; in turn, the state captures, and sometimes kills, as many terrorists as possible.

The analogy with an economic war of attrition between two firms is almost immediate. Suppose an economic activity that is a natural monopoly. If a second firm decides to enter into this market, the situation becomes that of a duopoly. The two firms engage then in a price war: they produce over the equilibrium level in order to depress the price of the good. When the price falls, the two firms have negative benefits and therefore staying in the market is costly for them both. Yet, if one firm resists longer than the other, the future benefits of being the monopolist may offset the costs of engaging in the war of attrition.

It may be argued that the production of violence is itself a natural monopoly (Tilly 1985: 175). The state has the control over its territory when it is the monopolist in the market of organized violence (Weber 1978: 54). If a terrorist organization emerges, the State is challenged and the situation becomes one of a duopoly (since the terrorist organization acts within the State's territory), with two actors fighting over the control of a territory. Some national liberation TOs see themselves as being involved in a protracted war of attrition with the state. Both ETA and the IRA have theorized their activity in terms of a war of attrition in which the goal is to outlast the enemy, that is, to break the will of resistance of the state (Sánchez-Cuenca 2007).

From the point of view of game theory, there are various ways to model the war of attrition. It may be considered as an iterated Chicken game (Fudenberg and Tirole 1991: 119-21), as a Chain Store game with two-sided incomplete information (Kreps and Wilson 1982) or as a second-bid auction in which both the winner and the loser pay the second bid (Fudenberg and Tirole 1991: 216-7).

Let us take here the iterated Chicken game.⁸ Two players compete over a prize of value v . The cost of fighting is c . Each player has two strategies, either to stay in the game one round more or to exit. In the case of the state, exit means abandoning the territory under dispute; for the terrorists, it means abandoning violence. If a player exits, her utility is 0. The game has two asymmetric equilibria (one player exits in the first period and the other stays) and one symmetric equilibrium. Given the lack of

⁸ I simplify here the exposition of Fudenberg and Tirole (1991: 119-21).

commitment capacity by the players, only the symmetric equilibrium is considered. Both players have a discount factor δ .

Let $R(t)$ be a payoff function that establishes the utility of exiting at period t when the other player has not exited:

$$R(t) = -c - \delta c - \dots - \delta^{t-1} c = \frac{(1 - \delta^t)c}{1 - \delta}. \quad (8)$$

Let $A(t)$ be another function that establishes the utility of the player that stays when the other player exits at t :

$$A(t) = R(t) + \delta^t v. \quad (9)$$

The symmetric equilibrium is based on mixed strategies. This requires that each player is indifferent between exiting at t and continuing until $t + 1$, exiting then if the other player does not do so. Suppose that at $t + 1$, the rival exits with probability p . The indifference relation can be written as follows:

$$R(t) = pA(t) + (1 - p)R(t + 1). \quad (10)$$

Substituting for $A(t)$ in (3) and rearranging terms, we obtain

$$R(t) - R(t + 1) = p[R(t) - R(t + 1) + \delta^t v]. \quad (11)$$

Taking into account that $R(t) - R(t + 1)$ is simply $\delta^t c$, the probability with which each player exits at t if the other player has not exited in the previous period is

$$p = \frac{c}{c + v}. \quad (12)$$

Equation (12) shows that the higher the value v of the territory under dispute, the more likely that the players stay. Whereas the United Kingdom withdrew from Aden in 1967 after less than forty soldiers had been killed, it was able to stay in Northern Ireland after almost 2,000 people had been killed by Republican terrorist organizations. There were indeed some important concessions made in the peace process to the Republicans and the Catholic community more generally, but the unification with the Republic of Ireland, the IRA's most basic demand, was denied. The value of a territory may also be related to reputation effects when concessions in one region may trigger further challenges to the State by other regions. Perhaps Chechnya is not so important for Russia, but the very possibility that the challenge posed by this region is imitated by

other regions may be more than sufficient for Russia to adopt a fully uncompromising attitude. On the other hand, the higher the cost c of staying one more period, the more likely that the players will eventually exit. This means that the more intense terrorist violence is, the more likely that the state will yield.

The general strategic framework of the war of attrition model can be developed in several directions. For instance, there are some models that analyze the response of the state when there is asymmetric information (Lapan and Sandler 1988, 1993, Overgaard 1994). Suppose that the terrorists know everything about the state, but the state is uncertain about how serious the terrorist threat is. The state does not know whether the challenge corresponds to a weak or a strong organization. It has to calculate then the optimal response. In their seminal model, Lapan and Sandler (1993) conclude that full commitment power by the state not to make concessions is not optimal when the terrorists prefer to launch an attack even if they know that the state will not surrender. As a matter of fact, this amounts to granting commitment capacity to the terrorist organization. This assumption, however, seems dubious.

Overgaard (1994) suggests a more realistic model. There are two types of TO, the low and the high resource types (resources being members, additional supporters and money). With complete information, the optimal course of action for the state is to resist if it is fighting a low-resource organization and to make concessions if it is fighting a high-resource organization. With incomplete information, the state infers the strength of the organization from the level of violence. Violence, in other words, is a signal about the resources that the terrorists possess. But then a problem of adverse selection exists. The low resource organization might mimic the behaviour of the high resource organization in an attempt to induce in the state the belief that the organization is powerful when actually it is weak. Overgaard collapses the indefinite nature of a war of attrition in a two period model. The second round represents the future.

The game has separating and pooling equilibria. The interesting result is that whether we observe pooling or separating equilibria depends on the flexibility of the state to act on the information transmitted by the signal. The more flexible the state is in its response, the more likely the separating equilibrium in which the high resource organization attacks and the low resource one does not. By contrast, if the state cannot react to the level of violence (e.g., it is committed to making no concessions), then a pooling equilibrium is more likely.

These models suggest, in a counterintuitive way, that commitment capacity may be harmful for the state. The main shortcoming of models of incomplete information applied to terrorism is that some terrorist conflicts last for decades (in the Basque Country, in Northern Ireland or in Palestine.) As Fearon (2004) has argued in the context of civil war research, it does not make much sense to assume incomplete information when conflicts are protracted. After some time, all the information about the players has been revealed by their actions. Signalling games can be applied to short terrorist campaigns, but not to long ones. Unfortunately, one of the most conspicuous gaps in the literature on terrorism is precisely why some conflicts last much longer than others.

5. Killing under constraints

If TOs want to mobilize followers using violence as a signal of strength or as a cost imposed on the state, it seems logical to expect full use of resources and maximum levels of violence. However, in only exceptional cases do TOs employ all their potential destructive power. Although indiscriminate attacks attract maximum attention by the media, the fact is that, with some exceptions, Al Qaeda's being prominent among them, the majority of TOs refrain from mass attacks. According to the data collected by Quillen (2002), there were only 76 terrorist mass bombings with 25 or more fatalities during the period 1945-2000. Although the number has increased considerably in recent years, because of the diffusion effects of Al Qaeda attacks, it is still true that many TOs do not fully employ their power to hurt. This forces us to consider the possibility that TOs act subject to certain constraints.

We know very little about how TOs make decisions on who is to be killed and how the killing is to be executed. Given the generic aim of maximizing pain, there is wide variation in terms of the intensity of violence, the selectivity of the attacks and the condition of the targets. In Italy, during the 1970s and early 1980s, fascist TOs engaged in fully indiscriminate attacks against civilians with bombs exploding in packed streets, trains and railway stations. The rate of people killed per lethal attack was, according to my own calculations, 3.5 (208 people were killed in 60 different attacks). By contrast, Italian revolutionary TOs were much more discriminate: their rate was 1.2 people killed per lethal attack (158 people killed in 127 attacks). In the case of Italian leftist TOs, it is not only that they were rather selective in their killings; very often, they preferred to wound their victims (through kneecapping) rather than kill them. In 1978, one of its

bloodiest years, the Red Brigades killed 15 people and kneecapped 13. Why this self-restraint?

It might be that ideological principles affect the preferences of TOs with regard to violence. But it seems more promising to focus on the constraints that TOs face in order to explain variation in the forms of violence. Tinkering with preferences is always problematic from a methodological point of view.

There are two kinds of constraints: those related to resources and those related to support. Regarding resources, TOs must solve what McCormick (2003: 495-6) calls the security constraint. The more active the terrorists are, the higher the number of arrests by security forces. The security constraint is met when the rate of recruits compensates the rate of losses that the practice of violence entails. If the capacity to recruit does not offset the arrests made by security forces, the terrorist organization will have to lower its number of attacks to survive.⁹

One possible way to cope with the security constraint is to increase the rate of fatalities per attack, shifting from selective attacks to more indiscriminate ones: instead of shooting a politician, exploding a car bomb. Thus, with fewer attacks, the terrorists can kill more people. This pattern is observed in some cases. For instance, ETA reached its lethal peak in 1980, killing 82 people. This is also the year in which Spanish police forces arrested the maximum number of terrorists. Consequently, in 1981, the number of killings went down to 30. In 1982, ETA employed car bombs for the first time.

However, more indiscriminate attacks might have counterproductive effects under some circumstances. It is here where the popular support constraint enters. If supporters have more moderate preferences (for example, they reject the killing of civilians) than the terrorists and the terrorist organization depends heavily on popular support, the terrorists may feel forced to refrain from killing civilians in order to retain popular support. Kalyvas and Sánchez-Cuenca (2005) suggest a U-shaped relationship between killing civilians and popular support. Whereas TOs that have almost full support or almost none do not feel constrained in the form of violence they can use, TOs that have support conditional on violence not going beyond certain limits have to take into account the consequences of their type of attacks.

⁹ Sánchez-Cuenca (2007: 298-90) tests, in an indirect way, the security constraint for ETA and the IRA. It is shown how a greater number of attacks leads to more arrests and how arrests lead to fewer attacks. Kaplan, Mintz and Mishal (2006) test the effect on Palestinian suicide attacks of targeted killings and preemptive arrests by Israeli security forces. They find that whereas preventive arrests decrease the number of attacks, targeted killings have a boomerang effect, increasing attacks via a reinforcement of suicidal motivations.

Let us take the case of killing civilians. TOs fully isolated from the population may engage in indiscriminate violence against civilians, as the Italian fascists did in the period 1969-84: according to my own calculations, 88 per cent of the victims were civilians.¹⁰ At the other extreme of the U, we have Palestinian TOs. Surveys reveal that during the second Intifada there was high popular support for the killing of civilians in Israel: around 60 per cent of Palestinians approved of this in 2001 (Krueger and Maleckova 2003: 125). It should be no wonder then that more than 80 per cent of the victims of Palestinian TOs were civilians.

In the valley of the U, we find TOs that have some popular support, which is badly needed for the survival of the organization, but the followers do not approve of the indiscriminate killing of civilians. This might correspond to the cases of the IRA, ETA or the Red Brigades, organizations with high selectivity in their killings.

Obviously, there is substantial overlapping between killing civilians indiscriminately and launching suicide attacks (although these attacks can be rather selective, as in political assassinations, in general they tend to kill rather indiscriminately). Therefore, TOs that do not suffer the popular support constraint are more likely to engage in suicidal terrorism. Al Qaeda is an interesting case. Since its attacks are not territorially bounded, it is not affected by the popular support constraint. Its potential constituency is not fixed. Whereas Hamas acts in Israel and the Red Brigades in Italy, Al Qaeda, by enlarging the theatre of its operations, overcomes the constraint. It is sufficient for this organization to obtain the support among the more radicalized Islamic groups all over the world (not necessarily in Muslim countries, as the attacks in Madrid and London attest). The aggregation of all these groups generates an impressive pool of potential recruits and a vast network of cooperation.

Due to its frightening nature and to its extension in recent years, there is a growing literature on why some TOs resort to suicide attacks.¹¹ Now the point is not to understand motivations at the individual level (as in Section 3 above), but the strategic reasons that TOs consider in the decision whether to launch or not suicide attacks. These reasons can be linked to the resource and support constraints.

Berman and Laitin (2007) suggest that suicide attacks may help to solve organizational problems that are related to the security constraint. TOs are highly

¹⁰ A more controversial case is that of anarchist terrorists in Europe in the period 1880-1914.

¹¹ For the history of suicide attacks, see Reuter (2004), Gambetta (2005) and Pape (2005). An excellent overview of this field is Crenshaw (2007). See also Goodwin (2006b) and the general discussion in the review symposium in *Perspective on Politics*, 5 (2007), Issue 1.

vulnerable to defectors. If a terrorist abandons the organization and reveals her information to security forces, the ensuing arrests may end with the organization. Relying on Iannaccone's economic model of the rationality of sacrifice in religious sects (Iannaccone 1992; Iannaccone and Berman 2006), Berman and Laitin consider that a terrorist organization that demands heavy sacrifices of its members, suicide being the highest one, solves the free-rider problem. In their model, sacrifice generates a separating equilibrium in which only those highly committed, and therefore unlikely to defect, enter the organization.

But, obviously, suicide attacks are not only carried out for organizational reasons. As Berman and Laitin claim, this type of attack is particularly convenient for "hard" targets. Hard and soft targets are distinguished by the likelihood that the perpetrator will be captured. To avoid the potential complications of capture, suicide attacks will be used mainly against hard targets. Soft targets will be approached with more conventional terrorist tactics. This may help to explain the puzzling empirical pattern that the authors find, namely that 90 per cent of suicide attacks are aimed at people whose religion is different to that of the perpetrators. The conjecture is that co-religionists are soft targets, while people from another religious community are hard ones.¹²

Other authors have emphasized other advantages of suicide attacks that can also be reduced to the security constraint.¹³ Hoffman and McCormick (2004) mention the greater destructive capacity of these attacks, their reverberation in the media and their low cost in economic terms. Bloom (2004) considers that competition among TOs may lead to an escalation of violence that makes suicide terrorism more likely. While this seems to be the case in Palestine (Gupta and Mundra 2005, Pedahzur and Perliger 2006), there are many cases of tight competition without suicide missions (Italy in the 1970s, Republican organizations during the Troubles) and suicide missions without competition (the Tamil Tigers of Sri Lanka).

In general, the conclusion that may be drawn from these analyses is that suicide attacks are always an effective device in overcoming the security constraint. It screens

¹² For a discussion of this hypothesis, see Gambetta (2005: 288-92) and Pape (2005: 88-92).

¹³ I do not discuss here Pape's (2005) theory of suicide terrorism. He holds that suicide attacks are always aimed at occupying democracies, are part of a national liberation struggle, and that the victims have a different religion to that of the perpetrators. Even if these empirical regularities hold (see Goodwin 2006b and Moghdam 2006 for critical assessments), they are far from being an explanation. We still do not know the reasons why the fulfilment of these conditions is conducive to, or requires, suicide attacks by the terrorist organization.

out free-riders, it reaches hard targets and it multiplies the lethal effects of the attack. But then the question that comes immediately to mind is why suicide attacks are not more widely distributed. Why do so many TOs refrain from suicide attacks?

The answer could lie in the support constraint (Kalyvas and Sánchez-Cuenca 2005). Suicide attacks may alienate supporters when the latter reject both the tactic (for its extremeness) and its effects (indiscriminate or massive killings). Though the organization is aware of the security advantages of suicide attacks, it refrains from this tactic in order to keep its base of support. The most interesting case here is that of the IRA. The IRA fully understood the usefulness of suicide attacks against hard targets. In October 1990, the terrorists kidnapped the family of Patsy Gillespie (a civilian who worked in an army base). To liberate his family, Gillespie had to drive a car full of explosives following the route set by the IRA. When the car was close enough to an army checkpoint, the terrorists exploded the bomb by remote control. The operation was strictly similar to a suicide mission against a hard target, with the only difference that the perpetrator did not volunteer and was coerced and misled by the terrorists. This is the closest that the IRA came to a suicide attack. The IRA did not pursue this path, since “the vast majority of Catholics in Derry were sickened by the attacks and no doubt let the IRA know what they thought.” (Taylor 1997: 317)

One of the most under-researched questions in the field of terrorism is the calculations that TOs make when they choose tactics and targets. In recent years, things have improved a little thanks to the growing interest in suicide attacks, but we still lack a satisfactory theoretical analysis of this question. From a rational choice point of view, I have suggested that, given the aim of TOs at producing pain, either to mobilize followers or to coerce the State, differences in tactics and targeting may be due to the varying effects of constraints. To simplify this somewhat, I have divided constraints into two categories: constraints that have to do with resources, and more concretely with the security constraint, and constraints that have to do with popular support. A testable hypothesis establishes that when the support constraint is not binding, suicide missions are an effective way of overcoming the security constraint.

6. The counterterrorist policy of the State

What can the State do to prevent terrorist attacks? There are two types of answers, with very different implications. On the one hand, the State may observe the conditions that make terrorism more likely and then pass reforms to change these conditions. This

policy does not try to deter terrorists, nor does it try to induce them to stop violence. Rather, it goes to the “root” causes and tries to act on them so that terrorism does not find a favourable niche. The potential “root” causes that are considered in the literature have to do with factors such economic backwardness, lack of political rights, or occupation by a foreign power (Bjørge 2005; Pape 2005; Richardson 2006). Obviously, the change of these conditions may require a long-term horizon and may be not incentive-compatible with the interests of rulers.

On the other hand, the State finds itself in a strategic context with TOs. Once there is a terrorist conflict, the State has to decide what kind of policy is going to pursue. It may go for negative or for positive incentives, or for a mix of them. It is in this context where the rational choice literature on terrorism has made one of its more important contributions. Assuming that TOs react to the policy made by the State, the State has to decide what to do in a strategic way.

Several distinctions are necessary at this point. Generally speaking, counterterrorist policy consists of raising the cost of attacks for the terrorists. The idea is that the more costly terrorist attacks are, the more likely that terrorists will shift to non violent tactics. This can be achieved through negative (“stick”) or positive (“carrot”) incentives. Briefly put, negative incentives make violence more costly, whereas positive ones make non violence more attractive. Most of the attention has been paid to negative measures (i.e, coercion). But, as Frey (2004) has argued, there is not ground to rule out positive measures that help terrorists to make the momentous step of quitting violence.

Frey (2004) suggests three measures of positive policy, but unfortunately they are not backed by empirical analysis. The first one, perhaps the most speculative, is that economic and political decentralization makes a country less vulnerable to terrorism. If economic power is not concentrated, the economic cost of terrorist attacks cannot be very high. Likewise, if political power is divided and geographically dispersed, terrorists cannot attack the core of the system, since there is not a core.

The second one is to give opportunities to terrorists to become part of the system. This may require political reforms to increase the inclusiveness of the system. Also, it implies that those terrorists willing to renounce to violence should be somehow rewarded. Repentant people, for instance, have been crucial in the fight against some TOs. For instance, *pentiti* in Italy and *supergrasses* in Northern Ireland led to a high number of arrests that weakened considerably the Red Brigades and the PIRA respectively. Many people reject this policy, both on moral and instrumental grounds.

From a moral point of view, some find objectionable any sort of benefit for particularly cold criminals as terrorists are. From an instrumental point of view, some fear a potential moral hazard effect (if it is so easy to quit as a terrorist, the incentives to become one are greater).

The third measure is still more unlikely than the other two: given that the terrorists cleverly manipulate the media repercussion of their attacks, there should be ways to control this repercussion. Censorship not being a feasible alternative in democracies, Frey opts for the Government misleading the audience with too much information. Instead of attributing responsibility to an organization (an effect desired by the perpetrators), the Government may suggest several possible authorships, so that the terrorists cannot claim their attacks credibly.

More interestingly, Bueno de Mesquita (2005b) has elaborated a formal game-theoretic model in which concessions made by the State have some positive consequences. Basically, Bueno de Mesquita argues that State's concessions provoke a split in the terrorist camp. Moderates accept a pact with the Government, while radicals take control of the terrorist organization and increase violence in the short-run.¹⁴ However, due to the fact that moderates cooperate with the Government, providing information, counterterrorism becomes more efficient and overall the level of terrorism is reduced. This is yet another argument for "carrot" policies, though its empirical basis is rather fragile.

Most research focuses on negative incentives (see Enders and Sandler 2006 for a comprehensive review). Counterterrorist policy is basically intended to raise the costs of engaging into violence rather than to raise the benefits of abandoning violence. This coercive approach implies a trade-off between security and liberty (Davis and Silver 2004), with far-reaching consequences for the functioning of democracies.

Coercive counterterrorist policy may take two forms, the proactive and the defensive one. Proactive policies try to neutralize terrorist groups destroying their training camps, arresting activists or infiltrating the organizations. Defensive policies

¹⁴ Bueno de Mesquita (2005a) claims that this is what happened in the Basque Country and Northern Ireland. Yet, it is not true that ETA increased its violence during the Spanish transition to democracy because of State concessions (p.145). There were not negotiations between the State and the terrorists. Moreover, the spiral of attacks began earlier than the democratic Constitution (December 1978) or the devolution process to the Basque Country (December 1979). It is also inaccurate to say (p.173) that the peace process in Northern Ireland led to "an increase in militancy". The Real IRA was clearly a marginal group and its most horrible attack, the Omagh bomb that caused 29 fatalities, was a consequence of an ill-planned operation. It is ironic that the motivating empirical pattern of the formal model is not grounded in facts.

try to protect the targets from attacks. The destruction of Al Qaeda camps in Afghanistan was clearly a proactive measure, while the construction of the security fence in Israel is a defensive one. Proactive policies try to prevent attacks; defensive ones try to deter them.

This distinction is particularly relevant in the case of international terrorism, since proactive policies share some of the features of a public good, whereas defensive ones are more of a private one. The destruction of the attack capacity of a terrorist organization is a good from which countries that did not contribute to it cannot be excluded. Protecting a target, by contrast, only benefits to that target and it may be argued that it produces negative externalities to other potential targets.¹⁵

In fact, there is evidence of a substitution effect (sometimes called “transference”) by which defensive measures induce terrorist not to reduce violence, but to shift targets. Enders and Sandler (1993) showed, for instance, that the introduction of metal detectors in airports decreased skyjackings, but increased kidnappings and assassinations. Likewise, Kaplan et al. (2005) found that during the construction of the security fence in Israel, there was a shift from protected cities to still unprotected ones. In the Basque Country, the protection of politicians with bodyguards has led ETA to kill local, low-rank politicians, and when bodyguard protection was extended also to them, the terrorists chose former local politicians without protection.

The public good nature of proactive policies creates a free-rider problem among countries that suffer international terrorism. According to Arce and Sandler (2005), this explains the prevalence of defensive policies as opposed to proactive ones. Using a simple normal form game, they show that under very general conditions, the Nash equilibrium of the game is the choice of defensive policies by all parties. Let us suppose that the actors are two neighbour countries, the terrorist organization being a third actor whose actions are not modelled. Let B stand for the public benefits of attack prevention, c the cost of the proactive policy, C the public costs of protecting a target in a defensive way, and b the private benefits of a defensive policy. Each country has three strategies: a proactive policy, a defensive policy, and doing nothing. The structure of the game is represented in figure 2.

¹⁵ The literature does not contemplate other kind of externalities. For instance, proactive policies at the domestic level may generate an international problem. This is what happened with the Japanese Red Army in the 1970s (Farrell 1990): due to the counterterrorist policy of Japan, the terrorists decided to become an international group acting in many countries and particularly in the Middle East.

[FIGURE 2]

If the two countries invest in proactive policies, the benefits are $2B$ and the cost of the policy for each country is c . If the two countries invest in defensive policies, the calculations are somehow less obvious. On the one hand, each country gets the private benefit b . But, on the other, each country pays the cost C of protecting the target and imposes also this cost to the other country. This may be because the terrorists will shift from one country to the other one, or because there may be citizens of country 1 living in country 2 and vice versa. Defensive policies, therefore, always impose a cost to the neighbour, regardless of what the neighbour does. The same logic holds for the payoffs of all other strategy profiles.

The 3x3 matrix can be analyzed as the juxtaposition of two partial games. In figure 2, these two games are highlighted in bold. The first one, in the northwest of the matrix, corresponds to a 2x2 game in which countries decide between a proactive policy and doing nothing. It is a Prisoner's Dilemma, in which the strategy profile (Doing nothing; Doing nothing) is a Nash equilibrium. Each country is better off not paying the cost of preventing attacks, but the two countries would be even better if both of them paid the costs. In the second partial game, in the southeast of the matrix, the countries choose between doing nothing and a defensive policy. Again, the payoff structure corresponds to a Prisoner's Dilemma in which the (Defensive; Defensive) is the Nash equilibrium. Although the two countries are better off if they collectively renounce to defensive policies, each has incentives for unilaterally protection of its national targets.

It is easy to see that in the 3x3 game, when the three strategies are simultaneously considered, the defensive policy choice is a dominant strategy regarding the other two. The only Nash equilibrium of the whole game is therefore (Defensive; Defensive). Proactive policy is not observed due to the free rider temptation. And the negative externalities that a unilateral defensive policy has for other countries forces them to adopt defensive measures too. Following Arce and Sandler (2004), the only way to change the equilibrium without a dramatic modification of the payoff structure is when targeting is asymmetric. If the likelihood of being hit by a terrorist attack is much higher for one country than for the other, then the more vulnerable country may have incentives to implement a unilateral proactive policy regardless of what the other country does. Of course, this is just an extension of Olson's (1965) result on the exploitation of the great by the small. After an attack of the magnitude of 9/11, the

United States had incentives to invest in proactive policy even if other Western countries were not willing to reciprocate.

In the context of domestic terrorism, the State is not subject to the free rider problem. Insofar as the State is the main provider of public goods, it will pursue proactive policies. Here, the problems are of a very different nature and have not been sufficiently analyzed from a rational choice point of view. As was mentioned earlier with regard to revolutionary and nationalist TOs, the State has to devise a counterterrorist policy that does not produce indirectly more popular support for the terrorists, as it is usually the case when the State engages in indiscriminate forms of repression; likewise, it has to decide under what circumstances it is appropriate to establish negotiations with the terrorists, an issue that was dealt with in section 4.2.

7. The contribution of rational choice theory to the study of terrorism: an assessment

The field of terrorism has been traditionally dominated by case studies. Case studies are indeed valuable, for they provide detailed information about the origins, tactics, aims and ending of terrorist organizations, but it is difficult to generalize from them. Comparative, large-n studies regarding terrorist violence have been scarce (Burgoon 2006; Engene 2008; Li 2005; Li & Shaub 2004; Sanchez-Cuenca 2009 are some exceptions), simply because of the absence of datasets comparable in scope to those on civil and interstate wars. It is true that there are datasets of international terrorist events, but it is hard to see why international attacks constitute a relevant “political kind” or should be analyzed independently of domestic ones. Firstly, it should be noted that international attacks represent a very small fraction of all terrorist violence. And secondly, the decision to engage in international terrorism should be considered a choice made by the terrorist organization, not a type of event that is to be explained independently of other actions carried out by the TO that do not fall under the “international attack” definition (any terrorist event in which the nationality of the perpetrators is not the same as the nationality of some or all of the victims or targets counts as international).

In terms of theory, the field has been trapped in endless debates on definitional issues. If terrorism is conceptualized as a type of violence that can be chosen by very different actors (underground groups, guerrillas, armies, States, etc.) under very different circumstances, it is dubious that any systematic finding about the onset,

intensity, strategy and end of terrorism is ever going to be established. The heterogeneity of the actors and the diversity of situations in which terrorism thus understood occurs makes almost impossible any kind of theoretical analysis. This is why I have argued that the actor-sense of terrorism (basically, underground organizations that engage in political violence) lends itself more easily to theory development.

Due to the lack of consensus about how to delimit the study of terrorism, no middle-ground theory, in the line for example of Kalyvas' (2006) masterful theory on violence in civil wars, has yet been formulated. Rather, we have a number of partial approximations. The rational choice approach has produced many models on issues such as the effects of State repression on the terrorist organization, the negotiations between the State and TOs, the relationship between terrorist violence and popular mobilization, the choice of tactics such as suicide missions, or the consequences of different counterterrorist policies.

Rational choice theory has brought to this field an unprecedented degree of rigour and analytical sophistication. To a large extent, it has contributed crucially to the end of the "methodological exceptionalism" that was associated to terrorism studies. But having said that, it must also be recognized that rational choice models present shortcomings of their own kind. Many of them are devoid of any empirical import, not because they are not tested, but simply because they are not motivated by empirical findings. Or they are unable to generate clear comparative static results.¹⁶ Or they are so disparate regarding the basic assumptions and the setting of the models, that it is hard to think of ways of adding up the findings in an integrated framework.

These criticisms, it goes without saying, are not intended to reject the rational choice approach in this area. Rather, they set high standards that have not yet been met. As in many other fields, the first generation of formal models is far removed from empirics. Probably future contributions will try to match theoretical and empirical concerns, as it has happened in other areas of social and political research. In fact, the

¹⁶ Bueno de Mesquita and Dyckson summarize their model in these terms: "terrorist conflicts will be most common in places where even soft-line governments are unable to engage in counter-terror without imposing heavy negative externalities and in societies where all types of governments more or less agree on the value of negotiated settlements." (2007: 374) This proposition, no matter how insightful is, hardly lends itself to empirical, comparative testing given its abstraction and the difficulty of measuring its parameters.

field is right now under a deep transformation. The definitive implosion will take place when formal models become integrated with empirical, comparative research.

More generally, the analysis of terrorism is fully taken by the agency vocabulary of rational choice theory. It is widely accepted that terrorist organizations are rational actors that pursue certain goals strategically, interacting with the State and social groups, under certain material and political constraints. The agenda for the future is how to develop more elaborated theories on terrorism that start from this basic assumption.

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Figure 1. A typical S-shaped reaction function

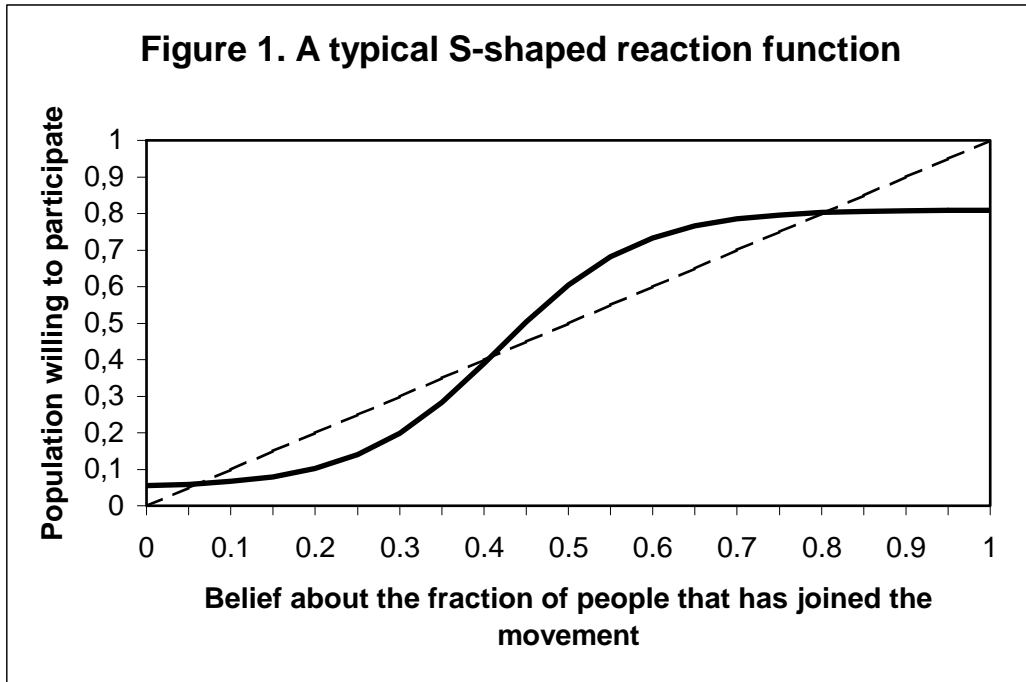


Figure 2. The general game of counterterrorist policy (Arce and Sandler 2005)

		Country 2		
		Proactive	Doing nothing	Defensive
Country 1	Proactive	$2B - c, 2B - c$	$B - c, B$	$B - c - C, B + b - C$
	Doing nothing	$B, B - c$	$0, 0$	$-C, b - C$
	Defensive	$B + b - C, B - c - C$	$b - C, -C$	$b - 2C, b - 2C$

Assumptions: $2B > c > B$ & $2C > b > C$