Theorizing Terrorism:
Terrorism As Moral Action

A Scoping Study

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¹ Directed by the second author.
EXECUTIVE SUMMARY

We report on the findings of a scoping study. Our remit was to establish whether a theory of moral action and crime causation—specifically, Situational Action Theory—could provide a framework for understanding the causes of acts of terrorism, organising current knowledge, and outlining a systematic research agenda. This study is the first step towards realising such a program.

Main argument

While much scholarship on the causes of terrorist acts has accumulated, the field still lacks overarching theoretical frameworks. This is due, in part, to conceptual and methodological difficulties, including a lack of access to reliable empirical data and an inability to clearly define the object of study. This under-theorisation is not trivial, but impedes knowledge integration and the generation of new facts.

We make the case that acts of terrorism can be meaningfully and innovatively conceptualised as moral action (actions guided by what is the right or wrong thing to do in a particular circumstance). Moral actions, including acts of terrorism, result from both rational (deliberation) and experiential (habituation) processes, themselves the outcome of the interaction between individual and environment—specifically, the interaction between a person's morality and the moral context in which he or she operates.

We contend that the Situational Action Theory is a powerful framework for organising and interpreting known facts, discriminating between causal factors and mere marker or symptoms, generating new facts and ideas, and, ultimately, building a robust explanation of terrorist acts (including suicide terrorism), from which to devise effective prevention strategies.

Directions for research

We identify three questions, which must be addressed by future research:

1. What kind of moral values and moral emotions support perceptions and choices relevant to people's engagement in acts of terrorism?
2. What aspects of the social and moral context support (a) the moral development of such values and emotions and (b) instigate their enactment?
3. How do social and moral contexts, which support the development of favourable moral values and emotions and promote participation in acts of terrorism, emerge and are sustained?

Concluding remarks

We submit that recent and current conflicts have driven home the need to understand the moral contexts in which people develop and act, and how changes in these contexts can result in, sometimes drastic, changes in action. We argue that, with Situational Action Theory, the "winning hearts and minds" strategy gets its scientific framework.
1. **Introduction, Purpose, Outline**

The questions of causation and explanation are fundamental to the prevention of modern forms of terrorism. If we cannot properly explain *why* and *how* people come to commit acts of terrorism, we have little ground from which to develop effective preventive strategies. We find that, thus far, the search for an explanation has been impaired by 1) a lack of a proper understanding of what needs to be explained; 2) a dearth of plausible causal processes linking putative causes and their outcome; 3) an unfruitful polarization between rational (deliberative-voluntaristic) and habitual (deterministic) action processes, and between individual and environmental factors; 4) an inability to systematically distinguish the causes of action (action processes) from the causes of the causes (social and developmental processes) of terrorist acts; and, consequently, 5) an absence of fully developed frameworks, capable of integrating individual, situational and environmental levels of explanation.

We report on the findings of a scoping study, which evaluated how a theory of moral action and crime causation could provide a robust framework to address these problems, organise a complex and diverse knowledge base, and develop a systematic, coherent research agenda. This study is only the first step towards implementing such a program.

Observations on terrorism have accumulated over the years, among them biographies of known terrorists, interview data, typologies, correlates of terrorist engagement or terrorist activity and ecology, anecdotes, empirical regularities, aetiological hypotheses, political analyses, evaluations of counterterrorist interventions, and local models of terrorist campaigns. However, general theories have yet to emerge: the sum of observations has not amounted to an explanation. Though quite a lot is 'known' about terrorism—and certainly much has been published, notably since the attacks of 11 September 2001— one may feel as if little is understood. Researchers are divided over the relative importance of levels of explanation (individual vs. ecological) and of categories of processes (deliberative vs. habitual). These divergences are reflected in a widespread uncertainty about 'what to do' about suicide terrorism in particular and terrorism in general. As a result, tremendous pressure has been placed on the traditional handlers of the terrorist threat: the military, the police, and the security and intelligence agencies.

Criminologists have faced similar challenges in their search for the causes of crime. In fact, the problems of causation and explanation have gone mostly unaddressed in modern criminology. Criminologists have been confronted with seemingly endless lists of correlates, or risk factors, associated with crime, leading some of them to despair that 'everything' or 'nothing' mattered in the explanation of crime. Newspaper readers confused as to whether of a glass of wine a day is beneficial or detrimental to their health will have an intuitive grasp of the difficulty: empirical regularities (correlates) are not necessarily indicative of causation. In fact, most identified correlates are likely to be only

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2 As the American National Research Council (2002:9) put it, the attacks triggered a "torrent of concerned but nonscientific writing."
markers (factors correlated with causes) or symptoms (factors correlated with outcomes). Although attributes cannot be causes (because they lack causal powers) some are often discussed in causal terms. Typical examples are demographic characteristics such as sex, age and social class. Attacking markers, symptoms and attributes does not help prevention, since prevention requires successful removal of causes or intervention in causal processes (see Wikström 2006).

To overcome the limitations of the 'risk factor' approach to crime, it was necessary to properly define what needs to be explained and develop theories capable of integrating the levels of explanation, so that both individual and environmental factors and their interaction could be assessed as potential causes. One such theory is the Situational Action Theory of Moral Action and Crime Causation ([SAT], Wikström 2004, 2005, 2006, 2007, 2008; Wikström & Treiber 2007, in press), which builds upon insights from traditional criminological theory and research, and draws upon social science and behavioural science theory and research more generally. The theory lays out a clear definition of the act of crime as the act of breaking a moral rule defined by law; a clear conception of what needs to be explained, i.e. what moves individuals to break moral rules defined by law; and a clear conception of what moves individuals to commit acts of crime, i.e. how individuals come to perceive crime as an action alternative and make the choice to commit a crime when confronted with a particular setting. Two types of choice processes are identified, proceeding from either habit or deliberation.4 We put forward the argument that this dual process approach provides a powerful framework for the integration of multiple causal factors and levels of explanation, and the identification of processes linking causes to outcomes, as should be required of a theoretical model of (suicide) terrorist acts.

To start with the terrorist act (rather than, for example, with more amorphous concepts such as 'involvement in terrorism,' under which fall a dizzying array of actions) is to study the direct causes of terrorism: the interaction of an individual, his or her experiences, skills, knowledge and other characteristics, with the circumstances of a particular setting. Knowledge of more distal (social and developmental) causes ('the causes of the causes') cannot be attained without an understanding of immediate causal processes. Direct causes are the first link in the causal chain leading to an act of terrorism, and each level is connected to the next through some mechanism(s). Only through this bottom-up process, from proximal to distal causes, can we make sense of broad social processes, such as segregation, or developmental ones, such as education, whose causal role is often hypothesised in the explanation of terrorism (as in the explanation of crime), but is unsatisfactorily modelled. Such an approach has obvious implications for prevention and control. The responsibility need no longer be restricted to the 'traditional handlers,' such as

3 Put another way, what must be explained is why people break rules when they know it is illegal to do so.

4 The idea that action arises either out of habit or after deliberation fits with the idea that there are two basic systems of cognitive processing that guide action; the experiential (associative) and the rational (deliberative) systems (e.g., Carver & Scheier, 1998; Kahneman, 2002), and similar intuitive-rational models in moral neuropsychology (Haidt 2001; Greene & Haidt 2002).
the police and the intelligence services. Rather, the load can justifiably be spread across all spheres of society, and intervention can occur earlier in the chain, before individuals perceive terrorism as an action alternative.\(^5\)

Not only do we propose to apply the same epistemological logic to the study of terrorism as to the study of crime, we argue that the Situational Action Theory, as a special case of a general theory of moral\(^6\) action, is a legitimate starting point for the development of theoretical models of terrorist actions. Central to our argument is the claim that an act of terrorism can be meaningfully defined as a moral action, which results from both rational (deliberation) and experiential (habituation) processes, themselves the outcome of the interaction between individual and environment.

**Outline**

To begin, we narrow down the problem space by setting out some boundaries to our scoping efforts. We then briefly discuss aspects of the problem of explaining terrorism and how these might be addressed in a new light. In doing so, we clarify our epistemological stance. We believe strongly that reformulating problems—especially old, seemingly intractable ones—can generate fruitful avenues of inquiry. We turn to a review of research, to build upon the insights produced by the field and identify the key questions which remain to be addressed, in order to produce a comprehensive explanation of terrorist acts. We then outline the fundamentals of the Situational Action Theory of Crime Causation, its epistemology, conceptual tools and theorems. We submit that it is a well-developed, powerful framework for organising and interpreting known facts and empirical findings, discriminating between causal factors and mere marker or symptoms, generating new facts and ideas, and, ultimately, building a robust explanation of terrorist acts, including suicide terrorism.\(^7\)

It is not our ambition to lay out a theoretical model of suicide terrorism at this time. More modestly, we set out to show how one might arrive at such a

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5 This approach falls within Atran's (2004:72) "first line of defense." Intelligence and military intervention are the middle line. Protecting targets is the last line.

6 Unless otherwise specified, the term 'moral' is used throughout in a descriptive, not a normative, sense. A crime (including acts of terrorism) is a case of moral action because it breaks a moral rule defined by law. No judgment need be made about the rightness or wrongness of the rule breaking or the rule itself to explain the act. Furthermore, the term moral has both a broad and narrow sense. We use it in the broad sense of being guided (or not) by what it is right or wrong to do in a particular context (see Wikstrom 2006:75 on the moral dimension of most intentional human actions), rather than limit ourselves to the sense of being guided by specific, relative or universal 'values' (e.g. fairness, justice, respect for life). Other authors use the term moral in the narrower sense. In any case, it can be argued that (suicide) terrorism is moral action both in the broad and narrow sense (it breaks a [legal] rule which says how one should act in a particular context, and it breaks a [quasi-universal] prescription against harming others).

7 Though our ultimate remit is to explain suicide terrorism, we do not always distinguish between suicide terrorism and terrorism in this document. The distinction is not meaningful at this stage. We are putting forward a comprehensive approach towards theory- and model-building, not the model itself. The same approach can address any act of terrorism, regardless of the specific means employed to carry it out.
model by identifying what questions must be addressed by any explanation, by meaningfully conceptualising terrorism as moral action, and by deriving a number of fundamental arguments from the Situational Action framework. Our approach is presented as a plausible and novel alternative to existing frameworks, and, therefore, worthy of further investigation. Hence, this document is best read as a series of interconnected, rational hypotheses grounded in relevant theory and research. We conclude by stating three questions, which we believe should drive the development of a systematic and coherent research program.
2. **What We Are Not Setting Out To Do**

In the interest of clarity, it is worth taking the time to lay out which aspects of the multi-faceted terrorism problem we do not set out to address.

We do not propose to:

**Explain unintentional acts**

Ours is a theory of intentional action. It does not explain acts of terrorism resulting from ignorance, mistake or coercion. For example, it does not account for actions such as physically tying drivers to the wheels of trucks filled with explosives. Nor do we account for accidental cases, such as terrorists killing themselves with their own devices as a result of error.

**Account for the social response to terrorist acts**

While some of the concepts involved in any explanation of moral action will have relevance to the way all agents (including non-terrorists) behave, we do not set out to explain why terrorist acts have the social consequences that they do. As an aside, we believe it important not to confuse the social meaning given to an action with its aetiology. Because we *respond* differently to terrorism than to other instances of law-breaking (for example, by adopting extraordinary legal measures to counter it) does not mean that its *causal mechanisms* must be fundamentally different. A strong case has already been made that actions as diverse as theft, rape and serial murder fall under a general theory of crime, though the features of said theory are still under debate (Gottfredson & Hirschi 1990; Wikström 2006). Conceptual reduction (e.g. reducing acts of crime to acts of moral rule-breaking) is not problematic in science, as long as it is meaningful, and is even necessary (see Bunge 2006).

**Analyse the strategic response to terrorist campaigns**

We model terrorist action, not the actions of the political or security apparatus, nationally or internationally. Of course, such considerations will find their way into any model of situated action, through their impact on the social and ecological environment, and the developmental trajectories of the terrorists themselves (e.g. Brym & Araj 2006).

**Produce a history or typology of terrorism**

Wikström (2006:65) agrees that one cannot construct a general explanation if one seeks to explain "the many different acts that constitute crime (e.g., rape, tax fraud, drunken driving)," which is precisely why one should focus "on explaining the rule-breaking (that is common to all crimes)." We argue that this rule-breaking is common to terrorist acts as well.
While putative causes of terrorism, notably "the causes of causes," such as inequality or migration, have a historical dimension, we do not set out to provide a history of terrorism. It does not follow that a model of terrorist action would be ahistorical. Indeed, any such model could be historically situated once the relevant processes and mechanisms have been identified. Nor do we set out to provide a typology of forms of terrorism. While classifications can have heuristic power in the initial stages of scientific inquiry, they have no explanatory power of their own and often impede the search for causes and mechanisms. To classify is not to explain, though it is often misinterpreted as such (Bailey 1994; Tiryakian 1966).

**Deliver a comprehensive review of the literature**

We do not claim to have conducted a systematic review of the literature on the causes of terrorism. This would be an altogether more time-consuming project. Rather, we have selected what we judged representative, important, germane, or illustrative findings in view of our argument.

**Offer a normative theory of terrorism**

Ours is a theory of moral action, not a moral theory of terrorism. We make no claim as to the morality of terrorist acts or the morality of the acts of opponents of terrorism, nor do we make claims as to the morality of any particular law or system of laws. We are interested in the causes of moral rule breaking (why people break [or don't break] moral rules [laws]), not in the evaluation (rightness or wrongness) of their reasons for breaking (or not breaking) the law. For example, an individual may break the law in part because they judge it to be morally wrong or because they think it does not apply in a particular moral context; in other words, law-breaking occurs when there is a lack of correspondence between the law and the individual's moral values in a given context. We seek to explain how and why this lack of correspondence between moral rules and individual moral values occurs and leads to the rule-breaking. To do this, we do not need to establish whether the rule or the individual is right or wrong. We will return to this point when we outline the Situational Action Theory of Crime Causation in Section 5.
3. **Five Propositions Regarding the Study of Terrorism**

We can ease into the discussion by examining aspects of the problem of explaining (suicide) terrorism, in the form of five propositions. Some of these aspects are specific to the study of terrorism, and others are common to the study of all social behaviour. Some are methodological in nature, others conceptual, and all are thought to be obstacles to our understanding of terrorism and to scientific research into its causes. We advance positive or corrective propositions in each case, which characterise our approach.

**The explanation of terrorism is an inverse problem**

To try and explain an act of terrorism is to tackle an inverse problem, because to explain an act of terrorism is to work back from effect to cause. A characteristic of (soluble) inverse problems is that they have multiple solutions. For example, inferring motivation from behaviour is an inverse problem, which is why criminal profilers consistently fail to make exact predictions regarding the motives of the perpetrator based on crime scene evidence, or else produce unspecific, over-inclusive profiles.\(^9\) Explanations which infer the subjective intentions, goals or motives of terrorists on the basis of observations run into a similar difficulty, since the same act can be the outcome of different intentions and beliefs, and, crucially, of different contextual factors.

Cybenko (2005) notes that inverse problems are much harder to solve than their corresponding forward problems. He observes that, in science and engineering, inverse problems are addressed by producing "a comprehensive list of forward problem input-output relations" and using "a lookup table type of approach—comparing the observed output with the list's computed outputs, thereby identifying candidate inputs" (p.80). However, in the social and human sciences, it may be difficult if not impossible to generate systematic input-output "lookup tables". Nevertheless, we suggest that the general idea can be approximated by matching up cognate problems.

There is no act of terrorism that would not be considered an act of crime (breaking a rule of law) under national or international law. From there, we argue that common crime and terrorism are two subcategories of a greater category of moral action. Furthermore, explanations of crime are currently better developed than explanations of terrorism, in part due to the greater availability of empirical observations. Therefore, we submit that a productive

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\(^9\) Bouhana (2004) argues that criminal profiling is a failing proposition, because the sources of an action are both internal and external to the agent (i.e. the result of the interaction between individual and setting). Profiling models propose no mechanism for abducting which caused what, or they proceed as if all sources of action resided within the agent.

\(^10\) On the problem of explaining the act on the basis of the actor's intent, goal or motive, we may defer to Durkheim's (1952:43) admonition that "an identical system of behaviour may be adjustable to too many different ends without altering its nature," so that the act cannot be explained post hoc by its ends. For a radical statement of opposition to teleological explanations of human behaviour, see Black (1995).
way of addressing the difficult inverse problem of explaining acts of terrorism is to reformulate it as the following forward problem: *How can a theory of crime causation help us explain acts of terrorism?*

**There is no consensual definition of terrorism**

The National Research Council (Smelser and Mitchell 2002), charged by President Bush to sum up the collective understanding of terrorism in the wake of the 11 September 2001 attacks, concluded that the definition of terrorism was a politically contested object *par excellence* and gave up on any attempt to come up with one of its own.

An unsystematic examination of the contents of the peer-reviewed journals *Terrorism and Political Violence* and *Studies in Conflict and Terrorism* reveals that the term terrorism has been applied to instances as phenomenologically diverse as anti-cult vigilantism in Western Europe (Introvigne 2000), the petrol-bombing of drug dealers' houses by vigilante groups in South Africa (Hough 2000), the millennialist attacks of the Aum Shinrikyō cult in Japan (Reader 2002), insurgency operations in Iraq (Hafez 2006c), revolutionary movements in Peru and nationalist groups in Spain (Zirakzadeh 2002), 'agroterror' attacks (Foxell 2001; Ungerer & Rogers 2006), campaigns of kidnappings and beheadings by the Abu Sayyaf Group in Southern Philippines (Filler 2002), Palestinian suicide terrorism operations during the *intifada* (Moghaddam 2003), no-casualty arson attacks by the Earth Liberation Front in the United States (Ackerman, 2003), Nineteenth Century anarchist terrorism in Europe (Bach Jensen 2004), Loyalist sectarian violence in Northern Ireland (Bruce 2004), separatist violence in South-East Asia (Chalk 2001), animal-rights violent activism in the United Kingdom (Monaghan 2000), al Qaeda's global, mass-casualty attacks (Sedgwick 2004), targeted suicide assassinations by the Tamil Tigers (Roberts 2005), anti-abortionist bombings (Seegmiller 2007), the Khmer Rouge guerrilla (Kaplan 2007), and systematic child abduction and rape by the Lord's Resistance Army in Uganda (*ibid*).

The list is not exhaustive. As more databases are made available through electronic means, the pool of empirical data grows without formal delineation of relevant information (Gordon 2004). Wading into legal waters only muddies the matter, as legal definitions are tailored to serve states’ foreign policies (Dedeoglu 2003). The qualifier has even been co-opted by domestic violence scholars, who employ the term "intimate terrorism" to denote that both the purpose and the method of this type of violence is to subdue the domestic partner through fear (Johnson and Leone 2005).

In a 1988 census, Schmid and Jongman identified over one hundred definitions of terrorism, and the situation is not much improved today (cited in Silke 2001). This state of affair has led some scholars to adopt a "I know it when I see it" attitude towards the matter (Laqueur 1977). Others insist that terrorism must be transformed "into a useful analytical term rather than a polemical tool" (Crenshaw 1995:7), or risk forever crippling scientific study. A survey of scholars yielded a "consensus" definition of terrorism including sixteen of twenty-two definitional elements identified from an analysis of questionnaires.

It reads:
Terrorism is an anxiety-inspiring method of repeated violent action, employed by (semi-) clandestine individual, group, or state actors, for idiosyncratic, criminal, or political reasons, whereby—in contrast to assassination—the direct targets of violence are not the main targets. The immediate human victims of violence are generally chosen randomly (targets of opportunity) or selectively (representative or symbolic targets) from a target population, and serve as message generators. Threat—and violence—based communication processes between terrorist (organisation), (imperilled) victims, and main target (audience(s)), turning it into a target of terror, a target of demands, or a target of attention, depending on whether intimidation, coercion, or propaganda is primarily sought (Schmid 1988:28).

Weinberg, Pedahzur and Hirsch-Hoefler (2004) took a leaf from Schmid's book and turned to academics for a consensus. They analysed fifty-five papers from the three main peer-reviewed terrorism journals, identified the definitional elements of terrorism, and ranked them in order of their frequency of use. These elements are: violence, political, fear, threat, victim, tactic, civilians, movement. Weinberg and colleagues noted that psychological concepts were virtually absent from the top eight, despite the centrality of psychological explanations in previous decades. They have, apparently, fallen out of fashion.

We argue that neither consensus nor fashion is a criterion upon which to build or evaluate a scientific definition of terrorism. Neither approach is likely to lead to the transformation wanted by Crenshaw (1995). As before, one might try to solve the problem by reformulating it. We submit that the lack of a universally-accepted or consensual definition of terrorism is an ill-posed problem, because a scientific definition of terrorism need not be consensual, but stipulative and conventional. Stipulative, because, for the purpose of discussion and analysis, it is necessary to give a precise denotation to any word with a vague or commonsense meaning. And conventional, because a definition sets out what it is that we set out to explain here. Such a definition is reductive and conceptual, not compiled from empirical observations. It is a top-down, not a bottom-up process. All that is required of a scientific definition is that it be conceptually meaningful and that it be exact (that all the concepts within it be themselves defined), so that any fact might be held up to the definition and checked for inclusivity with a degree of certainty. It is not a requirement of a scientific definition that it fits everything that anyone, some day, somewhere, has called "terrorism." We shall return to the conceptualisation of terrorism in Section 5.

**Terrorism requires multi-causal and multi-level explanations**

The phenomenological diversity of terrorism has led some students of terrorism to conclude that the search for general explanations is unlikely to succeed (Laqueur 1977; Hutchinson 2007). Many researchers focus on subsets of the overall problem space, such as target selection (e.g. Kardes 2005; Sandler & Lapan 1988). Others have taken up the challenge of integrating the levels of explanation in multi-factorial frameworks, which so far remain either local or more descriptive than explanatory (Atran 2003; Bloom 2006; Hafez 2006a,
If modelling joint multiple causal factors remains a daunting task, it is
perhaps because researchers tend to favour one level of explanation over the
other (e.g. group over individual), even as they argue for multilevel integration.
Their approach is systemic in intent, but the mechanisms linking micro to
macro level variables and *vice versa* are rarely articulated beyond the
placement of an arrow on a graph. Consequently, models struggle to account
for the diversity of local manifestations (e.g. in some cases suicide terrorism is
an institutionalised practice, while in others it is the fact of small, informal
groups, and individuals appear to radicalise themselves).

Though we believe that a bottom-up approach is the most promising in
this case, our approach is systemist, recognising that terrorism is the fact of
human brains embedded in a social context (Bunge 200611; Granovetter 1985).
This ontological stance brings order to an otherwise bewildering array of
potent factors, and provides a framework for the organisation of multidisciplinary findings not traditionally brought to bear on the issue. Moving
beyond the *chasse gardée* of a few disciplines can only be beneficial to the
study of terrorism12.

**(Suicide) terrorism is hard to study empirically**

This is true. While most terrorist incidents are visible events, about which some
information is readily available (e.g. time, location, number of victims; often,
but not always, perpetrator), the kind of data which are the bread and butter of
social and human science (e.g. the perpetrator's thought processes and life
history) are much less so. The scientist must often rely upon open sources, such
as media reports, the validity of which cannot be ascertained, especially when
the event occurred far away. Direct access to the perpetrators is problematic,
either because they are dead, because their identity is unknown, because they
are in hiding, or because they are imprisoned and the authorities will not grant
access, or the perpetrator simply does not wish to talk. Issues of veracity and
distortion come up when researchers rely on trial transcripts or terrorist
literature (unless, of course, the framing of legal arguments or the content of
terrorist discourse are the object of study; e.g. Smith 2008). Access to families,
friends, medical and educational histories, and ecological settings of origin are
made difficult either by geographical distance, lack of record keeping, lack of
cooperation, linguistic and cultural barriers, security issues—notably when a
conflict is ongoing—or the fact that terrorists hardly advertise their identities.

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11 As Bunge (1996:46; 2006) explains, terrorism "originates in individual agency" but "occur[s] within or between social systems and [has] supra-individual features," hence its study calls for an integrated (systemic) approach. Furthermore, Bunge contends that all social facts have a cultural, political, biological (psychological) and economic dimension, and though explanations tend to privilege one aspect in the first instance—for example economic (crime) or political (terrorism)—all aspects are always present and should be accounted for.

12 Recent advances in crime prevention can be laid at the feet of domain extensions in architecture, human geography, design, engineering, neuropsychology, and evolutionary psychology, among others.
Meanwhile, traditional criminological or medical research designs, such as longitudinal data collection, are hampered by the fact that, in many places, most of the time, terrorist acts are rare events. The likelihood of one individual out of a cohort of, say, a thousand primary school children, going on to commit an act of terrorism, is extremely low.

This (in no way exhaustive) overview of obstacles to the scientific study of terrorism paints a somewhat depressing picture. Of course, with terrorism at the top of the security agenda, cooperation between scientists and governmental authorities is bound to increase access to good quality data (the validity of which can be ascertained to some degree)\(^\text{13}\). Furthermore, a number of recent, influential studies based on open sources suggest that quite a lot can be achieved by a patient scholar with Internet access (e.g. Pape 2005; Sageman 2004). But the very real difficulties also bring to mind the saying, "If you don't like the answer, ask another question."

The study of social facts, which are resistant to the usual methods of research and data collection, highlights the value, if not necessity of, (1) mining cognate fields for insights; (2) constructing reliable indicators of unobservable processes out of observable data; and (3) adopting a ratio-empirical approach to research.

*Proposition (1)* follows from the observation that terrorism is a kind of human behaviour, which shares aspects of other kinds of human behaviour, in particular other kinds of moral actions.

We may deduce that general knowledge of moral action processes, belief formation, choice making, value acquisition, perception, judgment and so on will be of relevance to the study of terrorist actions. Here we submit that knowledge of moral action and its causes is applicable to the study of terrorism.

We may also hypothesise that some aspects of terrorist behaviour, which are not directly accessible to empirical enquiry, may be studied *by proxy*. Such an approach requires an act of imagination in the first instance, and the setting of precise boundaries around what is to be studied, but the hypotheses generated have the benefit of being testable, while many of our hypotheses about terrorism currently are not.\(^\text{14}\) To an extent, this approach has already born fruit. We understand much about the mechanisms of moral disengagement which operate inside terrorist groups, because it was recognised that their circumstances closely paralleled that of regular soldiers. The knowledge domain was extended as a result, allowing us to draw inferences about the role of training and indoctrination in terrorist behaviour (Bandura 2004).

This logic of knowledge acquisition *by proxy* can be pushed beyond theoretical inference. One of the authors (Bouhana) is at present involved in a project overseen by the MOD Science and Technology Counter-Terrorism Centre, which consists in collecting crime-based databases for the purpose of developing and testing social network analysis tools, to be used subsequently in the detection of terror networks. This work has sprung from the recognition that

\(^{13}\) Limitations on the use of information not collected for the purpose of research remain.

\(^{14}\) Taylor & Horgan (2006:588) make an equivalent point, when they propose that "the frame of reference for understanding at least the violent elements of terrorism may be shared with other kinds of violence and aggression, and therefore we might benefit from looking at terrorist violence in the way we look at other forms of problematic aggressive behaviour."
terrorism and other forms of criminal activity share similar features, so that knowledge of one will deepen our understanding of the other.

Without stretching credulity, we can imagine the benefit of exploiting the aspects shared by, for example, terrorist and paedophile networks. Paedophiles, too, are subject to thoughtcrime legislation, are organised in more or less informal networks and organisations, have a political wing, which militates openly, and make use of the Internet to support each other, procure illegal materials, learn of new tactics, diffuse their agendas and ideas, and explore their own proclivities ("self-radicalise") before offending, while others simply never cross that threshold.\textsuperscript{15} Without invoking such fuzzy concepts as 'globalisation,' it is quite evident that modern social facts must share some aspects by virtue of not occurring in a vacuum. For example, much social activity will be affected and perhaps reshaped by developments in communications in the same way. Hence, terrorists must go for the spectacular and for high body counts if they want to keep the attention of twenty-four hours news networks, who are easily distracted. And Al-Qaeda ideologues must engage in online Q&As with their Internet-savvy audience, accustomed to interactivity, regardless of preference or tradition ("Terrorism Analyst: Web Q&A Risky For Al-Qaeda," \textit{NPR Online}, 6 May 2008).

Why belabour the point? Because we should beware 'commonsense' distinctions, which categorise phenomena on trivial grounds. Gambetta (2005a:268) contends that the difference between a criminal and a terrorist is that "the former wants his crime to seem an accident, while the terrorist wants even an accident to seem designed." The formula is catchy, but one can, out of hand, come up with a plethora of contradicting examples, from the high school shooter posting his "manifesto" on YouTube, to the local street gang standing at a street corner to mark their territory, to the hacker signing his crimes, to the fact that terrorists engage in a great deal of criminal activity that they wish to conceal (on this last point, see Dandurand & Chin 2004; Hamm 2007; Schbley 2000; Silke 2000; Smith, Damphousse & Roberts 2006).

\textit{Proposition (2)}, constructing indicators, concerns our ability to infer the unobservable from the observable. Theories are not in themselves directly evaluable against empirical data (though their assumptions might be). What can be evaluated is the theoretical model of some specific object of study, built from the theory. For example, psychological theories cannot predict the behaviour of an individual until the theory has been enriched with information and assumptions relative to this particular individual (e.g. age, education, culture, current geographical location). These data are not derived from the theory, but from some other areas of knowledge. This is why theories themselves do not provide direct solutions to applied problems, but are necessary to devise these solutions. In turn, a model is made up of concepts, which must then be related to salient, observable indicators, themselves related to the unobservable processes postulated by the theory (see Bunge 2006:182-184).

\textsuperscript{15} Taylor & Horgan (2006) draw a parallel between the training programmes, which 'prepare' suicide bombers in advance of a mission, and the 'grooming' routines of paedophiles, which 'prepare' children for sexual exploitation.
For example, if a theory of terrorist action postulates a direct link between suicide terrorism and religious radicalisation (a situational process), we might build a theoretical model of an organisation known to use suicide terrorism. But because "radicalisation" is not a directly observable process, we must construct an "indicator of radicalisation" from observables. In this case, we may say that the extremist content of the literature put out by the group is a good indicator of the level of radicalisation of its members. Or in the case of an individual, we may say that a behavioural change, like a sudden attendance at religious offices and observance of religious rituals, combined with active participation in a study group known for its extremist views, are satisfactory indicators of radicalisation. Of course, the choice of indicator must itself be supported theoretically or empirically. Because unobservables such as "radicalisation," "culture," or "disaffection" are at the core of many explanations of terrorism, the development of robust indicators is a necessary step towards testing the models derived from these frameworks.

Proposition (3) is implicitly contained within the first two propositions. Because terrorist behaviour is, in part, an outcome of mental and social processes, which cannot be observed directly, we must adopt a rational approach, which posits unobservable mechanisms and concepts to explain observations (much as Newtonian physics posit the concept of gravity, which is observed by its effects). A reluctance to go beyond (not ignore) empirical data, or the lack of it, may be crippling to conceptual innovation. But a theory is only valuable to the extent that it accounts for reality. Therefore unobservables must eventually be linked to observable data, via indicators. This process can take a long time. It is not uncommon for theories to be developed before the measuring instruments or the empirical evidence required to test or support them are available (e.g. Darwin's theory of evolution; the existence of bosons in quantum mechanics).

This is not an argument in support of a priori theories of human behaviour, based on assumptions or axioms which are not open to refutation.\(^{16}\) The manifest attraction of these theories lies in their simplicity, a stated preference for parsimony, and an avowed pledge of fidelity to Occam's Razor. It is true that these models, notably of the rational choice persuasion, are gaining in popularity, to the point of quasi-hegemony in some fields. Rational choice models of terrorism will be reviewed in a later section. At this stage in the discussion, we only wish to, quite briefly, challenge the notion that, when it comes to theories, simpler is always better. Possibly the belief arose from a misreading of Occam's principle: "Entia non sunt multiplicanda praeter necessitatem"\(^{17}\) is not a prescription to hold to the maximum level of simplicity, but rather to keep to the optimum level of complexity. Simplicity can only be a criterion of evaluation between two theories, which account for the object of study equally well. In our approach, we aim not, therefore, for the minimum number of assumptions, but for the optimum one.

\(^{16}\) Becker, cited in Bunge (1996:374), claims that since "rationality can be pretty flexible and the data are often limited, I don't frequently encounter decisive evidence against rationality," hereby putting rational choice theories out of the reach of refutation.

\(^{17}\) "Entities should not be multiplied beyond what is necessary."
**Terrorism is subjective**

The controversial and political nature of terrorism, and the preponderance given to actors’ intentions and beliefs in explanations of terrorism, have led some scholars to conclude that terrorism is in the eye of the beholder and cannot be studied from a scientific realist perspective. Enquiries should, therefore, be limited to the abduction of agents’ intentions and beliefs from empirical observation or interview, or based upon theories which posit the agents’ subjective state of mind *a priori*, as do the rational choice theories mentioned above.

This diagnosis of ‘terminal subjectivism’ is unwarranted. Beliefs, intentions, goal formation, perception, judgment and choice are mental processes, and mental processes are the fact of human brains. In other words, even reasons have causes, and subjectivity can be investigated objectively. Subjectivity itself is, in fact, an object of scientific inquiry.

To acknowledge the role of human mental (brain) processes in social action is not to fall back on, or encourage, a return to conceptions of terrorism as pathological behaviour. On the contrary, in this context the scientific realist study of processes such as belief formation, the emergence of moral emotions, and their role in decision making is likely to uncover perverse effects of normal human cognitive processes, as demonstrated by now classic authority experiments (e.g. Milgram 1974).
4. EXPLAINING TERRORISM: QUESTIONS, INSIGHTS

Much scholarship on terrorism has accumulated over the last forty years, a significant fraction of which has been produced since 11 September 2001. Despite this sustained interest, fully-developed explanatory frameworks remain elusive. Terrorism studies are characterised by pervasive fragmentation and few broadly shared theoretical frameworks or must-replicate findings. Scepticism that a "common pattern of causation" (Crenshaw 1981:379) can be discovered is widespread. While not in its infancy, the discipline is not quite yet "grown". Scholars point to the heterogeneity of terrorism, limited access to data, and conceptual difficulties (i.e. the problem of definition) as the main impediments to theoretical progress (Crenshaw 2000, 2007; Silke 1998, 2001, 2004).

Notwithstanding some of the difficulties evoked in the previous section, we concur with Horgan (2005) that the crux of the matter is the lack of clarity as to what it is that needs to be explained. This goes beyond the lack of a common definition. Rather, the field seems unable to circumscribe its own object. In other words, is the subject of inquiry the emergence of terrorism as a social or historical phenomenon? Is it the consequences of terrorism? Is it individual support for terrorism? Is it the involvement, more or less formal, of the individual in a terrorist group or organisation? Is it the terrorist incident or the terrorist campaign? Are separate theories needed for different types of acts (for example, suicide bombing and hostage taking), or to explain the behaviour of ringleaders and foot soldiers? Should we spend more time asking why so few people engage in terrorism in the first place? And so on. Even when we restrict ourselves to etiological accounts of terrorist behaviour, we struggle to uncover some organisation to our knowledge, short of breaking it down by traditional disciplines (historical, psychological, sociological, political, and so on).

Nevertheless, we can make some general observations regarding the field. First, there is a lack of a theory of action linking individual and ecological levels of explanation. Without such a fundamental building block around which to organise the problem space, scholars struggle to identify causes and causal processes, and integrate levels of explanation (e.g. developmental and situational influences, such as the role of ecological factors in the formation and maintenance of propensity, and in its expression), and focus on attributes to the detriment of mechanisms (e.g. religious affiliation vs. moral education). Second, most explanatory accounts of terrorism are accounts of terrorist propensity. That is, they are concerned with explaining how an individual comes to be disposed to commit an act of terrorism or join a terrorist group (the distinction is not always present in the literature). Less attention is given to the context of action. Third, these accounts privilege group processes as the source of stability and change in the individual’s propensity, as a result of the failure to identify stable attributes in the background of samples of known terrorists. Of course, what is rejected is essentially a "trait"—or even an "innate"—account of terrorist propensity. Nevertheless, it has led some scholars to claim that explanations should focus on organisations, not individuals, especially in the case of suicide terrorism. Yet, fourth, the field still grapples with the "problem of specificity" (Sageman 2004). In other words, many individuals share the
patterns of attributes found in terrorists, but a tiny minority become involved with a terrorist group or engage in terrorist acts. The question of which contextual features interact with which individual factors through which mechanisms—or, put more poetically by Atran (Atran 2007:110), the question of "the original spark that ignites people's passions and minds"—remains. Fifth, explanatory frameworks favour either habitual (experiential or associative) factors and processes (e.g. emotional arousal, ideological commitment, acculturation, social bonds) or overlay the importance of economic rationality (e.g. means selection) in human action. The implicit recognition that both types of processes have a role to play has resulted in the attribution of economic rationality to groups on the one hand, and imperfect rationality to individuals on the other, rather than is the creation of dual-process models. Sixth and last, most frameworks have been developed on the basis of a local domain of empirical observations (e.g. Palestine) and do not apply equally well to other contexts, so that it seems that we must begin the task of explanation again with each new, phenomenologically distinct incident.

We develop these points, in order to identify ways to address the current limits of our knowledge and build upon available insights.

**Attributes, Profiles, Propensities**

The search for an explanation of deviant behaviour often begins in the background or personal characteristics of the individuals concerned. The earliest criminological theories looked for the causes of crime in the family trees of criminals or in the shape of their skull (Lombroso 1876), and, despite Hamm's (2005:239) warning that we "do not study terrorists for who they are, but for what they do," terrorism is no exception.

More complete histories are available elsewhere (see Horgan 2005; Victoroff 2005), but we can mention that early accounts of terrorist behaviour centred around the search for a terrorist trait, personality or syndrome, or some other psychological deficiency. Gross mental illness was ruled out early on. Carrying out successful terrorist operations requires a certain grasp of reality and control over one's own faculties (Taylor 1988), and there is some factual evidence that terrorist organisations purposefully exclude pathological personalities (Ricolfi 2005). However, terrorist behaviour was linked to primary psychopathy, to account for the terrorist callous disregard for innocent life (Ferracuti 1982). Other personality disorders attributed to terrorists include pathological forms of narcissism, paranoia and authoritarianism. Building upon earlier narcissistic-aggression models of violence, Post (1990) argued that 'splitting' and 'externalisation' are the main personality features shared by

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18 Little if any attention has been given to the mechanism(s) which might explain the emergence of group rationality from aggregates of individual choice processes.
19 Scientists are not immune to human cognitive biases, such as the fundamental attribution error, which is the tendency to blame ‘bad’ behaviour on an individual’s personal attributes (“He was late to the office because he is lazy.”), rather than circumstance (“He was late to the office because there was a road accident.”).
20 There have been instances of mentally disordered or “vulnerable” individuals being used as suicide bombers.
terrorists. According to Post, splitting results from a type of psychological damage in childhood, which produces 'narcissistic wounds'. As a result, the self is split into 'me' and 'not me', which leads to the identification of an outside enemy for the purpose of externalising blame. These individuals "find the polarizing absolutist rhetoric of terrorism extremely attractive" (ibid:28). Psychoanalytical concepts remain in use in some contemporary theoretical approaches (Miller 2006b; Miller, Perterson, Earlywine & Pollock 2003), but have been otherwise marginalised. Perhaps one of the most popular psycho-social accounts of the 1970s, the frustration-aggression hypothesis (Davies 1973; Gurr 1970), which proposes that terrorist violence is the result of frustration experienced due to rising political, social and economic expectations, has been dismissed as overly simplistic and indiscriminating (Sageman 2004; Wilkinson 1974). If frustration always resulted in aggression, we would face a terrorist epidemic. However, part of Gurr’s framework survives in the concept of "relative deprivation,” acknowledged by many scholars as a possible factor in the explanation of terrorism, and political violence more generally (Berrebi 2007; Hutchinson 2007; Maleckova 2005; Sageman 2004).

Psychopathological accounts of terrorist behaviour have been broadly rejected on empirical and methodological grounds. Today’s scholars make a point of stressing how normal terrorists are (Atran 2003, 2006, 2007; Horgan 2003, 2005; Reuter 2004; Sageman 2004; Silke 1998, 2003, 2008). Crenshaw (1981:390) concludes her seminal review of the causes of terrorism with the oft-repeated statement: "the outstanding common characteristic of terrorists is their normality." According to McCauley (quoted in Kruglanski & Fishman 2006:195), the results of investigations into the members of German, Italian, Palestinian and Basque groups may take "several feet of shelf space, but are easy to summarize. The terrorists did not differ from the comparison group of non-terrorists in any substantial way; in particular, the terrorists did not show higher rates of any kind of psychopathology...Indeed, terrorism would be a trivial problem if only those with some kind of psychopathology could be terrorists.” Post (1990) himself has acknowledged that a personality-based explanation is insufficient and turned his attention to the social-psychological processes taking place inside terrorist groups (only to be been accused by Silke (1998) of outwardly abandoning the search for a major pathology of terrorism, only to imply that terrorists were abnormal in more subtle ways). If anything, explanations in terms of profound deviance have given way to accounts which emphasise 'positive' sources for terrorist behaviour, such as sympathy—or even, in total opposition to psychopathic behaviour, empathy for the suffering of friends and relatives, or even distant strangers (e.g. Bloom 2005)—and the strong bonds of friendship and kinship that make radicalisation and suicidal commitment to a cause possible (Sageman 2004).

The search for non-random patterns of regularities in the background of terrorists did not stop with psychopathological accounts, however. It continued with attempts to produce socio-demographic "profiles," which appear to vary by epoch, group and ideology (Strenz 1988). Russell and Miller (1977) concluded that the terrorist of the 1970s was single, male, aged 22 to 24, with at least some university education—generally in the Humanities—adhered to a left-wing ideology, and came from an affluent background. By contrast, the terrorist of the 1980s, the 1990s and today is, according to Miller (2006a:124),
"a poorly educated, unemployed, and ill-trained male refugee of Middle Eastern origin. These are teenagers or young men who have grown up as members of street gangs, and what formal education they have received has been steeped in extreme religious and political doctrine." This description owes to research into the backgrounds of Palestinian terrorists (Merari 1990), and has been challenged by assessments of Islamic terrorists involved in the global Salafi jihad. Post (2005) contrasts Merari's Palestinian shaheeds with the September 11th hijackers—older, middle-class men, some of whom held post-graduate degrees. In an open-source study involving 172 participants in jihad, Sageman (2004) reports that his subjects averaged 26 years of age, originated from Maghreb, the Middle-East and South East Asia, and had been educated, for most of them, in secular schools. Two-third had some college education or a college or graduate degree, and only a quarter were unskilled and sometimes involved in petty crime, while a good number were professionals. Most were expatriates or second generation emigrants, and while some had grown up devout, others had not practiced Islam until a short time before they joined jihad. Two-thirds were married. These findings are broadly consistent with those of Hassan (2001), who interviewed recruiters, families and friends of suicide bombers and failed attackers, and draws a picture of middle-class, job-holding, religious men under forty. However, Sageman (2004:98) warns against the perception of a common "Salafi profile," and points out that similarities are found within geographical clusters, rather than across the movement. If he sees any pattern, it is that right before joining, "the prospective mujahedin were socially and spiritually alienated and probably in some form of distress." Comparative studies pitting members of terrorist groups against their own population have not been much more successful in isolating a profile, though terrorists seem better educated than the sample populations (Krueger & Maleckova 2003).

The limitations of trait- or profile-based approaches to the explanation of deviant behaviour are well-known, chief among them that any trait or stable characteristic cannot account for the fact that people behave differently in different circumstances, or even differently in the same circumstances at different times (across the life-course), so that even if a trait (e.g. "narcissism") could "cause" deviant behaviour, we would still need something else to explain heterotypic behaviour. But an in-depth examination of these issues is beyond the scope of this discussion (see Sampson & Laub 1992 for a review). What is of interest to us is that the failure to unearth a common psychopathology or socio-demographic profile has led some scholars to summarily dismiss the relevance of individual-level factors for the explanation of terrorist behaviour, on the basis that terrorists "are not sufficiently different from everyone else," and, therefore, we should forget the individuals and "understand the cells" (Atran 2006:141; Crenshaw 2007). Brym & Araj (2006:1971) report that Israeli attempts to keep men who fit the "profile" of a suicide bomber (single, unemployed religious fundamentalists in their mid-20s) from entering Israel were simply followed by an uptake of "university graduates, married men,

21 However, a recent report by the United Nations Assistance Mission to Afghanistan (UNAMA 2007:111) offers a profile closer to Merari's: "Suicide attacks in Afghanistan are distinct from suicide attacks in other theatres. Afghanistan's suicide attackers, based upon available evidence, appear to be largely poor, uneducated, young and impressionable."
people with a secular background, women and youths." In any case, there is no reason to expect that prevention and detection of terrorism based on "psychological profiles" will be any more successful than they have been with other crime types (Alison, Bennell, Mokros & Omerod 2002; Schbley 2006; Snook, Eastwood, Gendreau, Goggin & Cullen 2007).

Yet we should not confuse the failure of a "profile" or "risk factor" approach to the explanation of terrorist actions with the irrelevance of individual-level differences. The problem of drawing any conclusions based on studies crippled by methodological limitations aside, we should ask why one should look to "age, place of origin, residence, educational background, socioeconomic status, dietary preferences, etc." (Atran 2006:141) for an explanation of terrorist behaviour in the first place. As Atran himself points out, empirical regularities of a statistical nature do not indicate cause, though they might be helpful in prediction22.

To be of value, variables included in statistical models or "profiles" should be variables that we have good reason to believe to be causes, markers or symptoms. What the identification of non-random regularities (i.e. stronger concentrations of acts of terrorism among those with particular attributes) can do is to help us identify causes. For example, a disproportionate fraction of the criminal and terrorist population across periods and societies has been male (Gottfredson & Hirschi 1990; Moghaddam 2005; Silke 2008), which might suggest differences in the bio-socialisation of boys and girls or the types of monitoring to which they are subject. Specific age patterns may suggest agentive mechanisms. Late teens and early twenties are periods in the life-cycle when individuals experience increased agency (a greater capacity to make happen the things they want to happen, which up to that point was partly regulated by their carers). This may result in a greater ability to select one's environment (e.g. moving out of the childhood home; going to university; joining the military; expatriating), which in turn results in exposure to new moral contexts, the features of which interact with the individual's own characteristics (e.g. moral rules and habits) in ways that may lead to an act of crime or terrorism. Religious affiliation or level of education may be indicative of the types of environment to which the individual has been exposed. Hairgrove and McLeod (2008) attract attention to the role of traditional Islamic study groups (usroh and halaqa) in the "ideological conditioning" and the mobilisation of Islamic activists. Sageman (2004) finds that mujahedin join the jihad as small groups of homophilic friends and kin. Other scholars have observed that European terrorists often came from the ranks of the student population. Tied together, these markers might suggest the importance of mechanisms for moral change, which could be a factor in the variation of the individual's disposition to select environments conducive to involvement in terrorism.23

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22 See Section 5 for a discussion of the relationship between prediction and explanation.

23 Emergent dual-process models in moral psychology (Haidt 2001, 2007; Greene and Haidt 2002) suggest that individual moral change is very rarely the outcome of private deliberation (moral reasoning), but of social interaction. According to this model, an individual's moral stance is the outcome of an intuition (an affective, automatic process), which may later be followed by a rationalisation (giving the appearance of deliberation) if the individual is asked
A similar logic extends to the search for "the causes of the causes," the systemic factors thought to play a part in the emergence of terrorism (Berrebi 2007; Gurr and Björk 2005; Hutchinson 2007; Freilich & Pridemore 2005; Krueger & Maleckova 2002; Robinson, Crenshaw & Jenkins 2006), such as inequality, development, social strain, conflict and poverty, or the ever-popular "globalisation", which are not a cause of action, but are part of the background of action, through their indirect influence on (1) the characteristics and experiences individuals come to have, and (2) the contexts in which they come to operate (Wikström 2008). To discriminate between systemic factors is to hypothesise plausible mechanisms linking them to the context of human action and development, which requires a good understanding of both.24

In short, we should recognise that there are many kinds of individual characteristics and experiences, which cannot be causal factors in the development of terrorist propensity. Therefore, it is premature to rule out the importance of individual characteristics and experiences for the development of a differential propensity to engage in acts of terrorism, based on the failure to identify a profile from a handful of indicators.

**Context of Development, Context of Action**

We can understand why socio-psychological accounts, which explain terrorist behaviour in terms of the effect of group processes on individual psychology, have pride of place in the explanation of terrorism. They spring from a long
to justify herself. Afterwards, the individual is likely to seek only confirming rather than disconfirming evidence (she is likely to seek the company of those who agree with her). Moral change (the triggering of a new moral intuition) results overwhelmingly from social interaction ("talking things through with friends"), rather than "making up one's own mind" by weighing the pros and cons. One can see how both secular and religious students, who are consistently exposed to small, highly socially interactive and emotionally charged contexts, would be susceptible to this moral change mechanism. (Think of students' reputation for existing in a state of perpetual moral outrage!) Depending on the nature, intensity, and sustainability of the intuition triggered, and on the insularity of the group, one can see how the social environment could lead to radicalisation (a new morality), which could only be challenged by an equivalent process. We might hypothesise that some indoctrination techniques (such as bombarding people repeatedly with highly emotive videos accompanied by rationalising discourse) may achieve a similar effect. The social intuitionist model (Haidt 2008) has further implications relative to the link between moral values and culture, and how a counter-discourse might be framed and delivered to prevent or disrupt these processes, but they are beyond the scope of the present paper.

24 The same mechanism will manifest in different ways in different contexts, which is why mechanism must not be equated with, or reduced to, marker or symptom. The parallel with medicine is obvious. The same mechanism or process (e.g. immuno-suppression) may result in a variety of symptoms. Therefore, Silke's (2008) contention that the behaviour of Islamic radicals must be explained in fundamentally different terms than that of other criminals, because their demographic and social background does not reflect the "risk factors" commonly associated with the "typical" offender (e.g. broken family, low income, low education), and in fact includes known "protective" factors (e.g. religious practice, strong social and marital bonds), is ill-founded. Indeed, the social bonds of jihadis are, according to Sageman (2004), entwined with other jihadis (including their wives). Bonds with criminal peers is considered a social risk factor.
tradition of study of violent collective action, and build upon well-documented processes, such as moral disengagement (Bandura 2004). As Atran (2006:141) puts it, "Small-group dynamics can trump individual personality to produce horrific behaviour in otherwise ordinary people."

Recently, these accounts have been incorporated in an embryonic developmental perspective, which borrows from criminology the concepts of "trajectory" or "pathway" (Horgan 2005; Taylor & Horgan 2006). It is built upon the assumption that terrorists begin as "ordinary." What ordinary means in this context is not clear, except perhaps to rule out psychopathology and severe criminality. The "assumption of ordinariness" might give the impression that all individuals are equal before the opportunity to get involved in terrorism, but the model includes broad concepts of "family, early experiences, culture, socialisation" in the category of distal causes, suggesting that individual differences predate involvement and influence future development in ways that remain unspecified. However, these "distal" elements or "setting events," as well as "personal" factors, are hypothesised to play a lesser role once involvement occurs and "institutionalisation" sets in (Taylor & Horgan 2006).

Moghaddam (2005) forgoes the pathway metaphor in favour of a "Staircase to Terrorism." The staircase has six floors, "characterized by particular psychological processes" (p.162). On the ground floor, individuals acquire a degree of predisposition towards terrorism through subjective perception of deprivation and injustice, and the "feeling of frustration and shame" inspired by material, political, cultural or economic conditions. This floor is occupied by millions of individuals. It is not clear why some are susceptible to this process of subjective perception when others, presumably, aren't (unless all people are assumed to be equally motivated by environmental factors), or what objective (if subjectively perceived) features of the setting might be part of this process.

On the first floor, individuals who perceive that they do not have any options for mobility and that they cannot participate in the political decision-making process may displace the blame to an 'other'. Andoni (1997) reports that Palestinian suicide volunteers feel that they are driven by an absence of political alternatives. Individuals may proceed to the second floor, where ideological or cultural conditions comfort them in displacing their aggression to a perceived enemy. Sprinza (1990) speaks similarly of a crisis of confidence in the system's current "masters," followed by a conflict of legitimacy, when the system of rules itself is put into question, leading to a "break with the prevailing political order" (p.81).

Moghaddam offers little on the transition from second to third floor, when individuals become aware of and join the terrorist organisation. Other authors have stressed the importance of social networks in joining underground organisations (McCormick, 2003; Sageman, 2004; Bakker, 2006). Individuals come into contact with the terrorist organisation through family, friends or acquaintances (Clark, 1984; Crenshaw, 1986) and are drawn in by the rewarding aspects of interpersonal ties (Crenshaw, 1985). Sprinza (1990) discusses the emergence of the Weathermen as the "direct offspring" of a student organisation. In this configuration, the individual joins the group before it turns to terrorism. Of joining the terrorist group, McCormick (2003:494-495) says that the "individual must share something in common with a political collective to become affiliated in the first place." Commenting on the work of
Weinberg and Davis (1989), he adds that "[w]ould-be members of the underground are 'pushed' toward a particular group because of their preexisting cognitive or affective attributes and are 'pulled' into the group (and resocialized) by forces in play within the collective itself" (emphasis added). It is fair to say that the "resocialisation" process has so far received more attention than the developmental process leading to the acquisition of these 'pre-existing' attributes, or to the selection process, by which some individuals come into contact with environments (settings) conducive to moral change and the acquisition of new moral habits.

The terrorist organisation steps in on the third floor of Moghaddam's Staircase, where it exists "in a parallel or shadow world, with a parallel morality." Though the terrorists' willingness to employ illegitimate violence appears "morally disengaged" from a mainstream perspective, they consider themselves "morally engaged" according to their own perception of the moral context. The group mobilises resources "to persuade recruits to become disengaged from morality as it is defined by government authorities (and often the majority of society) and morally engaged in the way morality is constructed by the terrorist organization" (p.165). Moghaddam identifies some of the tactics used by the group to encourage and maintain this moral disengagement as "isolation, affiliation, secrecy, and fear." Recruits appear to select an organisation based on a match between the frustration they experience and the solutions the group advertises. The group, to some extent, exploits a pre-existing disposition, a situational lack of correspondence between individual and social moral valuations. Kruglanski and Fishman (2006:204) draw attention to the phenomenon of 'focalism,' whereby "increasing the subjective focus on a given objective leads to the suppression of alternative objectives." Once inside the group, the recruit may focus on the ends "assumed to be served by terrorism (e.g., a defense of one's religion...)") and may lose sight of "incompatible ends," such as the preservation of innocent lives.

Further reinforcement is manifest on the fourth floor, where assimilation in the secret life and structure of the organisation, and socialisation into its mores, promotes an in-group/out-group, us-versus-them dichotomy (Post, 1984; Crenshaw, 1988; della Porta, 1992), reminiscent of the polarization experienced by societies in times of war. The clandestine nature of the group fosters isolation from the mainstream social and political environments, and individuals can lose the sense of the reality of the world outside the group (Crenshaw, 1985; della Porta, 1992). Members of the organisation can become engaged in a "fantasy war" (Ferracuti, 1982:136) and are susceptible to Groupthink (Janis, 1972). Isolation and peer pressure lead to increased conformity with the practices and extreme belief system of the group. In the words of Post (2005:460; see also Post, Sprinzak & Denny, 2003), "there is a clear fusing of individual identity and group identity." Taylor and Louis (2004) speak of the normative structure of the "terrorist collective identity," within which the individual either forms a new identity of his or her own, or "simply follows the behavioral norms specified by the collective identity" (p.180). These norms must be "highly salient for individual members," "extremely

25 See McCormick (2003) for a thorough review of organisational effects on terrorist decision-making.
simple with no latitude for interpretation," and "espoused constantly." This collective normativity is formed in reaction against and in interaction with the norms of the enemy (out-group). The authors note the irony of the out-group's norms determining "the form that terrorist actions take...the powerful out-group's norms signal to the terrorist group the behaviors that are most shocking" (p.184). The enemy's own moral rules and values are used against it. The rules are broken for the sake of breaking them. Expanding on the last stage of his three-step model of group radicalisation, the *crises of legitimacy*, Sprinzak (1990) describes how the rejection of the outside context leads to the adoption of a new, antinomian system, whereby the members "free themselves of the yoke of conventional morality," while the "boundaries between political and personal illegality are totally removed, and certain forms of behavior are held as right and even sacred," and "a new revolutionary morality emerges" (p.83).

The fifth and last step provides the individual with the cognitive resources necessary to carry out the terrorist act. Committing acts of extreme violence against other human beings does not come easily to most individuals. State militaries have long understood the need to integrate recruits into a whole new society for the purpose of discipline, and to sustain them as they face "the great strain upon human nature" imposed by war (Procter 1920:36). Drills, such as repeatedly stabbing dummies with bayonets, condition the soldiers to react automatically to external stimuli, and stories of atrocities committed by the enemy are propagated through the ranks to rouse the recruits to anger and comfort them in the rightness of their actions. Procter describes firsthand how the soldier of the First World War lost "all personal consciousness and all individual volition" when he went over top; how "the habitual reactions set up in the course of his training" directed his movements (p.43); and how the army took care of the soldiers' bodies and "provided religion," because religion was "a very powerful incentive to killing Germans" (p.44). In the army, the soldiers had "no use for independent thought" (deliberation) (p.47).

Bandura (2004) discusses at length the processes of disengagement experienced by terrorists. He suggests that individual moral standards, which guide and restrain behaviour, cannot fulfil their regulatory role unless they are activated, and self-sanctions (e.g. moral emotions, such as guilt) are in place. Individuals frequently engage in "disengagement practices" in order to perform actions, which go against their moral standards. One such practice is to reframe the moral dimension of the act. As Guttmann puts it (1979:525, cited in McCormick 2003) the terrorist "asserts that he loves only the socially redeeming qualities of his murderous act, not the act itself." Groups not only devalue their opponents, but claim moral superiority over them (Smith, 2004). Under similar pressure, pacifists have been convinced (or have convinced themselves) that killing is morally justified.26 This process is reinforced through other practices, such as using euphemistic language (e.g. 'civilian victims' become 'collateral damage'), misrepresenting or minimizing the effects of the

26 Pat Barker's *Regeneration Trilogy* recounts the (fictionalised) experience of this process by pacifist poet Siegfried Sassoon, who served as an officer in the British Army during World War I.

27 A related notion might be 'framing effects', where respondents display different attitudes towards key issues depending on the phrasing of the question.
act, dehumanizing or distancing oneself from victims, displacing the blame onto the target, and, last but not least, displacing responsibility. We might rephrase this last as displacing agency. Responsibility for the action is attributed to an external authority, so that the agent is "spared self-condemning reaction," (p.130) which has obvious implications for deterrence, especially when one's agency is displaced onto an ultimate authority (e.g. God). Hoffman (1993:2, 1998) also notes the importance of a clerical sanction for religious terrorists, who feel that they are performing a "sacramental act or divine duty executed in direct response to some theological demand or imperative." This transcendent aspect frees recruits from all forms of social and moral constraints, and explains the extremities of violence employed by religious groups. Hoffman & McCormick (2004:270) speak of a "deliberate recalibration of social attitudes" in the case of suicide terrorism, whereby "an act which under normal circumstances would be considered abnormal, if not abhorrent, has been transformed into something that is not only acceptable, but even encouraged."

Whenever a process of disengagement operates, it suggests that the individual's break with the broader moral context is not complete. Rationalization and similar mechanisms would not be needed to overcome one moral rule (you must not kill) in order to challenge a larger set of rules, if all ties with the moral system had been cut. Bandura (2004) makes the point that getting individuals to kill against their well-established moral standards is not achieved by changing said standards, or altering the individuals on some other profound level, but by "cognitively redefining the morality of killing" so that self-restraints may be suspended long enough for the action to take place (p.124). The enemy is painted as a monster that must be stopped, no matter how distasteful the means.

What Bandura describes as the sanitising effect of ideology is a situational mechanism. Crucially, moral disengagement "is a product of the interplay of both personal and social manoeuvres" and not a strictly "intrapsychic construct" (p.137). It can be incited by other individuals, or produced by social systems and other collective entities. This intimates that the process will be affected by environmental change (the context of action). That

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28 The displacement of agency is itself, of course, an agentive process. It originates in the individual.

29 What is being challenged is the moral system itself. The terrorists contest the legitimacy of the state or the society as rule-maker, as decider of right and wrong. Hannah Arendt (1990) observes that "the most crucial political issue is, and always has been, the question of Who rules Whom?" It is in the challenge of the moral system, not solely in its violent breaking of the moral rule, that terrorism gains its political dimension. Soibelman (2004) proposes that American gangs provide a kind of analogy to terrorist groups, in that rejection of "the norms of the urban environment" allows the gang "to create its own norms." The difference then might be that the gang does not attempt to reverse the normative order beyond its own borders, while the terrorist group wants to expand its own order outwards and force others to adopt the terrorists' own moral rules (see, for example, Rapoport, 1990). From the perspective of the social reaction to these acts, fear commonly associated with crime may become terror as a result of the public's perception of the terrorists' antimain behaviour. This may explain why, in the case of suicide terrorism, a society is "more sensitive to the cause of casualties than to the volume." (Crenshaw, 2007:161).

30 'Brainwashing' is often mentioned in conjunction with suicide bombing, notably in the media, but Merari (1990) dismisses the notion and argues that indoctrination is at work instead.
is because a moral preference is always expressed in a particular circumstance; it does not make sense to speak of it as an absolute inclination. However, one may ask, in the situation where a process such as moral disengagement is experienced repeatedly over some period of time, whether the individual might not internalise new moral rules, emotions and habits, resulting in a change in disposition (propensity), rather than a change in motivation (a situational mechanism).

We believe that this is precisely what is achieved by the "institutionalisation" of these processes. Institutionalisation has been described as the answer to the so-called problem of the "ephemeral state of mind," which is said to animate suicide bombers (Gambetta, 2005a:275)31. Moghaddam (2003) describes how the volunteer recruited by a Palestinian organisation is put through an 'Institutional Phase' of training and indoctrination, where he or she is turned into a 'living martyr' and made to publicly commit to the fatal course of action in a kind of moral and social contract (a formal commitment), often involving the video recording of a testament. Following this process, the recruits are isolated from the rest of the group, or perhaps housed alongside other volunteers, and sent on the mission as soon as possible (Soibelman, 2004). The longer they wait, the more likely it is that they will change their minds (Moghaddam, 2003).

We may think of a suicide or other terrorist attack as an extended action process. At each step the individual carries his or her propensity into a new environment and as a consequence may perceive new alternatives and be motivated anew (e.g. to abandon the mission). By isolating the volunteers, the group controls the settings to which they are exposed. Environmental stability contributes to motivational stability, which the organisation, explicitly or implicitly, recognises to be situation-dependent. Palestinian organisations have been reported to provide handlers, which accompany the volunteer to the very site of the attack. This is the last setting the recruit will encounter, and one which the organisation does not control. Habituation (cognitive and behavioural automation acquired through experience, including training) may play a fundamental role at this stage. Neria, Roe, Beit-Hallahmi, Mneimeh, Blaban and Marshall (2005) analysed the Al Qaeda instructions provided to the 9/11 hijackers. In addition to passages which frame the impending slaughter and death in ritualistic terms, justify the suicidal aspect of the act, and provide moral exoneration, long swaths of text are devoted to practices which will induce a state of altered or transcended consciousness, suspending the need for deliberation, such as prayer, rituals, constant recitations and incantations, and extended wakefulness prior to the mission. Nevertheless, would-be suicide attackers have been known to be knocked "off course" by environmental factors (e.g. seeing someone they know; spotting women and children in the crowd; see Argo 2004), and either choosing a new site, turning back, or giving

31 The problem is ill-posed. A state of mind or motivation is the outcome of a situational process. It is the outcome of the individual's belief that his desires can be realised in a particular setting (the perception of an alternative). It is always ephemeral, in the sense that it is context-dependent, though the process can made automatic through habituation (repeated exposure to the same desire-setting pair). See Bargh (1994) and Bargh & Chartrand (1999) for a discussion of the preponderance of automatic processes in human social cognition.
themselves up to the authorities. As a result of a perceived change in the moral context of action, the action alternative is subject to a new moral judgment, which results in the decision to walk away.

On the strength of this example, we grasp the difficulty of disentangling processes of stability and change in disposition (individual moral rules, emotions and habits) from changes in the context of action. Why does this distinction matter? Because action is the outcome of the interaction between the individual's predisposition and the characteristics of the setting, which is as much the source of action as is the individual. We know that setting characteristics interact differently with individuals more or less predisposed to crime. To put it crudely, individuals highly predisposed to crime are much more likely to perceive crime as an action alternative at the slightest temptation or provocation, than individuals with lower propensity. However, we also know that while high-propensity individuals will offend no more or no less in a "bad" or a "good" neighbourhood, the "bad" neighbourhoods are more likely to get the "good kids" to act badly (Wikström & Loeber 2003)32.

What makes a good or bad "neighbourhood" (environment) in terms of the perpetration of terrorist acts has been unsystematically studied. Yet prevalence rates of terrorism, and suicide terrorism in particular, are not the same everywhere. We can hypothesise that some environments would constitute "terrorism generators," and it is fundamental to identify their qualities. For example, Kramer (1990) reports on the endorsement of terrorist activities by moral or legal authorities (e.g. Islamic clerics in Lebanon). This process might result in a change in the moral rules governing a setting and the monitoring practices prevalent in a community. Hafez (2006b) describes at length the "legitimizing" process of suicide attacks undertaken by authorities in the Palestinian territories, and the community support for the practice, institutionalised through rituals and discourse, which constitute clear signals that monitoring and enforcement of certain rules (deterrence) have been suspended. Wars and civil insurrections, which result in the suspension of the normal moral qualities of a setting (rules and their monitoring and enforcement), can be expected to produce terrorism (and crime)-generating environments. Understanding which qualities of the (insurgent) context lead "ordinary" people to engage in terrorist and other deviant action will facilitate restoration of the "normal" moral context after the fighting has stopped, or minimization of perverse effects as they occur.

In other words, a theoretical framework of terrorist action must articulate both the context of terrorist action and the context of development and change (moral change and habituation) in the propensity to terrorism. While we should make the most of our understanding of the processes of moral change and habituation taking place inside terrorist groups, we should not overlook the need to understand how some individuals select their environments and come to be exposed to these influences in the first place. The spread of a model of non-institutionalised "leaderless resistance" (Joose 2007), of "franchising," "amateurish," or "self-radicalising" networks of "spontaneously formed and

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32 In this context, the "good kids" are the adolescents endowed with the most protective factors. We might learn something about Taylor & Horgan's (2006) "ordinary" terrorists by looking at "good kids" who commit crimes.
self-mobilising" "pseudo-families" of "self-starters" (Kirby 2007; Silber & Bhatt 2007) cherry-picking ideological resources off the Internet (Atran 2006), emphasises the need to expand our explanations of the formation of terrorist propensity beyond organisational processes. So do findings that members of the jihadi movement in Europe and Iraq had no previous experience or training (Jordan, Manas & Horsburgh, 2008) or came from outside the country (Gambetta, 2005); that many suicide bombers are recruited outside the terrorist organisation (Moghaddam, 2003); and that others are "self-recruited" "walk-ins" with no past in the organisation and no previous experience of terrorist violence, who seek out the group with the intention of carrying out a suicide mission (Hassan, 2001; Soibelman, 2004; Pape, 2005; Speckhard & Ahmmedova 2006a). Merari (1990), in a discussion of the indoctrination phase, which precedes suicide missions, contends that it is "essentially a process of preaching to the converted" and that it "may serve as an ancillary factor by strengthening already-existing convictions and behaviour tendencies" but it "cannot create suicidal behaviour" on its own (p.200). This forces us to reassess the centrality of the role of the organisation in the developmental process, as regards the emergence and maintenance of the predisposition for (suicide) terrorism, and the decision to go through with the act. If terrorist groups "preach to the converted," the question of the conversion itself remains.

Rational Actors, Moral Agents

If *homo psychologicus* dominated early explanations of terrorist behaviour, *homo economicus* later rose to prominence. What models of terrorist choice have been offered are built upon microeconomic principles of rational choice (instrumental or economic rationality). Such models are based on the assumption that all actors are equally motivated by self-interest (the realisation of their narrowly selfish desires) and will choose the course of action, which they perceive most likely to maximise their utility (in short: minimise *subjective* costs and maximise *subjective* benefits). Economic rationality is the rationality of means. Two types of interventions can be derived from these models: increasing the benefits of compliance or raising the costs of non-compliance. The rational choice framework has nothing to say about the rationality of the individual’s goals, his or her preferences (except for their stability and transitivity), beliefs or desires. Therefore, evidence of economic deliberation about means should not be taken as evidence of economic

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33 An ontological and epistemological critique of the rational choice framework is beyond the scope of this paper. For a discussion, see Bunge (1995), Elster (2000), Green & Shapiro (1994), Searle (2001), and Taylor (2006). Chief among criticisms are the lack of empirical and experimental support for the Utility Maximizer postulate (people often do not behave like *homo economicus*, though they will do so when instructed or expected to, in which case they behave as if they are *homo economicus* [e.g. Frank, Gilovich & Regan 1993]), evidence that individual preferences are, in fact, unstable, and the post hoc nature of rational choice explanations. Bunge (1996) observes that, while rational choice scholars produced convincing-sounding accounts of the breakdown of the USSR after it occurred, it was politologist Hélène Carrère d'Encausse (1978) who predicted it the old-fashioned way a decade earlier. Finally, because the concept of rationality has been made so flexible as to encompass almost anything, rational choice theories have been accused of being impossible to falsify.
deliberation about ends—or, as Atran (2007:110) puts it: "arational motivations don't preclude rational actions." Preferences and beliefs can be inferred from observing the agent's choices, but since preferences do not change, intervention is not considered on that level.

Rational choice postulates have been stretched to accommodate collective actors, attributing a collective economic rationality to terrorist organisations (Berman & Laitin 2005; Crenshaw 1990; Gupta & Mundra 2005; Pape 2003, 2005), sometimes for the purpose of building game theoretic accounts (Kydd & Walter 2002). Recent studies of "horizontal networks," however, suggest that attributing a collective rationality to the strategic decisions of organisational frameworks is a less than straightforward process. Pedhazur and Perlinger (2006) analyse how suicide attacks carried out by Palestinian groups are less the product of organisational decision making than the outcome of competition between small networks of local activists reacting to personal provocations. Besides, most group-level, strategic accounts leave out the question of the group members' rationality, especially in the case of suicide attackers, or relegate it to separate, nonrational accounts (Bloom 2005, 2006; Hafez 2006b; Hoffman & McCormick 2004; Pape 2003, 2005).

Suicide terrorism is perceived as the greatest challenge to rational choice explanations, since no benefit could outweigh the ultimate cost of action (certain death) and any rational actor presented with this situation should be tempted for free-ride. This challenge has been taken up in a number of ways. One has been to borrow from evolutionary psychology evidence that humans' genetic selfishness can manifest as reciprocal or kin-oriented altruism (Caplan 2006). Notably, it has been reported that the families of Palestinian suicide bombers gain subsequent social status and are often guaranteed a monetary reward. Notwithstanding the fact that human systems have emergent properties (such as consciousness), which their constituents (e.g. genes or cells) do not possess, there is no evidence that genetic selfishness results in deliberate

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34 Of course, because this is an inverse problem, it has multiple possible solutions. Discussing the motivations and beliefs of suicide terrorists, Elster (2005) admits that, while "some are more plausible than others, we may never know the motivational and cognitive states of the suicide attackers for the simple reason that (to some extent at least) there is no fact of the matter," because they may not know, themselves, the reason(s) for their action.

35 See Bunge (1995:161): "What is true is that rational choice theory takes preferences for granted and assumes them to be radical and constant rather than derived and variable. Indeed, rational choice theorists do not investigate how preferences emerge and change as a result of both external circumstances and argument." This last remark recalls us to Haidt (2001; see footnote 23), who describes the mechanism by which moral change can result from social interaction.

36 Pinker (2008) warns against taking DNA anthropomorphism literally and points out that carrying a so-called selfish gene does not make the gene-carrier selfish: "Genes are not a reservoir of our dark unconscious wishes. 'Selfish' genes are perfectly compatible with selfless organisms, because a gene's metaphorical goal of selfishly replicating itself can be implemented by wiring up the brain of the organism to do unselfish things, like being nice to relatives or doing good deeds for needy strangers. When a mother stays up all night comforting a sick child, the genes that endowed her with that tenderness were 'selfish' in a metaphorical sense, but by no stretch of the imagination is she being selfish." We should note that evolutionary accounts of human behaviour offer only partial explanations. For example, Daly & Wilson (1988) found that children living with a stepparent (no genetic relationship) were 40 to 100 times more likely to be abused or killed than children who lived with both genetic
choice-making in the agent. An automatic process would bring no support to a rational choice framework. Besides, not all suicide terrorists can be said to serve the interests of their families or of communities to which they are tied by kinship or near-kinship bonds. That is the case, for example, of foreign fighters leaving their communities to carry out suicide attacks in Iraq.

Other rational choice scholars account for the willingness of individuals to take part in suicide attacks in terms of access to club goods (Berman 2003; Ferrero 2006; Iannaccone & Berman 2006; see also Iannaccone 1992). In this framework, individuals take on the extreme behavioural requirements of the group (including death) in exchange for access to public goods, which would not be otherwise available, and signal their willingness to commit by adopting the beliefs of the group (or by behaving as if they believe, according to Munger 2006). In return, the group solves its free-rider problem by demanding such great sacrifices that only the most committed will join and share in the goods. Defection is punished not only by loss of access to the goods, but also through stigmatisation. Therefore a counter-manoeuvre would be to ease defection from the group by negating the cost of stigma in some way. This framework seems tailor-made for configurations involving hierarchical groups, such as Hamas or the Tamil Tigers, to name only two, but it runs into some difficulty when the notion of 'group' or 'public good' must be stretched beyond credibility.

According to Ferrero (2006), rational individuals may enter into "martyrdom contracts" provided that benefits are accessed in some period prior to sacrifice or if the certainty of death is less than one. In the case of informal networks, such as home-grown Islamic networks in the United Kingdom, it is difficult to see why a small group of individuals would impose such a cost on themselves, and for the provision of which public good unattainable elsewhere. If they were socially isolated to such an extent that they were unable to access a "friendship," "identity," "belonging," or "religious piety" (Ferrero 2006) good elsewhere, then one must provide an explanation why social segregation occurred and would have this effect on these men, and why they failed to want the same public goods as the rest of their community. As well, one must still explain why the commitment signal should take the form that it does. Other groups might require that their members shave their heads, publicly profess a belief in aliens, even physically mutilate themselves—but why did these men settle on blowing themselves up amid other people? If they adopted an existing mental model (Elster 2005) or imitated a tactic (Crenshaw 1990), then why this one? One can imagine they could have committed to Salafi jihad at less cost, especially in the absence of a hierarchical structure. Pape (2003, see also Merari 2005) argues that terrorists have recourse to suicide terrorism because they perceive it as effective, while Berman and Laitin (2005) propose that suicide attacks are used against hard targets, which are unlikely to be attainable through conventional means. However, the July 7th bombers would have learned from the attacks in Madrid that conventional tactics can cause substantial carnage, and that public transportation does not constitute that hard a target. Finally, parents. But the case remains that some genetic parents abuse or kill their children, while the great majority of step- or adoptive parents do not abuse or kill their wards.

57 See Gambetta 2005a for a counter-argument. He observes that "most SMs [suicide missions] seem of limited military significance in terms of their destructive effects" (p.263).

58 The Madrid bombers killed themselves upon their arrest, not while carrying out the attacks.
Considering the relatively small number of individuals involved, the cost of stigma could not have been high and would have been offset by moving to another community. The cost of moving could not have been higher than the cost of death. If they remained out of guilt, loyalty or commitment, then the explanation is no longer strictly economic. The club good framework encounters similar problems when trying to account for the "twenty-four hour martyrs" and the foreign suicide attackers mentioned previously, who incur drastic costs before they have secured benefits from group membership.

Even among rational choice scholars, there is no agreement that suicide terrorists fall under the rational choice postulate. Caplan (2006) argues that terrorists and their supporters do not fit the rational expectations requirement, because they hold systematically mistaken beliefs with certainty (e.g. expectations of the success of a global caliphate, despite the repeated failures of pious Muslims to achieve dominance on or off the battlefield). Nor does he believe that suicide terrorists can be made to comply with the assumption of narrow self-interest. He suggests "relaxing standard assumptions [of the rational choice model] until we fit the facts" instead (p.105). Others have posited that assurances of heavenly rewards are sufficient incentive to make the cost-benefit analysis of martyrs rational (Berman and Laitin 2005). Notwithstanding the fact that many suicide terrorists belong to secular movements, Hafez (2006b:14) rightly observes that this type of argument simply "withers away" the separation between religious fanaticism and instrumental rationality. In other words, the onus of explanation is merely displaced to the terrorists' deep religious faith. As we have seen in the discussion of group processes, much is made of a group's willingness to manipulate its members' religious convictions for a strategic purpose, but, as Atran (2007:110) points out, "this degree of manipulation works only if the manipulators themselves make costly, hard-to-fake commitments." Meanwhile, Varshney (2003) reminds us that, for leaders to manipulate moral or religious beliefs in this way, it stands to reason that they must act as value-rational motivators for others. These scholars and others challenge a radical, economic account of human action, and contend that there is both a rational and a nonrational (moral, emotional, social, cultural) logic to terrorism (e.g. Atran 2006, Bloom 2005, Hafez 2006b, Moghaddam 2003).

Trying to fit suicide bombers into a rational choice framework has led Gambetta (2005b:317) to puzzle over the London bombers' "mystifyingly weak set of motivations to kill and to die—both in the sense of being unrelated to any clear benefit for the attackers and of lacking the features that seem to be required to produce and sustain the mind necessary to die in that way" (emphasis as original).39 Elster (2005) confesses himself at an equal loss. Drawing parallels between the diffusion of self-immolation and of suicide terrorist tactics, he notes:

39 Gambetta adds, "With no experience of conflict, no fighting organisation or community to support them, no demands and no links to any clear consequence of palpable relevance to be derived from the bombing, one wonders how they mustered the motivations in the relative quiet and remoteness of provincial British towns" (ibid:323). This puzzlement reflects a weakness of "folk theories of mind" (Malle 2002, cited in Bottoms 2006), whereby the observer accounts for the causes of intentional action in terms of the agent's reasons. If the observer cannot grasp the reasons, there is no causal account.
What seems to happen is that, following one person's self-immolation, other people begin to see it as a realistic option rather than merely a conceivable alternative. That this happens seems clear. How it happens, I do not understand. The diffusion of the suicide bombing strategy is certainly more complex, but the basic mechanism (whatever it is) could be similar. At the level of the leaders the mental model may have caused them to take seriously the idea of recruiting suicide attackers, and for the recruits the model would have made the idea acceptable. (p.253)

These remarks throw into sharp relief the weakness of the rational choice approach. Though rational choice theorists ground their models in the actor's subjective rationality (her preferences and beliefs), they assume that all agents are equally motivated (by self-interest) and that their motivation is invariant. They do not account for the agent's perception of action alternatives—how the individual sees what it is possible for her to do in that particular setting. The overwhelming majority of individuals do not engage in acts of terrorism (or acts of crime), not because it is against their interest to do so, but because it never occurs to them to do so at all. Their behaviour is not the outcome of a rational calculus: they do not even see acts of terrorism as an action alternative. It never emerges as a possible choice.

In other words, to explain terrorist acts, we need to explain how the individual comes to perceive terrorism as an action alternative, as a result of the interaction between his or her propensity (to engage in acts of terrorism) and exposure to environmental inducements (to engage in acts of terrorism). The suicide terrorists' "ephemeral motivations" (Elster 2005), the temporary suspension of their moral restraints (Bandura 2004), or the inexplicable weakness of their reasons for action (Gambetta 2005b) can be tackled once it is understood that motivation is a situational concept, and that moral preferences and desires are always expressed in (relative to) an environment. There is no such thing as stable motivation.

The situational nature of motivation is recognisable—though not articulated as such—in the centrality attributed to negative and positive emotions in accounts of individuals' motivation for terrorism. For Gambetta (2005a), the meaning of Palestinian suicide attacks is closer to that of self-immolations: the primary motive is to die in protest against individual and collective humiliation and the helplessness experienced by the Palestinian people. The killing is nothing but "a way to legitimize their choice of dying for the cause" (p.297). Accounts of what drives Palestinian suicide bombers make systematic reference to anger, disillusionment, humiliation, and grief, and the desire for revenge and retaliation. Anger is an animating principle in the text of the Shi’a thinkers of jihad (Moghaddam, 2007). Jihadist groups exploit communal narratives of humiliation and revenge to justify the need to kill themselves, civilians, and even coreligionists, as is the case in Iraq (Hafez, 2007). For Crenshaw (1981:394), vengeance on behalf of comrades or the constituency is "the single common emotion that drives the individual to become a terrorist." As a consequence of the successive intifadas, few Palestinians have escaped the personal experience of violence through injury to themselves, a family member or a friend. According to Speckhard (2005; see also Speckhard & Ahkmmedova 2006a, 2006b), populations in Palestine and Chechnya, traumatised by the experience of sustained violence and repeated
beregavements, are vulnerable to "self-recruitment" and turn to terrorist organizations as a form of "psychological first aid". In the sacrificial act in defence of the community, they find an alleviation of the pain. In Durkheimian terms, the suicide bombers display elements of both altruistic and fatalistic suicide (Pedazhur, Perlinger & Weinberg, 2003). However, the suffering does not have to be experienced firsthand for emotional motives to play a part. Suicide bombers have reportedly been moved to action by televised images of events in Palestine.

The emotions per se (e.g. frustration, revenge, humiliation, empathy, rage) are of little value to an explanation of (suicide) terrorism. There are as many personal motives as there are people who commit acts of terrorism, and we would be hard-pressed to account for them all (Durkheim 1952; see footnote 10). If anything, motive-based accounts predict a surfeit of terrorist acts. However, what we can take from a laundry list of personal motives is that it is in the interaction between the individual and the environment that arises motivation. The environment presents the individual with inducements that elicit desires, or trigger commitments to action, which he or she will first perceive (or not), then choose (or not) to act upon. This process of perception and choice is arguably an essential part of any explanation of human action in general, and acts of terrorism in particular.

**Integrating the Levels of Explanation: Locality, Generality**

So far, integrating the levels of explanation of terrorism has mostly been a case of saying that it is a good idea and that someone should do it. Several authors (Bloom 2005; Hafez 2006a, 2006b; Moghaddam 2003, 2005; Pedazhur 2004) have made important inroads towards integration, though their efforts have consisted essentially in offering two or more motivational accounts (organisational, individual, ecological) in a single narrative. Furthermore, these models have been self-avowedly local, in that they are most of them concerned with Palestinian suicide terrorism. Perhaps the self-containment and widespread nature of the phenomenon in Palestine, which, many authors argue, reaches into all spheres of society, facilitate modelling.

As a consequence, all the models give a central role to processes of institutionalisation and normalisation. For Hafez (2006a, 2006b), suicide terrorism occurs at the intersection of the personal motives of the "martyrs," the strategic calculations of the terrorist groups, and a set of social conditions (feelings of victimisation experienced on a society-wide level and the cooperation of legitimising authorities), which provide fertile ground for a community-wide embrace of sacrificial violence. Moghaddam (2003, 2005) offers a similar, two-stage account, distinguishing a "motivational" phase from an "institutional" phase. First, the "willingness to die" of the individual intersects the "willingness to kill" of the group, and the individual is recruited by the organisation. In the second, institutional phase, he is made into a "living martyr". Moghaddam distinguishes between the religious, personal, economic and nationalistic motives of the individuals on the one hand, and the strategic and organisational goals of the groups on the other. Future martyrs are approached by recruiters who assess their predisposition to die, then recruit, train, and indoctrinate them. Pedazhur's (2004) tri-stage model likewise places
suicide terrorism at the intersection of "a) decision making among elites of terrorist organizations, b) individual motivations of the perpetrators and c) the organisational process of recruitment, socialization, and launching of the terrorist" (p. 841). Pedahzur himself admits that his model "is mainly relevant to societies and communities which suffered from repression and were involved in a long lasting struggle" (p.842) and does not apply to many of the attacks conducted under the al Qaeda banner. Similarly, the greatest insight delivered by Bloom (2005), that organisations adopt suicide tactics as a result of outbidding between "pragmatic and power seeking" groups vying for a share of the political pie (p.89), is less applicable to the types of cases reviewed in the New York Police Department's report on radicalisation in the West (Silber & Bhatt 2007). Neither is the notion that suicide terrorism in strictly an institutional phenomenon (Sprinzak 2000), unless we should stretch the meaning of "institutionalisation" as to render it empty.

Comparable objections have been levelled at Pape's (2005) influential account of suicide terrorism in Dying to Win.40 Pape contends that the spread of suicide terrorism is the result of the groups' strategic decision to expel a foreign military presence from the homeland by using coercive tactics with a successful track-record against a democracy. However, other scholars point out that Pape's framework must be stretched considerably to account for the activities of al Qaeda (Cook 2007) or of any religious group with non-territorial demands (Bloom 2005). Perhaps the most sustained critique is that of Atran (2006:128), who believes that a different explanation is needed for the actions of a "thoroughly modern, global diaspora inspired by religion and claiming the role of vanguard for a massive, media-driven transnational political awakening."

Each of the preceding frameworks are, to an extent, theatre-specific. They account, often quite well, for some historical reality "on the ground," but it is precisely because they were built from the ground up that they run into difficulty as general theories. (To be fair, they do not all claim generalisability.) In a paper entitled "Rational Fanatics" published in 2000, Ehud Sprinzak argues:

A suicide terrorist is almost always the last link in a long organizational chain that involves numerous actors. Once the decision to launch a suicide attack has been made, its implementation requires at least six separate operations: target selection, intelligence gathering, recruitment, physical and "spiritual" training, preparation of explosives, and transportation of the suicide bombers to the target area. Such a mission often involves dozens of terrorists and accomplices who have no intention of committing suicide, but without whom no suicide operation could take place (p.69). [...] The Achilles' heel of suicide terrorists is that they are part of a large, operational infrastructure [...] Organizations only implement suicide terrorism systematically if their community (and, in some cases, a foreign client state) approves of its use (p.72).

40 Other criticisms, which cannot be reviewed in depth here, have been of a more methodological nature (see Ashworth, Clinton, Metrowitz & Ramsay 2008; Kiras 2007). In the words of Ashworth and colleagues: "By examining only instances of suicide terror, Pape 'samples on the dependent variable'...As a result, he cannot elucidate the causes of suicide terrorism; he cannot determine why some groups choose suicide tactics rather than other forms of resistance; and he cannot answer questions about the implications of various foreign policy choices on the incidence of suicide terrorism" (p.1).
This description was a good fit for the phenomenology of suicide terrorism at the time. Eight years later, it is no longer an ideal fit. We suggest that such cases illustrate the limits of phenomenological enquiries, as opposed to an analytical, rational approach. We come back full circle to our earlier argument that general explanations cannot be derived exclusively from empirical observations, but must in fact articulate abstract concepts and establish plausible causal processes or mechanisms, many of which are not directly observable.

We go on to outline a theoretical framework, the Situational Action Theory of Crime Causation, which, we submit, is a foundation for the analysis of the causes of terrorist acts, as well as a much needed basis for knowledge integration and the design of a systematic research agenda.
5. Theorising Terrorism: An Integrative Framework

We have identified some areas of weakness in the knowledge base and proposed that there is a lack of fully developed theories explaining acts of terrorism. We submit that without a properly developed theoretical framework, which can help us organise known facts, guide the generation of new facts, and interpret and analyze empirical findings, it is difficult to advance our knowledge about the causes of acts of terrorism and their prevention.

Three fundamental questions need to be addressed, in order to develop an explanation of acts of terrorism, such as suicide terrorism:

1. What is terrorism (what is it we attempt to explain)?

2. Why do people engage in acts of terrorism (what are the immediate processes that move a person to carry out an act of terrorism)?

3. What individual and environmental factors interact in moving people to engage in acts of terrorism?

We propose that the Situational Action Theory of Crime Causation ([SAT], Wikström, 2004; 2005; 2006; 2007; Wikström & Treiber, 2007; in press) provides a robust theoretical framework within which to address these questions. It is not our goal to present a full-blown theoretical analysis of acts of terrorism at this stage. That is a later task. For the present, our aim is more modest. We explore and argue for the potential to analyse the causes of acts of terrorism, and to create a foundation for developing effective strategies for its prevention, based on Situational Action Theory.

Our fundamental arguments are:

(i) that acts of terrorism are moral actions (actions guided by what is the right or wrong thing to do or not to do in a particular circumstance) and therefore needs to be explained as such;

(ii) that people engage in acts of terrorism, such as suicide terrorism, because they (i) come to see such acts as a viable action alternative and (ii) choose to carry them out;

(iii) that the likelihood that a person would come to see an act of terrorism as an action alternative and choose to carry out such an act ultimately depends on their morality.
(moral values and emotions) and its interplay with the moral context in which they develop and operate (its moral rules and their enforcement);

(iv) that to understand the role of broader social factors and their change (e.g. social conflict and segregation) in promoting acts of terrorism, it is essential to focus on identifying which (and how) such factors influence the emergence and change of (relevant aspects of) the moral contexts in which people develop and act.

We thus argue that to advance the explanation of acts of terrorism, and develop effective prevention measures, we need to understand how individuals come to be exposed to moral contexts and develop a morality conducive to seeing acts of terrorism as an action alternative and to choosing to carry out such acts. This, in turn, requires an understanding of why such moral contexts emerge in the first place, and their role in influencing individuals' moral development and actions relevant to their engagement in acts of terrorism.

**Outlining Situational Action Theory**

We briefly outline the background to the development of the Situational Action Theory. We feel this is important because, as previously discussed, many of the problems encountered in the search for explanation in criminology generally are also present specifically in attempts to explain acts of terrorism. We outline the actual theory and its fundamental assumptions and conclude by commenting on its applicability to the study of acts of terrorism. Crucially, we propose that there is no fundamental difference in explaining acts of terrorism and other acts of crime. Both can be explained as moral action within the same theoretical framework.

**Background**

The Situational Action Theory was developed to address some of the shortcomings of traditional criminological theorising (Wikström, 2004; 2005):

(i) the problem of the concept of crime (an unclear conception of what is to be explained by a theory of crime causation);

(ii) the problem of distinguishing causes and correlates (a poor understanding of causal mechanisms);

(iii) the problem of integrating levels of explanation (a poor understanding of how individual and environmental factors interact in causing acts of crime);
(iv) the problem of explaining development and change (a poor understanding of the role of processes of development and change in crime causation).

There is no commonly accepted definition of crime. In fact, many criminological theories fail to clearly define what it is they propose to explain. We reason that without a clear conception of what one aims to explain, it is difficult to build adequate theories of its causes (problem 1).

Few criminological theories are based on an explicit theory of action (a theory that tells us what moves people to action). The ones that touch upon the subject are generally underdeveloped, alluding in general terms to the importance of choice (usually rational choice) without detailing either the process of choice or its role within the process of crime causation. We reason that it is difficult to distinguish between causes and correlates without a clear understanding of what ultimately moves people to action. Criminology has produced hundreds of stable correlates with crime involvement, most of which are likely to be only markers or symptoms, rather than causes (problem 2).

Much theorising and study of crime tends to focus on either the person (propensities) or the environment (inducements) but rarely the interaction of the two. Even when theories and research do include both aspects, the lack of a proper theory of action makes it difficult to identify and integrate the role of person and environmental factors in the causation of acts of crime. Acts of crime (like all actions) are always the outcome of the interaction between a person and his or her environment, but few theories detail the process of causal interactions instigating action, and few studies explore such interactions (problem 3).

Finally, developmental and life-course studies in criminology (longitudinal research) rarely analyse processes of development and change relevant to crime involvement. Rather, they tend to explore correlates of crime involvement at various ages, or the factors, which, at a given age, predict later crime involvement. We reason that a lack of focus on processes hampers the advancement of the understanding of how people come to develop and change their propensities and motivation to engage in acts of crime (problem 4).

To be clear, we do not claim that criminological theorising and research do not provide valuable insights into the problem of crime causation (or terrorism causation), but we argue that what is lacking to advance our understanding of the problem is an integrative perspective, which enables us to organise knowledge and assess what correlates are causes, and which are mere markers or symptoms.

The Situational Action Theory of Crime Causation

Situational Action Theory (SAT) explains moral action and crime (e.g., Wikström, 2004; 2005; 2006; 2007; Wikström & Treiber, 2007; in press). The theory builds upon insights from various criminological traditions and draws
upon social and behavioural science theory and research more generally. It sets out to overcome key common shortcomings in existing criminological theory (as detailed above). Situational Action Theory seeks to explain moral action and crime by elucidating the key processes which lead to acts of crime (and transgressions of moral rules more generally), and the individual and environmental factors, which directly (and indirectly) influence those processes.

**Crime as moral action**

Situational Action Theory argues that crime is best analysed as moral action. SAT defines *moral action* as action guided by moral rules about what is right or wrong to do in a particular circumstance. It defines *crimes* as breaches of moral rules defined in law. Acts of crime are thus viewed as a special case of moral rule-breaking. This definition has the advantage of focusing on what all kinds of crime, in all places, at all times, have in common, namely, the (moral) rule-breaking. What is to be explained by a theory of moral action is thus why people (follow and) breach moral rules, and what is to be explained specifically by a (sub-)theory of crime is why people breach moral rules defined in law.

By focusing on the rule-breaking rather than particular kinds of actions, the theory avoids the analytical problem which arises from the fact that particular types of action may be defined as crime (or moral rule-breaking) at one time, but not at another, or in one jurisdiction, but not in another (e.g., certain sexual behaviours, the use of violence in certain circumstances, or certain traffic-related behaviours, such as drink driving or talking on a mobile phone while driving). It also avoids the analytical problem that the law (but not moral rules) can be abolished by a political decision. It is not conceivable to have a society without moral rules, while, in principle, it is possible to have a society without formalised law.

Moreover, the focus on the rule-breaking, rather than on the particular action, sidesteps the need for higher-order judgements regarding the moral justification (or lack thereof) for a particular action. Relying on moral judgment risks turning any discussion into a political or ideological, rather than a scientific, assessment. The theory does not try to explain why certain acts are regarded as moral rule-breakings or defined as illegal and others not. The focus of the theory is only why people (follow or) breach existing moral rules and laws. This is not to say that the reasons why certain actions are criminalised or regarded by large sections of a population as immoral should not be studied. There are, for example, reasons to believe that, in many cases, this process is linked to features of human nature (e.g. the need for protection) or the problem of social order (e.g. the need to regulate social interaction to make collective action possible). However, the origin of local and general moral rules (and laws) is not what SAT is designed to explain.
Fundamental Assumptions

The key assumptions of the theory are the following:

1. Situational Action Theory is based on explicit assumptions about human nature and its relation to social order. These assumptions differ from rational-choice assumptions. SAT accepts that rationality and self-interest (at times) play a role in guiding human action, but it reasons that on a more fundamental level human beings are rule-guided actors\textsuperscript{41}. Human actions (including acts of terrorism) must, therefore, ultimately be explained as rule-guided action.

   Let us stress that we are talking about guidance, not absolutes, since moral rules are always applied to a circumstance, and circumstances vary. Rules are important for people, who seek system of rules, in part, to spare themselves the effort of decision-making (they do not have to think about every action), and to gain emotional stability (they avoid the stress which may be result from not having clear directives for action\textsuperscript{42}). Rules (and systems of rules) vary and may be partially contradictory, and individuals may be exposed to contradictory rules and systems of rules. The extent to which a person’s own moral rules correspond to a particular system of moral rules (such as the law or a religion) is the extent to which the individual may be expected to follow its rules. This is the principle of moral correspondence, which is the cornerstone of the explanation of moral action (i.e. why people follow or breach particular moral rules).

2. The theory is developed to overcome the common (but unfruitful) divide between individual and environmental explanations of moral action and crime. It achieves this by proposing a situational mechanism (a perception-choice process) that links the person and his or her environment to their actions.

   It postulates that all actions (including acts of terrorism) are ultimately an outcome of (i) what action alternatives a person perceives, and, in turn, (ii) what choices he or she makes. In contrast to most choice-based theories, which focus on how people choose among predetermined alternatives, Situational Action Theory stresses the importance of why people perceive certain action alternatives (and not others) in the first place. The perception of action alternatives thus has a more fundamental role in explaining action that the process of choice (which is subordinated to perception). Causes of moral actions are factors that influence the perception of action alternatives (morality, moral contexts) and the process of choice (e.g. the ability to exercise self-control, stress, intoxication). The causes of crime are thus factors that influence an individual to see an act of crime as an action alternative, and factors that influence their process of choice to carry out such an action alternative. The situation is no different

\textsuperscript{41} See Bunge 2004 for a review of neurocognitive research, which supports this assumption.

\textsuperscript{42} Research suggests that there is a high cognitive, emotional, and moral cost to repeated choice-making (e.g. Mick, Broniarczyk, Haidt 2004). These costs might be offset by the adoption of a strong system of rules (e.g. ideology), notably for people confronted with more choices than they are culturally accustomed to handling.
for acts of terrorism. The causes of terrorism are found in the individual and environmental factors, which influence a person to see an act of terrorism as an action alternative and that influence their process of choice to carry out such act.

3. One of the most difficult problems in explaining human action is to reconcile the role of deterministic and voluntaristic forces in the explanation of action. SAT aims to integrate behavioristic (deterministic) and voluntaristic (free will) approaches within the explanation of moral action and crime. It does so by recognising that human action (including law-abidance and acts of crime) may be caused either by habit or rational deliberation. It argues that only in deliberative choice-processes do individuals exercise free will and are subject to the influence of their ability to exercise self-control (internal control) or respond to deterrence cues (external controls).

Human behaviour is the outcome of a mix of actions based on rational deliberation and habit, though most action will be predominantly habitual in nature. Action based on full-blown deliberation (e.g. weighing pros and cons) is a rare occurrence in most people's daily life.

When humans express agency (their powers to make things happen), they do so either out of habit or after rational deliberation. Whether a choice of action is an outcome of deliberation or habit depends on the actor's familiarity with the circumstances in which he or she operate. Habits are created by repeated exposure to particular circumstances and lead to action becoming automated rather than deliberative in such circumstances. Habituation may be a particularly interesting aspect to analyse in the explanation of acts of terrorism, and particularly acts of suicide terrorism. Habituation is, for example, a key element in basic military training (to promote automated rather than deliberate action responses to environmental cues) (see the discussion of socio-psychological group processes in Section 4).

4. While acknowledging that motivation (desires and commitments) have a general directional influence on moral action, SAT states that the crucial factor in the explanation of moral action is the interplay between the morality of the person (values, emotions) and the moral context in which he or she operates. The outcome of this interaction will serve as a moral filter determining whether or not a person will act upon their desires or commitments. Many people are, for example, disadvantaged and frustrated for various reasons, but do not break moral rules to overcome or change the conditions perceived to cause their disadvantage or frustration. Commitments as motivation may be of particular interest to the study of acts of terrorism in general, and suicide terrorism in particular.

5. Situational Action Theory is a scientific realist theory. It offers a scientific perspective in the study of moral action and crime. The theory ambitions to provide causal explanations, which tell us why and how particular phenomena (events, actions) occur. Explanation requires causation (but causation does not require explanation). We can establish causation without providing explanation (through manipulation in experiments).
However, a scientific theory which does not provide explanation falls short of a full theory. An explanation tells us how a putative cause produces the effect, and, therefore, why the effect happens. An explanation involves specifying cause and effect relationships, and how the former produces the latter. A cause may be regarded as a condition or event, which, when activated, initiates a process (a causal mechanism) that produces the effect. A cause cannot be specified without its effect, because a cause has to be a cause of something (although an effect can be specified without specifying its causes). For example, we can specify what a suicide bombing is without knowing what its causes are, but we cannot specify the causes of a suicide bombing without specifying what a suicide bombing is. An effect must be defined as a particular change (happening, event, action).

It is well understood, but nonetheless very important to stress, that correlation is not causation. There are a great many examples of factors which can predict outcomes but do not cause the outcome (a classical example is that of barometer readings, which predict weather conditions, but clearly do not cause them). Even if one can establish that acts of terrorism, or that the individuals involved in such acts, share certain characteristics, have certain experiences, or are exposed to certain environments, it does not follow that these characteristics are causes of their action. To predict who is likely to be involved in acts of terrorism (useful as it may be for certain tasks) is not the same as establishing causes or providing explanations. To establish causes, we need to identify the key causal processes (mechanisms) which move people to engage in acts of terrorism.

**Basic elements of the theory**

Having identified the fundamental assumptions upon which the theory is based, we briefly outline its elements.

According to Situational Action Theory, all moral actions are an outcome of the (causal) interaction between a person's *propensity* (to engage in the particular moral action) and his or her *exposure* to environmental inducements (to engage in the particular moral action):

\[
Propensity \times Exposure = Action
\]

The process which links the interplay of propensity and exposure to action is the "moral perception-moral choice process" detailed earlier. This process can, depending on the circumstances, be predominantly habitual (expressing moral habits) or deliberative (expressing moral judgements).

Individuals will vary in their propensity to engage in a particular moral action depending on their moral rules and emotions. Moral emotions (shame, guilt) attached to violating a particular moral rule may be regarded as a measure of the strength with which a person holds a particular moral rule. For example, while many people think it is wrong to steal something from another person, some may feel very strongly about this, while others may not. Those who feel less strongly about stealing from others may be regarded as having a higher
propensity to engage in such action. However, it is important to bear in mind that propensities always need some environmental inducement to get activated.

People do not behave in a social vacuum. Individuals will vary in their exposure to moral contexts (external moral rules and their enforcement linked to particular circumstances). The extent to which moral rule-following in a particular context is enforced (i.e. the extent to which behaviour is supervised and breaches are sanctioned) may be regarded as the strength of the moral context. Although most societies have a common overarching moral context (e.g., based on law and religion), segments of societies may vary in what they think is right and wrong to do, and how strongly they feel about particular moral rules. Common examples include different views on the right and wrong of abortion, alcohol and drug use, different sexual behaviours, animal rights, the use of violence in particular circumstances (e.g., honour killings and disciplining of children) and care of the physical environment (recycling, congestion charges, etc). Crucially, there are also differences among segments of a population in views on the moral justification of undertaking generally, or in specific circumstances, acts of terrorism such as suicide terrorism.

If there is a high degree of correspondence between a person's morality and the moral context in which she operates, it is likely that she will abide by the moral rules of the particular context. That is so, because she will not see breaching the moral rules as a viable action alternative. If there is a discrepancy between a person's morality and the moral context in which they operate, as regards a particular moral action, a strong moral context may prevent someone who sees an action alternative from choosing to carry out this act. It should be made clear that only an action for which the individual is motivated (by desires or commitments) will be influenced by their morality and the moral context they take part in. If they are not so motivated, their morality and the moral context in which they operate will lack relevance in guiding their actions (which is why our framework only accounts for intentional action).

Societies vary in their social (cohesion and trust) and moral integration (homogeneity of the moral values held by the population, and their correspondence to moral rules expressed by the larger society; e.g. in terms of laws). It is reasonable to assume that societies which have higher degrees of social and moral integration will experience relatively less moral rule-breaking and crime. There will be less room for discrepancy between individual and collective moral rules.

According to Situational Action Theory, changes in a person's actions stem from changes in their propensity and/or changes in their exposure. This also implies that if one wants to change (or prevent) a person's moral actions (such as acts of terrorism), the aim should be to change their propensity (to engage in such acts) and their exposure (to environmental inducements for such acts).

\[(\text{Change}) \text{ Propensity} \times (\text{Change}) \text{ Exposure} = (\text{Change}) \text{ Action}\]

From a developmental perspective, changes in propensity and exposure are not unrelated. Changes in exposure may lead to changes in propensity (through socialisation and habituation), and changes in propensity may lead to changes in exposure (through selection). The key developmental concept is moral education. People internalise moral rules (and emotions) through
processes of learning, through exposure to the responses of others to their actions, and through observation of the actions of others and their consequences.

Changes in the broader social environment in which people's daily life is embedded (e.g. political, economic and social changes of relevance to moral actions) may instigate changes in the kinds of moral contexts present in a society, and the processes of exposure of different groups of people to particular moral contexts. In the longer term, this may affect the moral education of the population, or segments of the population and (in the shorter term) the moral context in which people, or groups of people, act.

The Case for Applying Situational Action Theory to the Study of Acts of Terrorism

Any action that is guided by rules of what is the right and wrong thing to do in a particular circumstance is a moral action. We propose that there is no difference in that respect between, for example, shoplifting and suicide terrorism. Both are examples of moral actions. Hence, both kinds of actions can be explained within the same theoretical framework. What may differ is not the process (the perception-choice process) leading up to the action, but the content of the moral context (the action-relevant moral rules) and a person's morality (the action-relevant moral values and emotions) that drive the action process and the broader social processes (the causes of the causes), which generate particular moral contexts (moral content) in which people develop and act. Both in the case of shoplifting and suicide terrorism, the actor has to perceive the action as a viable alternative and choose to carry it out. However, the specific moral rules, which guide whether an act of shoplifting is perceived as an action alternative, will differ from those which guide whether an act of suicide terrorism is perceived as an action alternative.

As we have seen in Section 3, there is no clear and commonly accepted definition of terrorism. The concept of terrorism tends to refer to unlawful acts of force and violence, but unlawful force and violence are not what define acts of terrorism. There are obviously a lot of acts of unlawful violence and force that do not qualify as acts of terrorism. What defines terrorism is rather the unlawful use of violence and force as a method of creating fear and intimidation. However, people may use violence and force to create fear and intimidation without any particular political or social goal to their action. We may therefore reserve the concept of terrorism for cases in which unlawful violence and force is used as a method of creating fear and intimidation with the aim of reaching political or social objectives. Creating fear and intimidation is the main mechanism through which acts of terrorism are meant to influence political or social change. According to this definition, both civilians and others can be perpetrators of terrorism, as well as be the victim of such actions. We see no major advantage in restricting the definition of terrorism to particular kinds of perpetrators or particular kinds of victims. Acts of terrorism can be conducted by civilians as well as others (e.g. police and military) and both civilians and others (e.g. police and military) can be the victims of such actions.

What ultimately needs to be explained by a theory of terrorism is:

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(i) why people come to see acts of terrorism as an action alternative, and,

(ii) why those who see acts of terrorism as an action alternative come to choose to carry out such actions.

The answer to these questions involves issues of morality. The use of unlawful violence and force in itself, the creation of fear and intimidation in itself, and the aim to obtain particular political or social objectives by the use of force and violence, fear and intimidation, all have moral dimensions (Atran 2006). Therefore, terrorism is the appropriate object of a theory of moral action.

According to SAT, the direct causes of a person's involvement in acts of terrorism have to do with their morality and the moral context in which they operate. Whether a person comes to see acts of terrorism as an action alternative, and whether she chooses to carry out such an act, depends upon moral values and emotions relevant to the engagement in acts of terrorism, as well as the extent to which the individual is exposed to moral contexts promoting engagement in acts of terrorism. Whether a person holds moral values and emotions promoting engagement in acts of terrorism depends, in turn, upon their moral education (their history of moral learning and moral experiences), and these experiences depend, in turn, on the individual's history of exposure to moral contexts promoting engagement in acts of terrorism.

Knowledge of the kind of moral values and related emotions, and the kind of moral, contextual aspects which promote the perception of acts of terrorism as an action alternative and the choice to carry them out, needs to be complemented by the study of how moral contexts which promote terrorism (through their influence on moral education and moral action), emerge and are sustained. Of particular interest is understanding the role of social and moral integration in the creation and sustainability of moral contexts conducive to terrorism.

**Directions for Research**

By focusing on analysing (theoretically) and researching (empirically) acts of terrorism as moral action, we can substantially advance our knowledge of the causes (and prevention) of terrorism. We have suggested that the Situational Action Theory is the best available theoretical framework to guide such an enterprise.
A research programme built upon, and guided by, the insights offered by SAT, dictates that we address the following questions:

1. What kind of moral values and moral emotions support perceptions and choices relevant to people's engagement in acts of terrorism?

2. What aspects of the social and moral context support (a) the moral development of such values and emotions, and (b) instigate their enactment?

3. How do social and moral contexts, which support the development of favourable moral values and emotions and promote participation in acts of terrorism, emerge and are sustained?

By answering these three questions, we will attain a solid understanding of why people engage in acts of terrorism, and a starting point for evaluating what kind of prevention strategies will be effective in combating such acts.
CONCLUDING REMARKS

We began this report by arguing the value of reformulating old, reputedly intractable problems. We stand by this assessment. To define acts of terrorism as moral actions is to pave the road for innovative enquiry. In this endeavour, the importance of a well-developed theoretical framework cannot be understated. Without such a structure, problems cannot be posed properly, and ill-posed problems cannot be solved.

The Situational Action Theory is a sophisticated framework. Its continued development is supported by ground-breaking longitudinal research (the Peterborough Adolescent and Young Adult Development Study [PADS+]). It can guide both fundamental, theoretical analysis and empirical study into acts of moral rule-breaking, including acts of terrorism. As a theory of moral action, it is uniquely relevant to the explanation of acts of suicide terrorism. Acts of suicide terrorism are acts of dual rule-breaking, to the extent that they breach rules against harming others and against harming oneself. Through SAT, we can handle both dimensions of the behaviour, by asking how people come to perceive killing themselves (in the process of killing others) as an action alternative.

Though our formal redefinition of acts of terrorism as moral action is conceptually novel, the understanding that terrorist acts (and other acts of political violence) are moral acts is implicit and widespread. This understanding is contained intuitively within the belief that, to tackle the problem of terrorism (and other forms of political violence, such as insurgency), we must engage "hearts and minds." What this means and how we might go about doing it is unclear. Yet recent and current conflicts have driven home the need to understand the moral context in which people develop and act, and how changes in this context can result in, sometimes drastic, changes in action. We would argue that, with Situational Action Theory, the "winning hearts and minds" strategy gets its scientific framework.

This approach has profound, long-term implications for our ability to prevent violence and disorder in any environment at any time. Building robust, testable, comprehensive theoretical frameworks takes time and effort, but in light of the benefits, it is worth doing right.
REFERENCES


