An Economist Looks at Suicide Terrorism*

Mark Harrison**

Department of Economics University of Warwick

and

Hoover Institution Stanford University

Abstract

Suicide terrorism has an economic aspect. The organisation of a suicide mission requires an incentive, a voluntary transaction, and a contract that is enforceable by the parties to it. A terrorist faction that competes for power in a community that is both oppressed and oppressive provides young people with an incentive to invest in an identity that is rendered more valuable by death. Suicide attacks are then the outcome of a voluntary agreement between the faction and the young person to trade life for identity. The institution of the "living martyr" renders the agreement privately enforceable. Thus, suicide terrorism is the outcome of an individual rational choice. There are some implications for counter-measures.

^{*} Published in *World Economics* 7:4 (2006), pp. 1-15.

^{**} Mail: Department of Economics, University of Warwick, Coventry CV4 7AL, UK. Email: mark.harrison@warwick.ac.uk. I thank Adil Farooq, Richard Higgott, Karin von Hippel, Norman Ireland, Koen Lamberts, Peter Law, Valery Lazarev, and Andrew Oswald for advice and comments on earlier versions.

An Economist Looks at Suicide Terrorism

What can economics say about suicide terrorism? It is an economic problem when individuals devote their efforts to killing and self-killing rather than to enhancing their lives and their communities. Where economists see patterns of voluntary behaviour that are challenging to society they try to work out what motivates people to act in that way. Those who take part in suicide terrorism are self-evidently volunteers: they engage in it willingly, usually knowing what to expect and accepting the consequences. They are not crazy and they are not being fooled. Moreover, although they do it as individuals, they do it in a context and they do not do it alone. To do it at all, several people must adopt coordinated roles, so that some recruit the volunteers and supply the means, while others carry out the act. In other words at the core of suicide terrorism are specialisation and exchange. The exchange is voluntary, underpinned by an enforceable contract. These matters are the business of economics.

Suicide terrorism is complicated: to understand it we must consider both terrorism and suicide. Consider terrorism. I do not think that understanding terrorism is easy, but it is clearly easier to understand than *suicide* terrorism. There is some faultline in society that creates a positive return to political violence, so political factions arise and militant leaders emerge that are ready to exploit the opportunity. Then they face the problem that any terrorist action creates a risk to the agent, but it is hard make the agent safer without making the victims safer too. The solution is an agent who accepts certain death in order to kill with high probability. Worldwide, suicide attacks accounted for only 3 per cent of all the terrorist incidents that took place between 1980 and 2001, but almost half of the deaths resulting from terrorism over the same period, excluding the unusually heavy casualties of 9/11 (Pape 2003, p. 346). Thus leaders of factions that are inclined to violence may wish to promote suicide missions because they are said to be relatively effective at killing people. Now another problem arises: how is it possible to induce an agent to accept certain death? Clearly, the latter problem does have a solution: for more than two decades suicide terrorism has been an established fact. The puzzle is to understand how the solution works.

To do this we should focus on the individual and suicide: the key to the puzzle is not the willingness to kill others but the willingness to die (Merari 1998). To find the key we should look beyond religion and nationalism which are the most commonly offered explanations for suicide terrorism because these are incomplete: they apply first of all to communities and while communities can and do endorse suicide terrorism it is only a few individuals who carry it out. Of course community issues matter. Suicide terrorism has arisen in the context of injuries done to communities by expulsion, expropriation, or occupation. The response to such injuries is expressed

sometimes through nationalism, sometimes through religion. Islam is less of a constant than is often supposed; in Lebanon in the mid-1980s the attackers identified themselves with secular organisations more frequently than on religious grounds (Merari 1998). One group that has sponsored suicide attacks, the Tamil Tigers, is a Marxist-Leninist organisation that recruits in a predominantly Hindu community. Thus, while nationalism and religion have clearly helped to frame the context in which suicide terrorism has emerged, they do not explain why some individuals step forward to kill and die while many more do not.

Why do some people choose to become suicide attackers? As an economist I am professionally inclined to what is sometimes called a "rational actor" view of the world. Rather than interpreting people's actions as driven by social and psychological compulsions, what if they are doing what they rationally choose? I do not mean that people act with *perfect* rationality; on the contrary we see that all the time people act with less than full information, they miscalculate, and they also do things that have unintended consequences, especially when they do them for the first time. Rather, the idea of rational choice presents us with a challenge: if people are doing what they want, subject to the limited resources and information available, and if we do not understand what they do, then we are missing something important and we should not be satisfied to label them as crazy or stupid.

Economists associate rational choice with the pursuit of self-interest. Here suicide terrorism suggests a paradox: how can *self*-destruction be *self*interested? I will use the idea of an individual's identity that is valuable to show that self-interest does not preclude self-killing and may be promoted by it. But this happens only under special circumstances. I will connect suicide terrorism with the ability of a terrorist faction to exploit the crisis of a young person growing up in an oppressive society. I will show that suicide terrorism is the outcome of a transaction between two parties, a militant faction and the young volunteer. I will explore the problem of the credibility of the resulting contract and describe how it is achieved. Finally I will draw some implications for countering suicide terrorist threats, but no magic solution will present itself.

Suicide terrorism is not the same everywhere; in spreading from Lebanon to other countries, it has evolved. For my data I will refer mainly to the setting of the Arab-Israeli conflict. This is for two reasons: first, these facts are more generally available, and second, the participation of civilian volunteers puzzles western minds more than where suicide missions are carried out as if by hardened soldiers in theatres of combat such as Iraq.

The Parties to Suicide Terrorism

There are three parties to the transaction that ends in a suicide attack: a community, a militant faction, and a volunteer.

In Israel's occupied territories suicide terrorism has enjoyed widespread community support. Throughout the world the word "terrorism" tends to be seen in a negative light; however, many actions that western opinion would describe as self-evidently terrorist are defined otherwise by Arab or Palestinian opinion. For example, a survey of 1348 respondents carried out in the West Bank and Gaza Strip in December 2001 found a majority, 53 per cent, opposed to terrorism in pursuit of political goals (Krueger and Maleckova 2003). But a bigger majority, 62 per cent, favoured the view that attacks on Israeli civilians promote Palestinian rights more effectively than diplomacy; the same majority opposed the idea of a "war on terrorism" even if backed by the United Nations. No less than 82% expressed support for attacks on Israeli targets, and the same overwhelming majority agreed that suicide attacks on Israeli civilians should *not* be counted as terrorism. Finally, support for political violence was found to be either unrelated to occupational and educational status, or positively associated with them.

At the same time it is not "the community" that gives rise to suicide attacks in a spontaneous way. Suicide attacks require organisation that is purposeful and conspiratorial. In the Arab-Israeli context three main organisations have been involved. Of 102 suicide attacks carried out in Israel from November 2000 to November 2003 that are reported in the database of the International Policy Institute for Counter-Terrorism (ICT), Herzlia, Israel, 44 were sponsored by Hamas (the Islamic Resistance Movement), 26 by the Martyrs of al-Aqsa Brigade, 24 by Palestinian Islamic Jihad, and the remaining handful by other organisations. These attacks resulted in 440 deaths, not including 109 perpetrators, and more than 3,000 injuries (Harrison 2006).

How much do we need to know about the ideologies and aims of the factions, their varying religiosity, and so forth? For present purposes I think these do not matter very much. Competition has led them to converge: Hamas and Islamic Jihad were always Islamist organisations whereas the Martyrs of al-Aqsa Brigade was established by Fatah which is a secular national organisation, but the Martyrs of al-Aqsa have become more devout through time. At the same time, I believe, too much attention is paid to the professed goals of terrorism. The fact is that terrorism has rarely if ever achieved the aims that it has declared. It has not united Ireland, for example, nor secured independent homelands for the Basques, Chechens, Tamils, or Palestinians, nor has it destroyed the state of Israel. When leaders persistently promote policies that lead away from their claimed objectives it is reasonable to doubt their sincerity.

Rather we should relate their actions to the objectives that they have *actually* achieved: not victory, but unresolved conflict that promotes factional power in the community, based on the interplay between their own violence and the enemy's repressive counter-violence that it invites. "Winning may not be desirable," as David Keen (1998) has written of modern civil wars: "the point of war may be precisely the legitimacy that it confers on actions that in peacetime would be punishable as crimes. Whereas analysts have tended to assume that war is the 'end' and abuse of civilians the 'means', it is important to consider the opposite possibility: that the end is to engage in abuse or crimes that bring immediate rewards, while the means is war and its perpetuation."

Such are some of the organisations that sponsor suicide terrorism. Who are the attackers themselves? Merari's (1998) classic study of 36 suicide

attackers in the Lebanon between 1983 and 1986 found that most were male and most appeared to have a nationalist or secular rather than religious motivation. A more recent analysis of suicide attacks in the occupied territories (Ganor 2000) finds that volunteers associated with Hamas were males aged between 18 and 27, single, unemployed, and from a poor family; they had typically completed high school, were engaged in religious study, and had often been affected by the violent death of a friend or family member in circumstances related to the occupation. Schweitzer (2002) notes that the most successful suicide attackers in history, the 9/11 group, was made up exclusively by males, all students aged between 20 and 33 with considerable education and from prosperous families, but with nothing else in common.

The suicide attackers in the ICT database fit this pattern: of the 95 for whom there are data the average age at death was 22; the youngest was 16 and all but four were under 30. Despite the often sensational publicity given to female suicide attackers, only seven were women.

While suicide missions are always associated with one or another faction, not all suicide bombers were previously affiliated activists or foot soldiers. There is no linear progression from throwing stones at soldiers or ambushing settlers to mounting a suicide attack. A volunteer may be a quiet person whom nobody previously noticed but who goes on to surprise everyone, for example, Raed Mesk, a bookish young man who killed 20 Israelis on 19 August 2003: "a deeply religious man ... a preacher in the local mosque and just months from completing his degree in religion. 'He was a very nice, straight person,' said a neighbour ... "None of us would think he would do a thing like that" (McGreal 2003).

To summarise, suicide attackers, being mostly male and mostly young, do not represent the communities from which they come in respect of age or gender. On the other hand they are like everyone else in being rich and poor, educated and uneducated. Some have had lengthy involvement with the militant factions, and others have not. Worldwide, some are Arab or Palestinian and some are not. Some are Muslim and some are not. For many the road to death is signposted by religion, but clearly not for those who profess national or secular motives.

There is no evidence that suicide attackers are psychologically abnormal in any way. Among the Lebanese martyrs Merari (1998) could find no shared psychopathology, tentatively concluding: "... it seems that a broken family background is an important constituent." Ganor (2000) reports only that volunteers associated with Hamas had often been affected by the violent death of a friend or relative in circumstances related to the occupation. Schweitzer (2002) concludes, "There is no single profile of a suicide terrorist." The Palestinian psychologist Dr Eyad Sarraj (quoted by Simon 2001) has said that the volunteers he knew were often "... very timid people, introverted, their problem was always communication," but his point seems to be that suicide attackers have normal feelings although they may not show them easily; certainly they are not brutal psychopaths ("They were not violent at all"). Since broken families, well-defended emotions, and an acquaintance with violent death are fairly normal in human experience, it would appear to follow that suicide attackers fall within the range of "normal people."

In short, under certain conditions some *normal people* become suicide attackers. At the same time it is important that *not all do*. That is, in Palestinian communities feelings of national humiliation and religious fury are widespread; the actions of suicide attackers have nearly universal support. But mass volunteering is not the result, and not everyone becomes a martyr. There is selection, regulated by supply and demand. On the supply side a few volunteer, but most reject this option even while approving of it for others. The volunteers are young and predominantly male; beyond this we cannot generalise. On the demand side, the factions select from the volunteers. A problem that results is that, when we observe the characteristics of those who participate, we do not know exactly whether these are the ones that were supplied or those that were demanded (Bueno de Mesquita 2005).

The Economics of Suicide

Why do some people choose to die? Economists have looked at suicide from various angles. Hamermesh and Soss (1974) suggested that there is an individual propensity to suicide, and they predicted that suicide should be chosen more frequently when life is less valuable. The value of life rises with economic status and residual life expectancy; therefore, the old and poor should kill themselves more often than the young and rich. There was some evidence at the time to support this. In the same vein Sayre (2003) has found that the frequency of suicide attacks on Israelis in the 1990s was weakly related to adverse changes in economic conditions in the occupied territories, which would support a value-of-life approach. However, this does not explain why most suicide attackers are young men for whom the expected value of life foregone should be greater, not less than for others. Clearly, when young people throw away their lives they must set the value of life to one side. But if the value of life does not matter to them, we need a more powerful concept of what does.

More recently, economists have looked at suicide among young people. Cutler, Glaeser, and Norberg (2001) interpret adolescent suicide and attempted self-killing, or "parasuicide," as strategic action to resolve conflicts within the young person or with others. Parasuicide is a poor match for the problem of suicide terrorism in the sense that when young people in families attempt suicide, an attempt that fails may successfully resolve the young person's problem, whereas for the suicide attacker a failed attempt is just a failure. However, the idea of payoffs to strategic behaviour seems more promising than the more traditional value-of-life approach.

A fresh approach to the choice made by suicide attackers is suggested by recent developments in the economics of identity. According to Akerlof and Kranton (2000) identity is "a person's sense of self." They observe that, subject to various social and biological constraints, we choose our identity. Evidence of the way that people relate to their identities suggests that identity is intrinsically valuable and affects behaviour. What is the value of identity? Before a person can value her own life she must first know who she is: she must have an identity that makes her a person. Without identity we cannot undertake many of the social transactions that give each life its value; it enables us to function in society, find others whose identity complements or competes with our own, and profit from transactions or conflicts with them. This is why identity is valuable. When damaged or destroyed, it leaves a sense of irreplaceable loss; without it, people may be completely unable to enjoy income, physical health, marriage, or friendship.

Because identity is valuable, it affects behaviour and influences action. We are motivated to do things that cost us effort and resources so as to establish our identity or, having established it, to affirm it. Equally, others may do things that endorse or challenge our identity; when they do this we respond. Finally, others can manipulate or redefine the social categories that correspond with our identities; when they do this we respond again.

These observations prompt the idea that the motivation behind selfkilling may often be better understood as turning not on the value of life but on the value of identity (Harrison 2003). For the most part our identity prescribes how we are expected to live, but not exclusively: it may also define how we should die. In particular circumstances an identity may be made more valuable by death and devalued or completely destroyed by continuing to live; when those circumstances obtain, we may prefer to die. In such cases the choice of identity has turned out to be a matter of life and death. The more common acts of voluntary self-destruction may therefore be understood as follows. A person who chooses the death of the self does so because at the given moment death will maintain her most valuable asset, the identity that she has selected and built up through her life, whereas living on will damage it beyond repair. The moment is such that by choosing life she must abandon her identity.

A mother perishes, entering a burning house to save her children because, if she did not, she would live on, but could not do so as a loving parent. A father kills his wife and children to stop them leaving him, and then kills himself to protect his reputation as a family man. A teenager kills herself fearing that she has failed her exams, or that she has contracted a sexually transmitted disease, for the sake of her identity as a scholar and loving, responsible child of her parents. A soldier dies, falling on a grenade to save others, and becomes known forever as a brave comrade. Unjustly condemned, a defendant kills himself to prove his innocence because his identity as an innocent man has been taken from him. A witness to a faith accepts a death sentence rather than recant her faith, so central to her life is her religious identity. Trading life for identity is the stuff of romance and tragedy in every culture.

A Martyr's Identity

What leads people voluntarily to adopt an identity that must end in selfdestruction? None of us is born that way. As Dawkins (1995) has pointed out, natural selection has programmed in all of us a powerful love of life, sex, and children. Suicide attackers are made, not born. How are they made? Why should someone give up the life-loving dreams for which we are selected and prefer an identity that requires detachment from humanity and can only be sustained by a terrible death?

Three elements evidently combine to produce this outcome: young people growing up, a conflicted, oppressive environment, and a terrorist faction. The first of these is *young people* growing up. What young people do as they mature is this: through a process of painful choices they acquire their adult identities. Every parent sees their child asking herself "Who am I?" and struggling with the answers. Even in loving families and tolerant, pluralistic societies, young people make mistakes and are brought crashing down by them.

Adolescent suicide is often about mistakes. Life provides information about the world and ourselves, but we must make some choices before we have all the information we need. In the fraught process of selecting an identity some children go for identities that turn out not to work because they won't grow up pretty or clever or strong enough to carry them off. In effect they choose an identity that is based on wrong information, or defined too narrowly or rigidly to adapt to information that is new. Such people idealise themselves; Dorothy Rowe (2000) has argued that when a young person's idealised identity is challenged by reality, one response is to protect her ideal by killing herself. In effect it becomes apparent that some part of her most precious investment was wasted; she must either accept the loss, undertaking the difficult task of rebuilding an identity on a new basis that is more attuned to circumstances; or else she may choose to perpetuate herself as the person she intended originally, but only by dying now, and so she commits suicide.

If mistakes are one factor in many cases of adolescent suicide of the everyday kind, they can hardly account for suicide terrorists who choose the identity of a warrior martyr in full knowledge of the consequences. Here another necessary condition comes into play: a *social environment* that is conflicted and oppressive to the point that the life-loving aspects of the child's nascent personality cannot develop. I have in mind the kind of context in which traditionally oppressive family and neighbourhood institutions interact with severe limits on young people's options to associate, work, and travel created by public discrimination, military occupation, and blockade.¹ It

¹ In research published since this article was drafted, analysing many incidents in many countries, Robert Pape (2005) has stressed the role of military occupation. Most suicide attackers come from territories that have experienced military occupation or the presence of military bases of a foreign power, and most suicide attacks are directed against the occupiers. Not every foreign military presence stimulates suicide terrorism, but a religious difference between the occupiers and the occupied is a positive conditioning factor in the association. Moghadam (2003) has also pointed to the influence of nationalism and the sense of personal humiliation that arises from living in an occupied land. I speculate that the military presence of a religious and

is not hard to see how such an environment can erode the capacity to sustain friendly and loving relationships and replace them with anger and hate. Of course, not every young person is equally crushed by such an environment to the same extent, and some will be affected more than others.

What is the appeal of martyrdom to the most vulnerable? It is more than just the promise of paradise; this leaves too much unexplained. Rather, the volunteer wins a martyr's identity here on this earth, an identity that is established by death and honoured beyond death, but we shall see that it is also honoured before death, in anticipation. Considered beforehand, the death of a martyr bears some resemblance to being born again, since past stains on social or religious identity are forgotten: the new identity promises to wipe out the past. The Sri Lankan specialist Rohan Gunaratna (Frontline/World 2002) has described a common thread in the volunteers' aspirations "to become a hero. Someone special. Someone different."

Such issues are sometimes expressed more fluently by women. Thus Hiba Dareghmeh, a nineteen year old student from Tubas on the West Bank, said to her mother on the morning of the day she died, killing three Israelis and wounding 48: "I feel that I am a new person. You will be very proud of me" (Ghazali 2003). The women interviewed recently while training in a female martyrs' brigade of Palestinian Islamic Jihad had adopted new names: "Thawra (Revolution), Nidal (Struggle) and Jihad (Holy War), Bissam (Smile), Nour (Light), Saber (Patience) and Tahereer (Liberation)" had symbolically abandoned their past lives (Jaber 2003). This also has a darker side: it is reported that young women have been more easily recruited to suicidal missions when they have been shamed by a failed, illicit, or abusive relationship or by sexual violence (Israel, Ministry of Foreign Affairs 2002).

If martyrdom has a value, it must be valuable relative to the alternative, and this may explain its appeal to the young. A martyr's death redeems the past and wins honour, but it is not the only available means to this end. Anyone can achieve the same things by living. But to complete the living alternative takes a lifetime's effort in building a family, a career, and a place in the community. Therefore it is appropriate to ask: for what kind of person is it more costly to travel the long road of life than to die tomorrow? One answer is young people, who have not yet begun to build the living alternative and whose lifetime of effort is therefore still in front of them.

The heavy bias towards the selection of young men may be explained in different ways. It appears that initially the militant factions limited recruitment to males on social and religious grounds, and allowed women to join in at a time when counter-measures against male volunteers became more effective. Male preponderance may also be explained on the supply

cultural outsider is a powerful stimulus to conflicted personal selfidentification. The principal events that have followed the drafting of this article – the decline of suicide terrorism in Israel following announcement of the Israeli intentions to build a security frontier and withdraw militarily from the occupied territories, and its rise in Iraq under occupation by the U.S. led coalition – are broadly consistent with this view. side by the logic of comparative returns. Conservative societies with patriarchal families often devote much effort to protecting the position and identity of women. If they succeed, then the burdens of increased economic uncertainty may fall more heavily on young men. When that happens, young men may experience a sharper decline in the expected return to lifetime effort than young women.

The question "Who am I?" is tough enough for adolescent males in western societies where the range of choice often appears to be overwhelming. How much harder it is where young men's choices are heavily prescribed for them but no longer work: what it means to be a man is predetermined, conventional society is dominated by elders so that youth is not respected, daily life is ruled and impeded by the humiliating rituals of military occupation, and heavy unemployment removes the hope of one day providing for a family. All this must increase the relative attractions of militancy and martyrdom.

It is not only young men whose choices are shaped in this way. Leila, 22, volunteered to train for martyrdom after the killing of her brother. "Her life, she said, had become a prison. 'My movement is restricted courtesy of the checkpoints and my human basic right to move freely around my territory has been denied,' she said. 'I have younger brothers and sisters who have never seen a park, never visited the sea and cannot even imagine there is life beyond this enclave in which we have been imprisoned.' She said that from her early childhood she had dreamt of falling in love and having a family. 'You know, like you see in the films,' she said with a smile. Now she seeks only revenge" (Jaber 2003).

Trading Life for Identity

Peter Beaumont (2003) has written that, for the children of Israel's occupied territories, martyrdom is "a teenage fantasy made real in a place where all other dreams are crushed." But such fantasies do not arise spontaneously; they are deliberately created and nurtured. The third element that is necessary for suicide terrorism to become established as an option for young people is the organised working of a *militant faction* willing to exploit terror to build power in society. A UNICEF official described this capacity for exploitation to Beaumont as follows: "Where violence became so much a part of life, society embraced it and celebrated it. Now it has created a culture where young people believe that violent death is a good thing ... And when they think that, they are wide open to being preyed on by the militant factions."

Suicide attackers are made, not born, and they are made deliberately by organised intervention. Merari (reported by Sprinzak 2000) concludes that the terrorist faction does not create the young person's predisposition to die, but it converts this predisposition into action. At the moment that the young person enters the crisis of adolescent identity and becomes receptive to the idea of the death of the self, the faction presents an alternative: to become a religious warrior and eventually die as one, winning a glorious new identity in the act. Thus the faction's indispensable role is to establish a powerful incentive for young people to invest in an identity that will be affirmed by death and devalued by continuing to live.

It is relatively easy to show that the incentive is a secular one that is artificially created by the faction, not a heavenly one that grows organically from pre-existing religious beliefs.

From the economist's point of view suicide terrorism is the outcome of a contract between consenting parties. The suicide attacker and the militant faction enter voluntarily into this contract in the expectation of mutual benefit. Under the terms of the contract the volunteer agrees to trade life for identity. She will die to promote the faction's terrorist objectives. In return the faction endorses the volunteer's identity as a warrior martyr. As a result each party can achieve an objective that would be beyond the reach of either without this agreement.

At this point the economist sees a problem: it is one thing for both sides to agree to a course of action beforehand, and another for both to carry it out. Carrying out a contract usually requires each party to do something costly from which the other will gain. Where the steps are sequential rather than simultaneous, however, opportunities for defaulting must arise; therefore, even when completing the exchange would be advantageous to both sides it will not be completed without guarantees.

In this case the steps are that (1) the faction selects, trains, and equips the volunteer (2) the volunteer carries out the mission and dies (3) the faction identifies the volunteer to the public as a new martyr and compensates her family. Lacking a guarantee that the faction will complete stage 3, however, the volunteer will not proceed to stage 2. And without a guarantee that the volunteer will complete stage 2, the faction will not embark on stage 1.

Both guarantees look hard to establish. The core of the problem is that one party must die before the other has completed the sequence. With the volunteer dead, the faction might fail for some reason to reveal the martyr's identity and give compensation. The volunteer would have died anonymously for nothing. She might rationally fear this outcome. The fear could be mitigated if a degree of trust has arisen between volunteer and faction on the basis of past experience, but three factors must still arouse it. First, a volunteer who is risk-averse may value highly even a small probability of the faction's defaulting. Second, even if experience leads her to trust the faction completely we must ask how this trust arose: at the beginning of suicide terrorism no such trust existed and so it is a problem for us to understand how it was created in the first place. Third, the faction's defaulting is hard to verify once the volunteer is dead, with the result that once trust has arisen there could be incentives for the faction to trade on it and default from time to time.

The volunteer could also default on her own promise. Fearing a default by the faction (at stage 3), or just fearing death (at stage 2), the volunteer might turn away from the mission and so waste the resources that the faction invested (at stage 1). If this seemed likely the faction would not offer a

contract in the first place: the opportunity for a mutually advantageous exchange would be missed and suicide terrorism would not arise.

To solve this problem requires a specific mechanism to enforce the contract on both sides. Since the law cannot be invoked it must take the form of social pressure. The mechanism exists and the evidence for it is in Merari's research (reported by Martin 2001; see also Moghadam 2003, pp. 84-5): it is the promotion of the "living martyr." A few days before the event, the volunteer records a final statement of joy at becoming a martyr in photographs, videos, and letters to friends and family. From then on she is gloriously dead, only temporarily still alive. This brings stage 3 forward in such a way that both sides become fully committed. When the recording has been distributed and the letters and photographs have been sent, the faction has already completed its part and the volunteer can no longer draw back since she will now lose more by breaking the contract than by implementing it.

The institution of the "living martyr" intervenes in the volunteer's relationship with the world, not with God. It shows clearly that the motivational apparatus of suicide terrorism is secular as well as religious, and that the secular element is the decisive one. It meets the attacker's need for an audience (Merari 1998) which is assembled in advance, before the event. "I cannot wait to tell the world" says a trainee female martyr, Hiba: "Watch me …" (Jaber 2003). A volunteer who bases her action on the certainty of paradise alone does not need ceremonial enforcement to comply with what has been agreed; if God knows the truth, earthly rituals should carry no additional weight. But this is not what happens when a suicide mission is organised. Religion matters but it is the means, not the end: in Jessica Stern's (2002) phase it is a "technology of mobilization."²

Finally, family and money complement each other in the trade of life for identity. In the case of Palestinian suicide missions the money has come from a variety of sources including Iran, Syria, Saudi Arabia, the UAE, and, until recently, Iraq. It was channelled mainly through the terrorist factions but the Palestinian Authority also provided small sums to martyrs' families. The total from all sources may have run to tens of thousands of dollars per family (Human Rights Watch 2002).

What part has money played? Clearly it cannot be a prime motive for one who is about to die; rather, it underpins the community's endorsement of suicide terrorism by giving material support to the social honour associated with martyrdom. It also compensates for the standard punishment that is carried out by the Israeli Defence Force: destruction of the family home. Thus it softens the conflict between the new identity of the martyr and the former identity of the loving child who abandons parents and siblings. In some cases it may also buy the collusion of families in reassuring the young volunteer and sustaining her suicidal commitment.

² For a contrary view, see Wiktorowicz (2004).

Breaking the Cycle

Suicide terrorism is the outcome of a voluntary transaction among consenting parties. Those involved make a deliberate choice. This choice is made in particular circumstances, but is not a product of circumstances alone. Suicide terrorism does not take place without organised sponsorship. Young people are not forced into it by ordinary desperation, but lured into it by an extraordinary prize: the identity of a warrior-martyr. The gap between their romantic aspirations and conflicted circumstances is the object of calculated manipulation by the militant factions that will sponsor their mission.

How can the cycle of suicide terrorism be broken? The economic analysis of suicide terrorism does have some implications for policy. Some are relatively banal while others may give food for thought. The main difficulty is that, because suicide terrorism is organised and consensual by nature, there is no one simple remedy that can eliminate it.

Evidently, suicide terrorism would not arise in the Middle East without the militant factions and without widespread community endorsement of their role. Probably, community endorsement is in turn conditional upon the basic Arab-Israeli conflict, so the militant factions have a strong interest in perpetuating the conflict. They achieve this, in part, through suicide terrorism and the repressive responses that it invites. No surprises here: there is a vicious circle that will continue until the militant factions have been destroyed or co-opted, and this in turn seems likely to happen only in the context of an overall settlement of the Arab-Israeli conflict that neither they nor the forces opposing them appear to want. Too many people still have something to gain from its continuation.

Assuming that the will towards peace can find the leaders that it deserves, difficult choices will continue to lie ahead. Individual attackers can be punished only through their families. Measures to punish the families of previous suicide attackers have helped to deter the recruitment of new ones (Halperin 2003). Thus Hiba Daraghmeh's cousin Murad remarked: "I will never be an *Istishahdi*. I have brothers and sisters. The army would arrest them. And the army would destroy my family house" (Ghazali 2003). More significantly the militant factions can only recruit suicide attackers as long as they can provide the technical means to carry out attacks and the social capital to endorse the attackers' identities. Punishing the faction leaders can thus weaken their ability to sustain the process.

But punishment of families and leaders is also part of the process that maintains community endorsement of the factions, promotes their power, stimulates the flow of volunteers, and feeds the cycle of violence. This suggests that regardless of the efficiency of modern methods of intelligence and policing there are limits on the effective power of states to repress suicide terrorism without addressing the fundamental conflicts from which it springs.

Let me conclude with a long-term perspective. Historically, suicide terrorism emerged in the 1980s as a result of bringing together two inventions, one chemical and the other contractual. The chemical component dates back to the late nineteenth century, when high explosives enabled the terrorist to displace the assassin. The contractual component came into being more recently when a terrorist faction and a recruit first devised the terms of a voluntary but enforceable agreement to trade life for identity. This contract is an invention with its own place in the history of technology.

Contractual innovations for making and sharing profits have been of great significance for global economic developments over the last millennium, and some forms of contracts have proved extremely durable. The present-day form of contracting for suicide terrorism is likely to prove similarly durable while international society is so organised that significant returns from political violence can continue to be harvested and shared. In short, suicide terrorism is out of the box.

References

- Akerlof, George A., and Rachel E. Kranton. 2000. "Economics and Identity." Quarterly Journal of Economics, 115(3), pp. 715-53.
- Beaumont, Peter. 2003. "The Lost Children of Rafah." *The Observer Magazine*. London, 9 February.
- Bueno de Mesquita, Ethan. 2005. "The Quality of Terror." *American Journal* of Political Science 49(3), pp. 515-530.
- Cutler, David M., Edward L. Glaeser, and Karen E. Norberg. 2001. "Explaining the Rise in Youth Suicide." In *Risky Behavior Among Youths: An Economic Analysis*, pp. 219-269. Edited by Jonathan Gruber., Chicago, IL: University of Chicago Press.
- Dawkins, Richard. 1995. *River Out of Eden: a Darwinian View of Life*. London: Weidenfeld & Nicolson.
- Frontline/World. 2002. "Suicide Terrorism." URL http://www.pbs.org/frontlineworld.
- Ganor, Boaz. 2000. "Suicide Terrorism: An Overview." Herzlia, Israel: International Policy Institute for Counter-Terrorism. URL http://www.ict.org.il.
- Ghazali, Sa'id. 2003. "The Story of Hiba, 19, a Suicide Bomber. Can the Road-Map Put an End to All This?" *The Independent*. London, 27 May.
- Halperin, Uri. 2003. "Suicide Attacks: Implications and Approach." Conference on "Weapons of Catastrophic Effect: Confronting the Threat," Royal United Services Institute for Defence Studies, London, 12 to 14 February.
- Hamermesh, Daniel S., and Neal M. Soss. 1974. "An Economic Theory of Suicide." *Journal of Political Economy*, 82(1), pp. 83-98.
- Harrison, Mark. 2003. "The Logic of Suicide Terrorism." *Royal United Services Institute Security Monitor*, 2(1), pp. 11-13.
- Harrison, Mark. 2006. "Bombers and Bystanders in Suicide Attacks in Israel, 2000-2003." *Studies in Conflict and Terrorism*, 29(2), pp. 187-206.
- Human Rights Watch. 2002. *Erased In A Moment: Suicide Bombing Attacks Against Israeli Civilians.* New York, NY: Human Rights Watch.
- Israel, Ministry of Foreign Affairs. 2002. "Blackmailing Young Women into Suicide Terrorism." Jerusalem, 12 February. URL http://www.mfa.gov.il.
- Jaber, Hala. 2003. "The Avengers." The Sunday Times. London, 7 December.
- Keen, David. 1998. *The Economic Functions of Violence in Civil Wars.* London: International Institute for Strategic Studies, Adelphi Paper no. 320.
- Krueger, Alan B., and Jitka Maleckova. 2003. "Education, Poverty, And Terrorism: Is There A Causal Connection?" *Journal of Economic Perspectives*, 17(4), pp. 119-144.
- Martin, Susan Taylor. 2001. "Willing to Kill and Die, but Why?" *St Petersburg Times*. St Petersburg, FL, 29 November. URL http://www.sptimes.com.
- McGreal, Chris. 2003. "Muted Feelings For 'Martyr' With a Grudge." *The Guardian*. London, 21 August.
- Merari, Ariel. 1998. "The Readiness to Kill and Die: Suicidal Terrorism in the Middle East." In *Origins of Terrorism: Psychologies, Ideologies, Theologies, States of Mind*, 192-207. Edited by Walter Reich. Second edition,

Washington, DC: Woodrow Wilson Center and Johns Hopkins University Press.

- Moghadam, Assaf. 2003. "Palestinian Suicide Terrorism in the Second Intifada: Motivations and Organizational Aspects." *Studies in Conflict and Terrorism*, 26(1), pp. 65-92.
- Pape, Robert A. 2003. "The Strategic Logic of Suicide Terrorism." *American Political Science Review*, 97(3), pp. 343-61.
- Pape, Robert A. 2005. *Dying to Win: The Strategic Logic of Suicide Terrorism*. New York: Random House.
- Rowe, Dorothy. 2000. "How We Can Stop Teenage Suicides." *The Guardian*. London, 13 December.
- Sayre, Ward. 2003. "The Economics of Palestinian Suicide Bombing." Working Paper. University of Texas at Austin.
- Schweitzer, Yoram. 2002. "Suicide Terrorism and the September 11 Attacks." Herzlia, Israel: International Policy Institute for Counter-Terrorism. URL http://www.ict.org.il.
- Simon, Bob. 2001. "The Mind of a Suicide Bomber." CBS News, 26 September. URL http://www.cbsnews.com.
- Sprinzak, Ehud. 2000. "Rational Fanatics." *Foreign Policy*, 120 (September-October), pp. 66-73.
- Stern, Jessica. 2002. "Get to the Roots of Terrorism." *International Herald Tribune*, 26 April. URL: http://www.iht.com.
- Wiktorowicz, Quintan. 2004. "Suicide Bombings: Do Beliefs Matter?" Working Paper. Memphis, TN: Rhodes College.