Inhibiting Imitative Terrorism through Memetic Engineering

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Some acts of terrorism are the consequence of an individual or group's imitation of an act of terrorism, which has previously been publicised through the media. Media reports of terrorism appear to be rising, feeding a potentially increasing number of imitative behaviours. Such reports may provide individuals who are frustrated, angry, suicidal and/or suffering from personality disorders with the means and the motivation to copy what is perceived to be a method of gaining attention or what is perceived to be an acceptable method of venting anger and frustration. Through memetic engineering, the interpretations that are placed upon acts of violence can be manipulated to appear undesirable to even the most unbalanced minds, which it is argued, should inhibit the spread of imitative terrorism.

Introduction

Violence has plagued attempts at establishing a civilised society from the dawning of time. Few people feel comfortable with it, few people find it desirable, and yet there are always elements within society that seek to further their cause, vent their anger, or seek recognition through violence. For them it is seen as an act of courage and independence, an act of rebellion, or an act of retribution for perceived crimes against them or their group. The media quickly portray such acts through the attachment of labels such as 'Oklahoma Bomber' and 'Washington Sniper'. It is argued that the attachment of such labels confers a communicable mantle upon the act of violence and takes the event in question to a level where copying behaviours are triggered. Such labels become 'memes'. A meme is a concept or cognitive behaviour that is copied from mind to mind.

It is further argued that a re-labeling of such despicable acts - using terms that are perceived to be undesirable - will curtail the copying process, as communication of the violent act cannot evolve into a meme, thereby inhibiting the replication process. How many enraged teenagers and hate groups would want to be associated with the 'Oklahoma Coward' or the 'Washington Weakling'? By using a simple term such as 'sniper' the cowardly acts committed by a lone gunman are, for some, raised to a level of respectability and copying will occur as a result of such a conceptual transformation. Conversely, by attaching a socially unacceptable label to such random acts of violence, there will be no bonding or connection with the offender, thereby making the act undesirable and less likely to be copied. The question is, will the media allow such 'newsworthy' items to be de-sensationalised through the attachment of labels that are less emotion arousing for the purchaser of their products?

Memes and the act of replication

The term meme was first used by Dawkins (1976) as a cultural analog to the biological notion of the gene in their 'need' to replicate. Memes are described as units of information, ideas or mental representations, culturally transmitted instructions (Blackmore, 1998; Dawkins, 1976; Oxford English Dictionary). While there is disagreement concerning a clear definition of the term 'meme', with some authors defining almost anything that conveys ideas, beliefs, concepts, melodies, cultural icons, or behaviours as memes (Blackmore, 1998), it is generally agreed that memes represent ideas or units of information that are contagious and self-replicating. They are cultural imitators. Commonly cited examples of powerful memes include religious beliefs, political views, a catchy tune, fashions in clothes, cars, or music. Plotkin (1997) mentions transient and unstable memes such as fashion memes. To qualify as a meme, the message, idea, or fashion it conveys does not need to be exactly or digitally replicated.

For the purposes of this discussion, the term meme is defined as a mental representation or cultural icon that can be effectively communicated and that continues to be replicated from mind to mind. The meme concept is certainly not

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new. It has become well established across a wide range of literature including psychology, general science, evolutionary theory, and philosophy (Blackmore, 1999; Bloom, 2000; Dawkins, 1976; Dennett, 1995), although a level of controversy still exists regarding the subject of memetics and the motives of some of its promoters (Searle, 1997; Pech, 2003). Ignoring the controversial aspects associated with the field of memetics, possibly the most crucial characteristic of a meme as it relates to this discussion about transmitting a message glorifying weapons-related violence and terrorism, is its 'need' for replication.

While memes are not sentient entities that plan for their survival through replication, they do have a common bond with the biological gene, from which the term meme was originally conceived (along with mime and mimic). Memes convey information, and the contents of that information trigger a variety of interpretations for the wide range of receivers. For example, news of the Bali Bombings in October 2002 was conveyed as a terrorism meme. For those with family and friends in Bali, it was interpreted with fear and anguish, but for those individuals identifying themselves with the perceived cause of the terrorists, it could be interpreted as a victory and as an act of courage. Subsequently, each time the terrorism meme is transmitted, its message will arouse opposing emotions depending upon the predisposition of the receiver.

It will be argued that certain violent behaviours labeled under such terms as terrorist, sniper, and gunman, become immortalised in history and that a small minority of individuals justify their violent behaviours by projecting themselves into the role and circumstances of their hero predecessor. They choose to do this because certain violent acts have become memes with which they find identification and through which they find justification. Some of these violent memes project an image depicting a macho, freedom fighting, minority rights, and/or wronged individual redressing balance of power theme. These memes are transmitted through the media, and are generally emphasised with words such as terrifying, traumatised, horrified, frightening, etc. It is argued that certain individuals and groups are emotionally aroused and feel justified in their actions when associating their circumstances with the message conveyed by such memes.

The media and the mind

According to research undertaken by Smallman (1997: 163) the world is becoming a riskier place. He interrogated the database of Reuters Business Briefing (RBB), which includes approximately 2,500 news and media sources from 1992 to 1995, and found a dramatic increase in the publication of the word 'terrorism' over these years. Smallman points out that relative to 1992, there is a 145 percent increase of reports in this category. He also points out that there is a dramatic growth in the reporting of incidents that mention disasters, risk, hazards, and crisis. He argues that while such increases may be attributed to improved levels of reporting, it is unlikely that such abilities could have improved so drastically over such a short period of time (Ibid: 164).

While Smallman's research may have identified a pattern in increasing risk and violence, this is countered by Johnson (2001) who claims that despite the media hysteria, the actual threat of terrorism has shrunk in recent years (it should be mentioned that this claim was made prior to the events of September 11th, 2001). He claims that although the 1990's saw a significant increase in the number of people injured in terrorist attacks, less than 1 percent of the incidents caused more than 70 percent of the injuries, which he mainly attributes to attacks by radical Islamic groups.

What Smallman's research has identified is an increasing trend in the transmission of memes that communicate terrorism. An increase in messages communicating such themes may be interpreted by the cynic as a growing media obsession with sales and content that will increase sales. There may be some truth to this, although the pursuit of such a line of argument is not the purpose of this discussion. Regardless of the motivation for the rise in such reporting, it has been determined that memes associated with terrorism are replicating at an increasing rate. Before addressing issues related to the impact of increasing terrorism meme replication and how this can be resolved, it may be worth briefly mentioning what this discussion will not be covering.

In his psychoanalysis of the Oklahoma bombing, Carr (1997) describes a number of psychodynamic processes to explain some of the bombing events and behaviours. He argues that this will provide a useful means for better understanding such an act of terrorism, rather than being confined and limited to attempts at interpreting the ideological convictions of those responsible in order to answer the question, ''Why?'' Carr's insights help to throw light on a most extreme demonstration of antisocial behaviour, but still leave too many unanswered questions. There have been numerous studies of violent offenders, including studies of perpetrators of terrorist-type acts, often resulting in a diagnosis that identifies antisocial or psychopathic personalities and/or tendencies. For the purposes of this discussion, the violent behaviours of offenders stemming from pathological or antisocial personality types will not be

included. Robins (1978) concluded from her longitudinal research that the vast majority of highly antisocial adults had also been highly antisocial as children, thus somewhat negating this group from the argument that their aggressive behaviour stemmed from memes conveying messages of violence, although these memes may have acted as triggers for subsequently violent behaviour. Also, attributing all terrorism to mentally unbalanced minds does not help to explain the rise in reports and acts of terrorism unless the world is also experiencing a dramatic rise in mental illness. No sudden and dramatic rises in the incidences of antisocial and pathological behaviour have been noted, therefore, can the sudden increase in reporting of terrorism be attributed to another causal factor?

Copying behaviours

Perhaps meme theory can provide a new insight into the increasing number of terrorist activities and antisocial behaviour, which seems to thrive on the victims' pain and suffering. Franzoi (1996) points out that less than a year after the 1888 Jack the Ripper murders in London, eight more identical murders were committed within the city. In 1966 Richard Speck murdered eight nurses in Chicago. Robert Smith later shot and killed four women and a child, claiming that he got the idea for the killings from the news reports about Speck. Franzoi (1996: 452) claims that, while there is considerable evidence indicating that viewing violence can lead to increased aggression, there is no clear agreement on why this is the case. He points to three possible explanations.

1. Disinhibition– according to this explanation, viewing violence of others reduces people's inhibitions against engaging in similar actions.
2. The formation of aggressive scripts – a script is a preconception about how a series of events is likely to occur, and it is argued that children watching television can develop aggressive scripts, such as responding to an insult with a violent act.
3. Cognitive priming – this hypothesis suggests that certain stimuli such as weapons are meaningfully associated with violence and that such stimuli may activate thoughts and behavioural tendencies towards episodes or acts of violence

It is highly probable that a combination of all three of the above provide an explanation of why viewing violence can lead to increased aggression, aside from other influences, which may be of a genetic, environmental, or psychological nature. Viewing violence is one form of transmitting the violence meme, but memes can be transmitted just as effectively through other media.

As an example, Marsden (2001) has argued that suicide is contagious[1] – a suicide meme. In an earlier discussion Marsden (1998) uses the example of Goethe's tale 'The Sorrows of Young Werther'. The hero, Werther, whose suicide inspired a wave of imitative suicides, resulted in a banning of the book in various parts of Europe. Marsden ascribes this phenomenon to a form of infectiousness termed 'social contagion'. This infers that there is a social transmission of socio-cultural artefacts or cognitive states. Marsden (1998) cites a definition by Lindzey and Aronsson (1985) that describes social contagion as:

> 'The spread of affect or behaviour from one crowd participant to another; one person serves as the stimulus for the imitative actions of another.'

Marsden clarifies that there is no reason for the contagion phenomenon to be restricted to the crowd scenario (1998:3). Memetics and social contagion theory share a common element as both require replication, but there is also a subtle but important difference, as expressed by Marsden. Using Marsden's (1998:7) example and adapting it for the purposes of this discussion, a social contagion theory perspective would ask ''What makes a person want to commit an act of terrorism?'' But from a memetic stance, the question would be worded as ''What is it about terrorism that makes people want to do it?'' From the memetic stance it is recognised that social learning is an evolved psychological trait, and a part of this learning process includes the capacity and desire to copy the behaviours of those we respect or admire. A significant number of terrorist acts could be attributed to nothing less than the social contagion aspect of the terrorism meme. The meme needs to be copied, the media has successfully added to this meme's fitness by ensuring that it is not only replicated, but also replicated in increasing numbers.

Weaving the threads into the strained fabric of society

The above perspectives can be combined in order to provide an alternative explanation for terrorism that has not already been provided by psychological and socio-political hypotheses. Within society groups and individuals exist who feel dispossessed, from their land, their identity, their peer group, their history, their future, and/or their lawmakers and authority figures. Moss (2002) (see also Arndt et al, 2002) refers to this as dis-identification, a precondition for pitilessness and therefore a precondition for limitless activ-

ities directed against the objects of ones hatred. The individuals, whether operating alone or in co-operation with others of the same bent, feel aggrieved and according to the formation of aggressive scripts' concept, exposure to television and the media has acted as a guide for developing an aggressive response to perceived wrongs. This is further compounded by their disinhibition against acts of violence, either through television, the media, or by living in a state of perpetual violence as experienced in certain city neighbourhoods or countries suffering from war. The cognitive priming hypothesis suggests that these individuals, already vulnerable to the suggestion of violence, are then triggered by aggressive stimuli, which could range from frustration at being bullied at school, through to the bombing of ones home, and all manner of perceived acts of injustice that the mind may dwell upon between these two extremes.

The memes of violence in the form of terrorism have found the ideal vehicle for replication in the media. Terrorism frightens, appals, shocks, and disturbs. But it also sells. Whether through a morbid fascination, a need to be informed, or shock appeal, acts of terrorism capture headlines, and according to Smallman's research, such acts are capturing a growing number of headlines. These subsequent transmissions of the terrorism meme provide the stimuli that act as both a cognitive and emotive primer. The group or individual project feelings of anger, hatred, and aggression onto others. Through the act of projection, they believe that the world, or segments thereof, feels the same hatred and aggression toward them as they feel toward others, thereby making everyone, no matter how far removed from their zone of perceived culpability, justifiable targets for aggression and violence.

For such people, copying known and publicised acts of terrorism and violence may become tantamount to a form of divine inspiration. Such cues and triggers are easily attributed to external agencies, whether it is a god, the spirit of a lost loved one, or a misguided sense of justice for perceived wrongs. The violent act, whether a mass bombing that injures great numbers or the destruction of oneself in an act of suicide (or both, as in the case of suicide bombings), while being developed and primed through exposure to one or more forms of media, ensures the replication of a despicable meme.

Inhibiting memes that transmit messages of violence

It has been aruged that memes, in their need for replication, provide a key piece to the jigsaw puzzle explaining terrorist behaviour. Individuals matching some or all of the criteria described above may be seduced and aroused by the terrorism meme, thereby ensuring its survival and replication. The key to reducing the incidence of terrorism would then lie in the elimination of such a meme. There is a number of strategies that can be employed to achieve such a goal, with the most obvious but least palatable being censorship of the media. This strategy would be unlikely to succeed for a number of reasons, not the least being the media's reluctance to participate in such an experiment.

The two most crucial elements of a meme are the information that it transmits and its need to replicate that information. The former is crucial to the character of the meme; the latter, combined with a state of disidentification, provides the momentum that drives the terrorist to act (see Figure 1). It may be impossible to eliminate all the factors that contribute to an individual's sense of disidentification; therefore the proposed remedy lies in changing the content of the terrorist meme. Removal or deliberate editing of the meme's information will result in a complete change in its character. As highlighted in Figure 1, changes to the terrorism meme will alter the information that is received by an individual in a state of disidentification, possibly removing the stimulus that could have led to an act of terrorism, and in the event of an act of terrorism, changes in its reporting may inhibit copying behaviours by re-engineering the contents of the terrorist meme.

In keeping with the biological metaphor from which the term meme was conceived, it is useful to note that a mutation in a gene, when found to be interfering with the function of an essential protein, will have harmful if not lethal implications. McFadden (2000:65) points out that the human genetic disease thalassemia is caused mainly by a mutation that changes a single amino acid in one of the globin proteins of blood haemoglobin. Medawar (1997:273) goes further by suggesting that mutations may lower the fertility or viability of the organisms in which they make their effects apparent. Unlike the common depictions of cartoon characters endowed with extra abilities due to the effect of mutations, humans rarely benefit from such changes in their gene structure unless such changes increase the probability of selective fitness. It is unlikely that the information transmitted in a meme can be completely removed, such as might occur through censorship, but it can be altered. It is hypothesised that such a deliberate mutation will be lethal to the meme's level of fitness, contributing to a failure to replicate and ultimately, being a causal factor in its death.

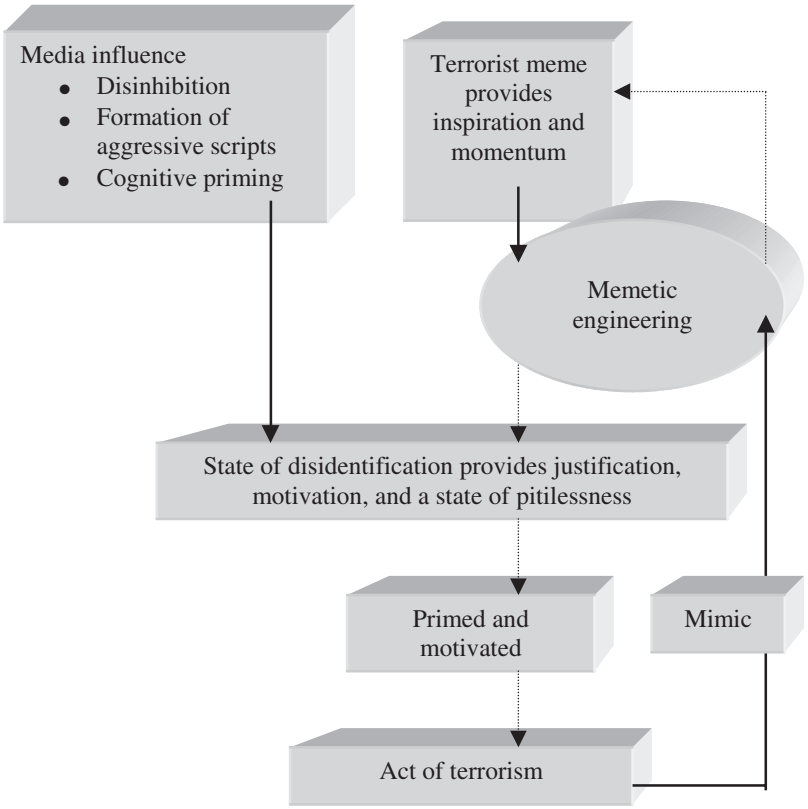

Figure 1: How memetic engineering can inhibit the replication of an act of terrorism

Acts of terrorism and extreme violence are often given specific and identifiable names, the Manson Murders, the Oklahoma Bombing, the Washington Sniper, September 11, the Bali Bombings, etc. These titles add to the terrorism meme, allowing it to evolve and transmit its message to an increasingly wider group of people. These people may be primed or triggered by the words 'bomb' or 'explosion' or 'sniper'. In military terms, a sniper is a highly trained and respected individual. Using the same title to describe the cowardly acts of a lone gunman murdering innocent people from a hidden vantage point only serves to further legitimise such behaviour in the minds of similarly dispossessed individuals, and may possibly prime them to repeat such a crime. 'Sniping' may in the future be transmitted and interpreted as being more 'respectable' via the terrorism meme than running amok in a schoolyard or office block, thereby initiating a wave of copying behaviours.

It is therefore suggested that the information contained within the terrorism meme be altered so that its ability to replicate is severely compromised. Words and terms such as bomber, sniper, revenge, retribution, freedom fighter, assassin, terror, and other such descriptive vocabulary must be eliminated from the media's portrayal of violent events. Instead, terrorist activities would be better described with terms such as cowardly, insecure, weak, malicious, gutless, pointless, mentally unstable, spineless, puny, pathetic, despicable, and loathsome. From a semiotic perspective, it is hypothesised that within the mind of an angry and dispossessed individual, the re-engineered images and interpretations created by such unappealing terms would inhibit all copying behaviours.

Limitations

Firstly, the model described in this discussion and which is outlined in Figure 1, cannot address all causes and catalysts for terrorist behaviours, its focus has been on the influence of the terrorist meme and its socially transmitted system of representation of an act that spawns imitative behaviours. Mental has been largely ignored illness as an influential factor upon terrorism, although, as Crenshaw (2000) points out, personality disorders and states of irrationality do contribute to acts of terrorism and must therefore not be forgotten by government decision makers. Pomerantz (2001) goes further by claiming that terrorism is a by-product of a group mental disorder, a type of cult behaviour in which paranoid/narcissistic/sociopathic leaders convince vulnerable individuals to follow their megalomaniac logic.

Secondly, according to de Mause (2002) the roots of Islamic terrorism do not lie in American foreign policy, but in the extremely abusive families of the terrorists. He claims that children who grow up to be Islamic terrorists are the products of a misogynist, fundamentalist system that segregates the family into separate areas, one for men, and one for women who are often battered and mutilated and treated as polluted beings, and who often reinflict their own miseries upon their children. Although such a causal hypothesis for terrorist behaviour has not been included in this discussion, it does fit with overall meme theory as such child rearing practices fall under the direct influence of cultural memes.

Thirdly, socio-political causal factors have also been largely ignored, although these too fall under the sphere of meme theory. The motives of some terrorist leaders, while possibly being of a narcissistic nature to gain power and prestige (Beck, 2002), are often transmitted through and under the guise of cultural and religious memes.

Conclusion

A number of causal factors for the imitation of terrorist acts have been discussed. While it is difficult to assign specific weightings in order to identify the most influential factors for determining terrorist behaviours, it has been hypothesised that altering the contents of the terrorist meme can reduce the further occurrence or copying of such behaviours. Although Searle (1997:105) complains that the analogy between genes and memes is incorrect, they do share at least two common characteristics, 1. they transmit information in order to survive and replicate, and 2. they may both be vulnerable to mutations affecting their ability to transmit information. It is therefore hypothesised that deliberate editing of the terrorist meme will provide an effective method for reducing the incidence of some terrorist-type behaviours by making the meme unpalatable and thereby initiating its eradication. Such an approach could be seen as a managed form of memetic engineering.

Notes

1 Kay Redfield Jamison (1999) explains that the majority of suicides are committed by sufferers of mental illness, which may have a negative bearing on Marsden's findings.

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