Scaring Us Senseless

By Nassim Nicholas Taleb

GLASGOW

I WAS visiting London last Thursday when a second wave of attacks hit the city, just two weeks after the traumatic events of July 7. It is hard to avoid feeling vulnerable to this invisible enemy who does not play by known or explicit rules. Of course, that is precisely the anxiety that terrorists seek to produce. But its opposite — complacency — is not an option.

The truth is that neither human beings nor modern societies are wired to respond rationally to terrorism. Vigilance is easy to muster immediately after an event, but it tends to wane quickly, as the attack vanishes from public discourse. We err twice, first by overreacting right after the disaster, while we are still in shock, and later by under-reacting, when the memory fades and we become so relaxed as to be vulnerable to further attacks.

Terrorism exploits three glitches in human nature, all related to the management and perception of unusual events. The first and key among these has been observed over the last two decades by neurobiologists and behavioral scientists, who have debunked a great fallacy that has marred Western thinking since Aristotle and most acutely since the Enlightenment.

That is to say that as much as we think of ourselves as rational animals, risk avoidance is not governed by reason, cognition or intellect. Rather, it comes chiefly from our emotional system.

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Patients with brain lesions that prevent them from registering feelings even when their cognitive and analytical capacities are intact are incapable of effectively getting out of harm's way. It is largely our emotional toolkit, and not what is called "reason," that governs our capacity for self-preservation.

Second, this emotional system can be an extremely naïve statistician, because it was built for a primitive environment with simple dangers. That might work for you the next time you run into a snake or a tiger. But because the emotional system is impressionable and prefers shallow, social and anecdotal information to abstract data, it hinders our ability to cope with the more sophisticated risks that afflict modern life.

For example, the death of an acquaintance in a motorcycle accident would be more likely to deter you from riding a motorcycle than would a dispassionate, and undoubtedly far more representative, statistical analysis of motorcycles' dangers. You might avoid Central Park on the basis of a single comment at a cocktail party, rather than bothering to read the freely available crime statistics that provide a more realistic view of the odds that you will be victimized.

This primacy of the emotions can distort our decision-making. Travelers at airports irrationally tend to agree to pay more for terrorism insurance than they would for general insurance, which includes terrorism coverage. No doubt the word "terrorism" can be specific enough to evoke an emotional reaction, while the general insurance offer wouldn't awaken the travelers' anxieties in the same way.

In the modern age, the news media have the power to amplify such emotional distortions, particularly with their use of images that go directly to the emotional brain.

Consider this: Osama bin Laden continued killing Americans and Western Europeans in the aftermath of Sept. 11, though indirectly. How? A large number of travelers chose to drive rather than fly, and this caused a corresponding rise in casualties from automobile accidents (any time we drive more than 20 miles, our risk of death exceeds that of flying).

Yet these automobile accidents were not news stories — they are a mere number. We have pictures of those killed by bombs, not those killed on the road. As Stalin supposedly said, "One death is a tragedy; a million is a statistic."

Our emotional system responds to the concrete and proximate. Based on anecdotal information, it reacts quickly to remote risks, then rapidly forgets. And so the televised images from bombings in London cause the people of Cleveland to be on heightened alert — but as soon as there is a new tragedy, that vigilance is forgotten.

The third human flaw, related to the second, has to do with how we act on our perceptions, and what sorts of behavior we choose to reward. We are moved by sensational images of heroes who leap into action as calamity unfolds before them. But the long, pedestrian slog of prevention is thankless. That is because prevention is nameless and abstract, while a hero's actions are grounded in an easy-to-understand narrative.

How can we act on our knowledge of these human flaws in order to make our society safer?

The audiovisual media, with their ability to push the public's emotional hot buttons, need to play a more responsible role. Of course it is the news media's job to inform the public about the risk and the incidence of terrorism, but they should try to do so without helping terrorists achieve their objective, which is to terrify.

Television images, in all their vividness and specificity, have an extraordinary power to do just that, and to persuade the viewer that a distant risk is clear and present, while a pressing but underreported one is nothing to worry about.

Like pharmaceutical companies, the news media should study the side effects of their product, one of which is the distortion of the viewer's mental risk map. Because of the way the brain is built, images and striking narratives may well be necessary to get our attention. But just as it takes a diamond to cut a diamond, the news industry should find ways to use images and stories to bring us closer to the statistical truth. □

Nassim Nicholas Taleb, who teaches risk management at the University of Massachusetts at Amherst, is the author of "Fooled by Randomness: The Hidden Role of Chance in Life and the Markets."