When technology takes over war

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The actual war against terrorism has little to do with the way Pakistan and India are dealing with it. One reason for this is that isolated acts of destruction, like the incidents of September 11 and December 13, 2001, in which states and 'organisations' take turns, can hardly be glorified as war. The war on terrorism, however, being termed a totally genuine cause, has brought out the most modern of weapons ever used.

It would be formidable to acknowledge that though traditionally man has been using technology to further his ends in warfare, at some point in time technology and warfare disengaged. Warfare, parallel to the evolution of the human brain, proceeded to take on complex and intangible forms. Additionally, technology proved detrimental for communication between the warring parties.
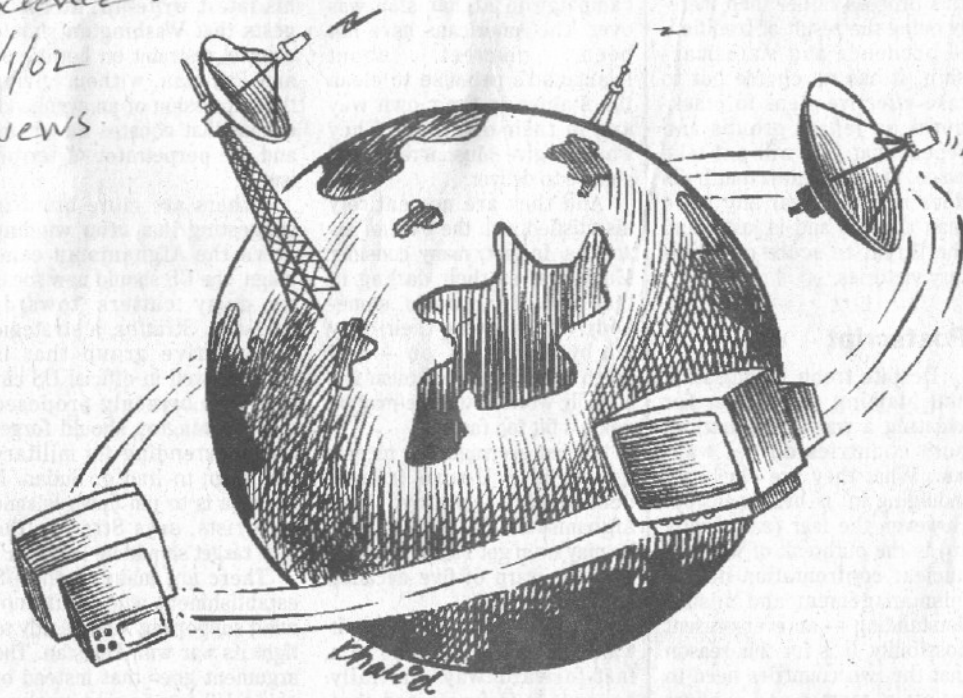
The relationship or the lack thereof, between technology and warfare needs a re-examination. Given the current international and regional circumstances, and the war fronts enunciated, such a re-examination may underline the fact that wars can hardly be won by the use of (military) technology. Pockets of people, habitats or buildings can be swept clean, without 'winning'.

The technological advancement used after September 11, however, amazingly eased things up for the investigators. For example, shortly after the attacks in America, US investigators had to sort through 700 suspects. A neuroscientist suggested a test that would ascertain whether the suspects had criminal knowledge of the terrorist attack by measuring their brainwaves, a phenomenon called 'brain fingerprinting'. It works this way: A subject's head is strapped with electrodes that pick up electrical activity. He sits in front of a computer monitor as words and images flash on the screen. When he recognises the visual stimuli, a waveform called the P300 reacts. The signal is fed into the computer, where it is analysed via a proprietary algorithm. If the suspect's P300 waves react to the data, it is an indication of guilt.

"There is no question from a scientific perspective that this is an extremely useful tool in the war against terrorism," says Farwell who has devised this test. "It's extremely important to the national interest to implement this as soon as possible." The agent who supervised the FBI field trials was fascinated with the results. He joined Farwell's company Brain Wave Science as soon as he retired from the agency.

The wonders of technology are indeed fascinating. However, the disconnection between technology and warfare today is also fascinating. For example, the maximum that 'brain fingerprinting' would be able to do is to provide a list of 'convicts'. Supposing these 'convicts' are then executed. Would the war have been won? There perhaps could be a way of 'winning' if the electrodes could somehow not only detect the 'criminal connection', but also convert the convicts to a certain set of beliefs. There are possibilities that technology may even be able to achieve that some time in the future.

Nevertheless, this is just one example of how technology and warfare seem to exist in a state of divorce, capable of creating greater magnitudes of disaster.

Similarly, two days after the US bombardment started in Afghanistan in October, an intoxicating review of weapons that have been introduced since the 1991 Gulf War and those being developed was released in the US. This included a list of about two dozen planes, helicopters and arms and ammunition that had mind-boggling 'smartness'. "America's war against the Taliban and Al-Qaeda will allow the US forces to test newly developed weapons never used on a battlefield before," it claimed, almost gleefully.

The list begins with AH-64D Apache Longbow combat helicopter featuring infrared target sensing cameras and night vision, capable of hitting 400 per cent more targets than the model it replaces and is capable of dealing with 128 targets simultaneously. Also included on the list is RAH-66 Comanche, now the most advanced helicopter in the world. It is the first to use stealth technology (designed for armed reconnaissance, attack and special operations). Its slender body hides a heat-reducing exhaust system, noise suppressors and bays that conceal weapons when not in use. It also has a sealed cockpit to protect the crew from biological or chemical threats.

And the wonder list goes on, encompassing the most riveting products of technology that can now deal with almost all kinds of adverse physical conditions, and still carry out absolute devastation.

September 11 gave fuel to the Republicans in the US who had first spurned the CTBT and now the ABM to take care of 'terrorists' and 'states of concern'. This, despite the presence of domestic critics who felt a multilateral approach could have taken care of such threats better. By going along with treaties, the spread of nuclear technology may have been harnessed with a relatively greater amount of success. However, the military industrial complex exerted a greater amount of pressure and won. Such decisions can also be seen as succumbing to the dynamics generated by a spiral of improving military technology.

A re-examination of the relationship between technology and warfare today is bound to highlight the incongruity of their relationship. The greatest military technological wonder existing in the form of nuclear weapons, derives its value precisely from its non-usability. Technological, reactionary and short-term answers cannot endlessly keep a lid on forms of warfare that persistently call for a more wholesome approach. This merely precipitates or mitigates acute cases.

Walter A. McDougall a Pulitzer prizewinning historian and a veteran of the Vietnam War analyses September 11 thus: "The first Cold War crept in slowly and was not at all evident to most average Americans. Cold War II: so many people thought it would be waged against China. But cold wars are not declared against mere geopolitical rivals — hot wars, yes, but not cold ones. We cannot begin to predict the course of this conflict precisely because the enemy is so diffuse, the allies so varied and numerous, and the weapons at hand so unsure."

Regardless of whether this war against terror is a second cold war or a haphazard rebellion of certain pockets of 'extremists' — technology can hardly deal with this kind of warfare. Two major roles that technology has performed in recent history is prevention of full-blown wars (eg with nuclear weapons) and a venting of anger in the form of lethal retribution, apart from the sending the wrong messages (such as ABM pullout by US). More significantly, a by-product of this contribution of technology in both its roles has been that of 'clogging' communication (in a medium more related to the type of war being waged). Therefore, notions of a limited war or a nuclear war or whatever threat is generated by possession of 'superior' technology not only is irrelevant to the crux of the problem between India and Pakistan, but it also blocks intrinsic communication between the two countries.