

**THE FUTURE OF WAR: PATHWAYS TOWARDS DESTRUCTIVE
OR CONSTRUCTIVE ALTERNATIVE FUTURES?**

A working paper

by F Vreÿ, University of Stellenbosch Business School

2005

ACKNOWLEDGEMENT

In contrast to our first two Working Papers which could be considered to reflect work-in-progress, this third Working Paper is the outcome of a virtually completed PhD dissertation entitled: *An analysis of the evolving military futures debate: Explaining alternative military futures for the South African National Defence Force.*

Starting from the premise that the contemporary quest for peace, stability, prosperity and wealth for humanity is historic in kind, it is argued that humankind has an ongoing interest in the unfolding of military futures and the destructive potential of conflict. The research shows that it is difficult to foresee a future characterised by the demise of war, although future forms of warfare may be less destructive.

This Working Paper certainly makes a contribution to our understanding of warfare and, more specifically – based on historical evidence – how future forms of warfare may unfold. For South Africans, who have experienced the devastation of war on its borders, as well as its destructive potential inside the country, this should be compulsory reading.

We wish to thank Francois Vreÿ for a most thought-provoking paper.

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Head: Doctoral Programmes

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ABSTRACT

The future of war pertains to war as a future instrument of policy while future warfare unfolds from how wars of the future are to be conducted. Both phenomena contain dynamics that contribute to explaining particular alternative futures. The future of war and its conduct through future warfare also demarcate much of contemporary debates about the future use of armed forces. Matters of alternative military futures, future war and warfare are not important per se. However, the contemporary quest for peace, stability, prosperity, and wealth of humanity is historic in kind and one that raised a persistent interest in the unfolding of military futures and its destructive potential. Hence, the lingering concern with military futures in order to prevent destructive futures through the intimate relationship between humanity and war. In this article, the author finds no dominant theory or quasi-theory that explains convincingly the future demise of war and the subsequent rise of warless futures. None of the arguments presented are immune from substantial criticism. Consequently a number of alternatives concerning future warfare remain visible. Although progress to lessen destruction is observable from the investigation of rising forms of future warfare, an emergent new warrior class and context for warfare perpetuates the difficulty of removing war as a policy option and its execution through different forms of warfare.

INTRODUCTION

If past matters of war and warfare can be studied, why not its future? The obvious answer to this question could simply be: "Because it has not yet transpired." In spite of this seemingly logical answer and a stern warning to this effect by Gray (2005), matters of military futures and future warfare remain on the security agendas of states and entities beyond the state. In spite of traditional objections to war, this latter observation is nowadays challenged by the growing saliency of international humanitarian and legal regimes. These regimes tie in with traditional objections embedded in prosperity and stability to terminate the scourge of war, protect the vulnerable, promote peace and effect more prosperous futures for humanity. The growing saliency of these calls demands some explanation of two phenomena that tend to upset linear expectations concerning alternative futures: future war and future warfare.

The central tenet of this paper is to explain alternative military futures by outlining theories on removing war as a policy instrument and the alternatives of future warfare that follow in its wake. To this end, ideas and quasi-theories are presented on how to remove war from the strategic landscape and the quest for warless and prosperous futures. Recognising that warless futures are not eminent, alternatives on future warfare are outlined that either support, or oppose the removal of war. In conclusion, some remarks are presented on shifting from destructive to constructive alternative military futures in order to support the prosperity over war hypothesis.

ALTERNATIVE FUTURES: THE MILITARY NEXUS

Military matters and the search for peaceful and prosperous futures can hardly be considered separately as the military-futures nexus can be traced back in history. In this nexus, war functioned as an early indicator that societies change over time and that these changes need to be studied within their futures context. (Kressley, 1997:3). It is perhaps not by chance that a soldier, the Greek general Thucydides, is cited as influential in establishing the idea of changing futures through his accurate reporting of military events such as the long Peloponnesian War (431-404 BC) (World Futures Society, c1999:1/11).

A review of certain futures publications offers further insights into military futures and the role of armed forces. In a regular column by Clarke in the journal *Futures* that spans approximately 15 years, the persistent quest can be observed to understand alternative futures also within a military context (Clarke, 1967). In this regard, not only early publications,¹ but also the rise of science fiction and its military slant feature quite prominently – a practice persisting up to the 21st century (Gray, 1994). From a futures perspective the primary interest in military futures turns upon its destructive potential and the imperative to contain or prevent devastation by better understanding the alternatives it entails. Within futures theory, this understanding unfolded as alternatives and optimism embedded in the elimination of ruinous military alternatives and steering them towards less destructive and even constructive futures that promote wealth, prosperity, and peace.

Probing and contending with alternative military futures emanate in part from the debates dominating future warfare and the future of war. Whilst future warfare unfolds through ongoing processes of military change effected by innovation and diffusion of thoughts and technological artefacts, the future war debate continuous at the theoretical level, but is less salient, submerged in political rhetoric and increasingly focused upon the demise of war.

THE FUTURE OF WAR

One early, but nonetheless prominent view on future war emerges from *The Future of War* by Bloch whose 1899 views were commemorated during 1999 in The Hague (Prins and Tromp, (eds), 2000:xi).² Bloch held that interstate wars could not continue amidst the increase in destructive power and lethality of the means of war. Although viewed as a utopian, visionary or idealist, Bloch maintained that wars by heavily armed great powers fighting for victory with deadly arms and mobilised societies held the seeds of their future collapse. Bloch viewed the anticipated destruction of lives by technological artefacts to ultimately erode the social and political will to settle disputes through war (interstate war in particular) (Stead in Prins and Tromp (eds), 2000:19-20). As a social phenomenon war also merged increasingly with the non-military sphere and could no longer be considered a singular deciding matter (Werner in Prins and Tromp (eds), 2000:87). Destruction of, and costs for society, became viewed as serious obstacles to war as a way to conduct the affairs of state (Stead in Prins and Tromp (eds), 2000:43).³

¹ The Battle of Dorking (depicting future destruction), Tanks. The Land Ironclads (future armoured warfare) , The War of the Worlds (warfare against aliens), The War in the Air, (aerial warfare of the future) The Stricken Nation (chemical and biological warfare) and The Great War of 189- are but some early examples of publications on future war as reflected in the work of Clarke.

² This commemoration coincided not only with the centenary of Bloch's contribution, but also with other ideas and thoughts that emanated from The Hague Peace Conference (1899) that sought to abolish war.

³ Taken from original interview with Bloch and published in Prins, G. Tromp, H. (eds), 2002, *The Future of War*, Kluwer Law International, London, et al.

Bloch's arguments tie in with the alternative futures dictum of avoiding war to promote prosperity through his view that war lost its rationality by promoting the risk of deep destruction through technological artefacts that destroy national culture, economic progress, and the creation of wealth. With the destruction of the opponent being primary, and socio-economic consequences hardly considered, the social fabric of society is endangered (Stead in Prins and Tromp (eds), 2000:55). This raised the imperative to question the future utility of war. (Stead in Prins and Tromp (eds), 2000:49). Subsequently, warding off future war became a central tenet in the debate on using armed coercion to pursue political objectives (HRH, Prins of Orange in Prins and Tromp (eds), 2000:60,62). Nonetheless and although influential, the six-volume cyclopaedia of Bloch that posits the impossibility of future war did not lead to its demise. In spite of Bloch drawing a destructive profile that depicted accurately why future war between states cannot persist, war as an instrument of policy survived (Bildt in Prins and Tromp, 2000:111). In spite of this survivalist tendency, parallel debates evolved over time to support the notion of Bloch that future war is not immune to opposing views.

A number of debates predicate the eventual eradication of war from the future strategic landscape. This latter expectation recently became embedded in the theory of endism that posits an end to a particular strand of war by singling out the recent demise of the Cold War, a downturn in war between nation states and the superiority of economic and political liberalism (Huntington, 1989:1). In this regard, but more comprehensively, Thompson (in Burk (ed)) outlines six related theories that posit alternative pathways towards the eventual demise of war – pathways that can be traced more fully by investigating its original proponents.

The end of history. Invoked by Fukuyama from Marx and Hegel (Fukuyama, 1989:1), the end of history declares an ideological victory where alternative and competing ideologies are rejected to provide conceptual space for economics, consumerism and marketisation to enter and occupy the traditional zone of war (Thompson in Burk (ed), 1998:92-93; Fukuyama, 1989:12-13). The necessity for war is eroded as political competition through war for furthering the aims of policy becomes defunct (Huntington, 1989:1), although not in a universal manner and neither applicable to the full expanse of the international strategic landscape.

The end of autocracy. As political dispensations mature and cope better with over-ambitious rulers and external threats, peace and prosperity are enhanced. This maturation is supported by the close interdependence between rulers and society through the exchange of citizen participation, ruler legitimacy, authority and tax extractions that further promote stability and wealth. Promoting and protecting this relationship implies the prevention of war, avoiding its destruction and the cost of post-war reconstruction. The increase in mature regimes of this kind lowers the need and propensity for war and is judged to contribute to its future decline (Thompson in Burk (ed), 1998:83; Layne in Brown, Coté, Lynn-Jones & Miller, (eds), 2000:179-180). Layne (in Brown *et al.* (eds), 216-217) nonetheless warns that it is dangerous to merely extrapolate internal democratic practices to foreign policy, although democratic peace remains a popular, though not demonstrated dictum for avoiding the use of war.

The end of war. A change in mental habits to view war as unthinkable, not unprofitable, paves the way to consider war as irrational. Construing it as a foolish and outdated way of doing things, the attraction of war is expected to fade. Furthermore, calculations of the benefits of war in terms of population and territory that contribute to economic and political power are no longer rational (Thompson in Burke (ed), 1998:95; Kaysen in Brown, *et al.*, (eds), 2000:448). Nonetheless, and in spite of the theoretical optimism underpinning war as unthinkable, culture (military culture in particular) changes slowly and not universally. Cultural changes also take shape much more slowly than technological and institutional adjustments (Kaysen in Brown, *et al.* (eds), 2000, 461). Promoting the end of war along the line of being unthinkable unfortunately competes with cultural traits

viewing it in some utilitarian way (Thompson in Burk (ed), 1998:95-96; Kaysen in Brown *et al.* (eds), 2000:442, 461). Subsequently, an attitudinal consciousness of war being undesirable could well pave a way towards war as unthinkable, albeit very slowly.

The end of the profitability of war. The extent to which decision-makers can no longer equate the costs and benefits of going to war, the latter will decline, as even winners no longer stand to profit. War gains are also no longer vested in territory and human material while the costs to life and economics by military destruction now more than ever cast doubt upon wealth creation through force. As societies reap the benefits from growth and prosperity, future wars that could dramatically erode or destroy the 'good life' are construed to obstruct consent and support for war. The subsequent growth of modern and advanced societies in the international system is therefore bound to hasten the obsolescence of war (Thompson in Burk (ed), 1998:97-99). In addition, the extent to which leaders maintain positive future expectations regarding relationships that determine their wealth and prosperity, the profile of war is to suffer (Copeland in Brown *et al.* (eds), 2000:500). On a cautionary note however, future environmental scarcity is bound to upset this prosperity alternative if its primarily domestic profile promotes interstate conflict for scarce resources (Homer-Dixon in Brown *et al.* (eds), 2000:536). This is demonstrated currently by the expectations concerning resource wars of the future.

The end of Westphalian simplicity. A decline in the state-centred system originally formed by war and it using war to promote state prosperity, accentuates certain obstacles to interstate war. Societies now increasingly live, function and prosper across state borders and maintaining this interaction and interdependence is viewed as a check to the crude use of military force, although Copeland (in Brown *et al.* (eds), 2000:500) warns against this simplicity. Prince (2002:119) also reiterates the Kantian expressed role of "hospitality" to have different communities co-operate and accommodate one another – irrespective of differences and boundaries. Societies have also become wary of war for it remains an expensive option for little gain and they no longer readily authorise their governments to go to war. The recent rise in the importance of human rights serves to further check the use of the military instrument that threatens humanity directly or indirectly (Thompson in Burk (ed), 1998:99-100) and is further eroded by the growing constructive approach of a responsibility to protect through prevention, graded intervention and reconstruction.

Individually and collectively the above theories on the future decline of war contain a profile of expectations and factors that promote the view that war could fade from the future international strategic landscape. However, Huntington (1989), Fukuyama, (1998), Thompson in Burk (ed), (1998) and contributing theorists in Brown *et al.* (2000) all cast doubt upon the manifestation of particular endism outlooks concerning war. Each future war thesis portraying the demise of war through interdependence, economic cost, nuclear destruction, liberalism, democratisation, attitudinal and institutional change and complexity is vulnerable to powerful forces that promote war. More fundamentally is the common argument that only a particular strand of war – interstate war within the developed and democratic tier of the international system – reflects something akin to the anticipated future demise of war (Prins, 2002:48). This disequilibrium on the probable demise of war leaves the leeway and need to also consider particular strands of future warfare.

STRADDLING THE INTERMEDIATE DIVIDE: ARMED FORCES FOR WARLESS FUTURES

War can be viewed as entrenched in a particular paradigm of using coercion to pursue state interests. The difficulty and extended time frames associated with replacing an established paradigm as argued by Thomas Kuhn should temper expectations of a future devoid of war to materialise suddenly. This check on expectations

depicts the alternative of an incremental pathway towards warless futures for some actors. Nonetheless and irrespective of how warless futures are to unfold, armed forces need to remain relevant and move alongside such broader societal shifts.

Kuhlman (in Caforio (ed), 1998) affords some intermediate insights as to how military institutions might migrate towards some form of warless futures. By exploring elements of this amongst European armed forces (UK, Italy, Sweden, France, Germany, Italy, Greece, Switzerland and Czechoslovakia), Kuhlman compiled certain prospects and indicators of this alternative.

As clear and close threats and their solution through military coercion diminish, armed forces have to assume tasks to preserve their legitimacy and resource allocations. Substituting, or merging, traditional with civic roles is an observable practice to solve the goal-displacement dilemma for armed forces (Kuhlman in Caforio (ed), 1998:426). Military institutions also tend to enter those domains corresponding to their public images. Although frequently not a preferable practice, embracing lesser military roles can become a matter of institutional survival as the popularity of futures embedded in war are marginalised and fade.

In Europe, the parameters of the domestic domain are circumscribed increasingly in wider geographic concerns such as NATO territory whilst the role domain is expanded to include civil disasters at home and abroad, as well as foreign humanitarian and developmental aid. Non-military tasks rated positively by public opinion find their way into the military role environment much more easily, but within limits. Protecting the environment and fighting drug wars are preferred to replacing striking workers and building civil infrastructure and educating sections of society (Kuhlman in Caforio (ed), 1998:430-431).

Public perceptions acknowledge the declining primary role of military institutions (Kuhlman in Caforio (ed), 1998:427), but are not a *carte blanche* for armed forces to enter the civilian domain. Neither can military institutions any longer primarily depend upon mere political defence of their future role. They nonetheless need to sustain their legitimacy into the future. In spite of endism theories, contemporary outlooks also do not yet sanction their future demise. Future warfare thus remains influential – whether in a destructive or more constructive guise.

FUTURE WARFARE: A THEORETICAL BACKDROP

Future warfare is debated broadly within the parameters of three dominant theories: Fourth generation warfare, third wave warfare, and fourth epoch war (Bunker, 1996:1). Fourth generation warfare unfolds from the sequential interplay of ideas and technology that gave rise to four different generations of warfare over the period 1648 to the late 20th century. Third wave warfare is viewed to match the waves of how humanity and the means of production evolved. The military waves emanate from adjacent military revolutions that wrought deep changes to keep armed forces in step with events in its societal sector. Fourth epoch warfare views military institutions as closely integrated with its political community and a constant adjustment through wars of destiny and wars of efficiency to remain relevant in a particular epoch or era (Moore in Bunker, 2002:168).

Proponents of fourth generation warfare view the rise of non-state actors as primary future opponents for armed forces still aspiring towards traditional and technology-based futures (Bunker, 1996:3).⁴ This fuzzy state - non-

⁴ Also see Lind, W. et al. 1989, The changing face of war: Into the fourth generation, *Marine Corps Gazette*, October, pp 22-26.

state divide blurs the previous delimitation that wars of the future should be viewed as interstate and intrastate phenomena. Adjacent to this features the view of van Crevelde (1991:192,207) that the state is no longer the only legitimate user of violence. At the turn of the 20th century efforts to contain and limit military power to the domain of politics and interstate relationships had to cede conceptual space to military power becoming entangled in intrastate relationships (Ayoob in Prins and Tromp (eds), 2000:152). The extent to which warfare now portrays a showdown between haves and have-nots, the profile of poverty, lack of resources and even structure depict a strand of future warfare that complicates matters. Established military institutions operating as orderly state-based Third Wave or post-modern institutions now have to contend with this collapsed order in the state-war connection (Keegan in Prins and Tromp (eds), 2000:179-180).

Third wave theory ties in with Russian sixth generation warfare as both theories acknowledge the arrival and impact of the information era. However, this theory has little basis in history, draws strongly on advancements in technology and human capital and is therefore bound to exclude a tier of countries unwilling or incapable of mastering this technology-military nexus (Bunker, 1996:7). Nonetheless, countries from different tiers of the international community portray varying commitments to enter third wave warfare and the spectre of disproportionate military capabilities for some Second Tier countries (Demchak, 2000:5,8). Subsequently information rich, information based or information poor armed forces are steadily evolving as formative segments of future warfare using information as its central tenet.

Fourth epoch thinking contends that two modes of warfare are evolving from the warfare societal connectivity - that of advanced post-mechanical warfare manifesting as advanced technology warfare and the blending of terrorism and low-intensity conflict within the warrior paradigm (Bunker, 1996:6). Coping with such new modes within a particular epoch results from either the pursuit of wars of efficiency or destiny. The former entails the enduring mobilisation of sufficient resources to cope with rising modes of warfare. Wars of destiny, in turn, supposes key changes to cope with the rise of fundamentally new ideas and technologies that begin to challenge established military, economic and ideological institutions (Moore in Bunker (ed), 2002:169). In the latter case, the new warrior culture is forcing traditional military thinking to come to terms with new future threat profiles not akin to traditional armed threats.

RISING FORMS OF FUTURE WARFARE

Although rising forms of warfare tend to be presented within a typology where a certain form is framed as prominent and drawing most attention and resources, the following discussion supposes that traditional interstate wars remain central and most dangerous. This notion or preference is, however, obscured by the prevalence of lesser modes of warfare that tend to occupy much of the intellectual attention on future warfare (Gray, 2005:6-7).

Amidst the prominent debates on future warfare indicated above, different variants of warfare can be observed (Gray, 2005 6-7). These forms roughly conform to the debates indicated, although it remains difficult to confine each to a dominant debate. One way of demarcating future warfare is to illustrate probable alternatives that await national armed forces. These alternatives, according to Evans (2002) now constitute challenges to military theory and practice of future war for they assume different profiles that manifest as follows.

Modern warfare: Based on high technology and conventional force-on-force warfare of the kind associated with World Wars 1 and 2, the Korean War, and the Gulf War of 1991.

Post-modern war: Characterised by extreme Western risk aversion and the stakes seldom involve issues of vital security or national survival.

Premodern war: Social rather than technological in character and an expression of the existential aspect of warfare and located in the antimodern, the millenarian, and the tribal mindsets.

(Evans, 2002).

The three overlapping models of modern, post-modern, and premodern war portray two contrasting images of future warfare—one mainly symmetric and one largely asymmetric in kind. In his outline, Evans (2002) raises a further difficulty. In the emerging conflict spectrum of the early twenty-first century, the models of war often collapse through unprecedented interaction and resultant multidimensionality. This multiplicity compels armed forces to be able to fight efficiently across a collapsed warfare spectrum of simultaneity and complexity. From this unstable triad of modern, post-modern and premodern war, the following alternative strands of future warfare can be distilled.

Peer or near peer warfare. Although perceived as an American perspective, fighting peer or near-peer competitor remains high on the mission agenda of armed forces. This is the “known” domain of warfare and not only an American outlook, but also that of China (Hawkins, 2000), Russia (Gareev, 1997) Germany, France and Britain (Unterseher, 1999). Hereby the primary warfighting role by armed forces is acknowledged. A peer competitor is capable of fielding multiple types and robust numbers of both emerging and present weapons with a concept of operations to realise the full potential of this mix. A near-peer competitor is a state (or alliance) that combines limited numbers of emerging weapons with a robust inventory of current weapons and develops innovative concepts to best employ this mix (Barnett, 1996:1/6).

Warfare in the peer and near peer categories is strongly influenced by the Revolution in Military Affairs through its technological and informational impact to fight high-tech wars against an opponent trained equipped and employed in a similar mode. In this strand of future warfare, information is particularly salient. Acknowledging this growing influence, Gray (2000) outlines different profiles of how warfare that is influenced by the RMA and information can unfold.

Profile 1. Strategic information warfare posits that cyberspace and information infrastructure is the future battlefield, as well as the ends, ways and means of the future.

Profile 2. A radical shift to information-led warfare where information dominance is pursued and exploited through sophisticated intelligent munitions, sensors, and delivery platforms.

Profile 3. A digital overlay of existing systems, doctrine and tactics, but maintaining the flexibility to also cope with robust warfare not conforming to the information overlay.

Profile 4. Spacepower is where the true revolutionary emphasis is probably located that brings information and technological advances together to enhance dominant battlespace awareness. Since space power is not only about technology, it is crucial that the concomitant military-cultural, institutional and doctrinal changes should also be clearly understood

(Gray, 2000:248-251)

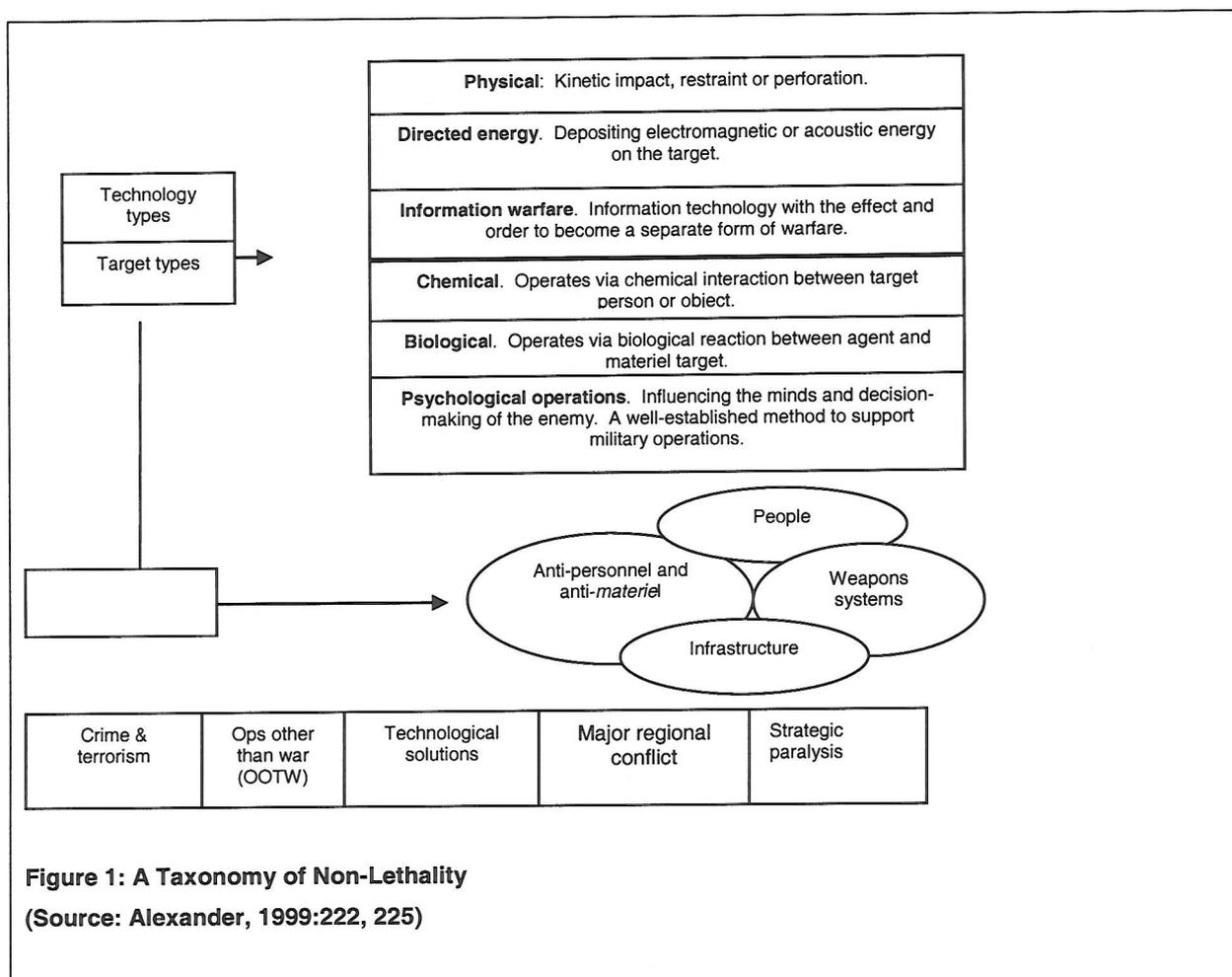
Upholding the primacy of peer or near peer war also is underpinned by the warning that warfare should not be adjusted for every trend or shift in the strategic environment. Gray (2005:2) is adamant that war proper remains unchanged and armed forces should not be sidetracked by other forms of conflict being cloaked as new wars of

the future. The nature of war remains, although its character might change. It is the latter and sometimes salient changes to its character and who conducts warfare that are addressed in the section below.

Non-lethal warfare. This outlook is perhaps well portrayed in the phrase by Alexander and Heal: "*The future of conflict is small, smart, fast, precise, and unconventional and death is optional*" (Alexander and Heal in Bunker (ed) 2002:121). The term non-lethal refers to weapons "... *that are explicitly designed and primarily employed to incapacitate personnel or materiel while minimising fatalities, permanent injury to personnel and undesired damage to property and the environment*" (Alexander, 1999:5). The non-lethal notion challenges the foundations of a firepower military that uses objects or machines to replace human lives and posits that in some forms of future conflict traditional military forces will experience severe limitations (See Figure 1). One matter that remains important, however, is the effort to minimise the loss of human lives – an outcome without lethality (Alexander 1999:x).

Distinguishing between the non-violent and non-lethal domains is important as well for non-lethal weapons may still contain elements of violence (Alexander, 1999a). Alexander further argues that demands of the future security environment upon the military-strategic instrument point towards the incorporation of non-lethal systems that are designed to limit physical damage (Alexander, 1999:5-6). This adjustment requires a proper understanding of alternative military futures through the influence of humanitarian and legal regimes that now scrutinise the use of unnecessary violence and injury to non-combatants. In turn, future military commanders are to face circumstances that call for alternative options to use force (Alexander, 1999:9) and in particular as changing missions of the military tend to upset existing traditional warfighting postures (Alexander and Heal in Bunker (ed), 2002:122-123).

Modern insurgencies. Insurgency wars or wars of low intensity have become important structuring variables of future warfare. One view is that as states are decreasingly able to fight one another, leeway is allowed for the low intensity conflict (LIC) paradigm. This paradigm is also an avenue for Second Tier countries to establish themselves and ignore the government-people-army nexus of the state. This lower end of the spectrum harbours warfare between state and non-state entities with the latter proliferating as the conflict continuous. Although viewed from some quarters as mere aberrations to a more preferred view of future war, van Creveld and proponents of fourth generation war argue against this simplicity. A further (longer-term) future is located in the state disappearing and non-state entities (now named terrorists, guerrillas, bandits and robbers) rising to prominence – something akin to the fourth epoch outlook. These warriors now viewed as irritations, are judged to assume more formal titles in future and take over from the state or even become future peer-type competitors to states (Van Creveld, 1991:197; Adams in Bunker (ed), 2002:58).



Future insurgency, according to Metz (1993:1-2/2), will reflect two dominant developments. The first is spiritual and grounded in the search for meaning amidst globalisation and modernisation. Spiritual insurgency is about rejecting a regime and its socio-political and economic system. Such rejection is particularly salient in contemporary times with a return of some nativist elements to guide the process. This cultivation of hostilities between so-called out-groups and in-groups and its volatile interface with religion is a danger zone of the future spiritual strand (Metz, 1993:2/5-3/5).

The second major strand of future insurgency is commercial insurgency. This differs from its spiritual counterpart by denoting a search for wealth. Some measure of meaning and the search for wealth is accelerated by exposure to what is deemed important: the measure of wealth and meaning according to Western standards. It is accordingly valued in a rather unorthodox fashion, which is not feasible in most societies (Metz, 1993: Part 2:3-4/5). The merging of the criminal domain with the spiritual creates a coalition that The extent to which the criminal domain merges with the spiritual a coalition emerges that promotes the commercial (financial) need and limits government responses by the popular support of such a merger. As wealth is created and personal meaning fulfilled, the incumbent regime is opposed and its instruments of coercion incapacitated. This combination fulfils both the material as well as the spiritual need of a new generation of insurgents (Metz, 1993: Part 2:4/5).

Sullivan and Bunker (in Bunker (ed), 2002:40) point to a further difficulty emanating from this lower end of the future conflict spectrum. New non-state entities and organisational structures such as warlords, gangs, and drug

cartels can organise into sprawling networks more readily than hierarchically inclined armed forces. Future insurgencies are also judged to assume network-centric features and in its new wave format, these insurgencies are bound to include new actors. Netwar, as in the conventional domain, refers here to conflict and even crime where use is made of network forms of organisation and related doctrines, strategies and technologies and can even portray an independent insurgent campaign as demonstrated by the Chiapas case in Mexico (Freedman in Prins and Tromp, 2000:238).

One very prominent issue that is bound to characterise the future strategic environment is the matter of terrorism. Although it can be related to all forms of conflict as a sporadic, partial or even independent strategy, it is here addressed in terms of its fourth wave and the future. Warfare in general moved into the fourth generation as technology increasingly reshaped the face of military conflict and challenges societies to adjust (Moore in Bunker (ed), 2002:168-169). This shift did not remain confined to traditional military conflict, but influenced the non-traditional field as well – including terrorism.

Fourth wave terrorism emanates from the powerful role of religion as a revolutionary ethos with the 1979 Iranian Revolution as its accelerator (Rapoport, 2001:421). Religious justification became the crucial ingredient and not the creation of something secular, such as a state or political party. The religious foundation transcends state boundaries in building up forces and projecting activities. It strikes in ways previously unknown and, as in the case of Al Qaeda, not only effecting destruction and loss of life at a level previously unknown, but also an unprecedented resolve for its eradication. History, however, does not point towards unlimited success of this wave. Inspiring causes thrive to both feed and reinforce the fourth wave, and are expected to feed a fifth wave (Rapoport, 2001:424).

The danger and visibility of terrorism as a particular form of insurgency recently surpassed that of a mere insurgent threat. The importance of the War on Terror that was launched in the aftermath of the September 11 attacks on the USA is reflected in the commitments of UN member countries. They adopted resolutions and legislation to oppose terrorism and bring about coercion upon such networks and those harbouring them in any way. This forms part of a broad international coalition and UN sanctioning to bind First and Second Tier countries into the War on Terror. A further noticeable caveat is the foreign military commitments by Germany and Japan. Both countries have been inhibited since World War 2 from deploying their military forces outside their national borders (Stratfor Report, 2000a ; Stratfor Report, 2000b). Both, however, began to challenge these constitutional restrictions and are currently deploying military contingents in support of the War on Terror. This reflects the impact of terror attacks and threat perceptions of countries involved in fighting the swell of terrorism at the dawn of the 21st century.

Gray connects the growing terrorist threat to the growing notion of asymmetry in warfare. According To Gray, this asymmetry operates by defeating the strategic imagination of possible or impossible threats to be focussed upon. Terrorism, as an asymmetric phenomenon, functions by defying existing conceptions about it as a threat, the *modus operandi* and the politico-strategic ways and means in place to face them (Gray, 2002:5). To this end and to face the uncertainty inherent in asymmetry and terror, the difficulty is to identify the terror threat spectrum (Gray, 2002:6). The costs of deterring all possible acts are staggering while asymmetric threats operate in the very spectrum of surpassing the idea of them transpiring and being successfully countered. Keeping the appropriate military responses legitimate in the face of such extreme uncertainty further complicates the challenge. This requires a degree of clarity about this strand of future warfare that is perhaps the ultimate future challenge.

Future insurgencies and its terror links are not to remain confined to territorial ambits as the fourth generation already broke this notion. A subsequent need arises to entertain a networked notion of future terrorism in a realm independent from traditional confines defining politico-strategic thinking. Procyschen (2001) extends the territorial type of insurgency to that of a future network, that breaks with territorial confines, but clings to the fourth wave in a more virtual mode. A network-based insurgency becomes a supranational arrangement that ignores state guidance and inhibitions on what is possible and needs to be done. It is not restrained by a popular support base or accountable to state institutions or their constituents, but becomes dependent for success upon globalisation's features of technology, international transport and telecommunications (Procyschen, 2001:45-46).

If Al Qaeda represents a harbinger of a future networked insurgency using terror, it is also to be understood as one operating in terms of an aspired future support base which it hopes to attract. Such a network based organisation ultimately aims at operating as a complex, loose and cosmopolitan network. It avoids entrapments of accountability and legitimacy and, owing to its character, is prone to establish its own rules of engagement and Laws of War. In practice, the Afghan Jihad represents one step in shedding the territorial limitations on terror and insurgent networks. The war in Chechnya most probably contains territorially limited features of networking to oppose a visible and tangible opponent (Dilegge and van Konynenburg in Bunker (ed), 2002:172). Al Qaeda is, however, pushing the envelope to a future extreme through its networked virtuality by shedding all restrictions that may inhibit the type of operation and target selection to promote its cause. This all finds meaning by Al Qaeda masking itself behind a networked sanctuary and exploiting virtuality as a refuge (Procyschen, 2001:47-49).

CONCLUDING REMARKS

From a futures perspective the matter of alternative military futures remains important since the historic dilemma of destruction and war interfering with the quest for prosperity is not yet resolved. Investigating alternative military futures ultimately turns upon the options vested in future war and future warfare. Inasmuch as war remains an option in the future for decision-makers to pursue national interests, alternatives concerning the use of warfare The extent to which future war remains an option for decision-makers to pursue interests, alternatives concerning future warfare remain salient and offer a destructive alternative within the field of inserts a destructive alternative into mimilitarylilitary futures.

A number of theories and hypotheses for eliminating war were traced of which the study on future war by Bloch is perhaps the most comprehensive and fundamental. In addition, several endism theories resurfaced as the Cold War faded. The end of history, a future community of democratic states that do not fight each other, no more profit from war, war being unthinkable and the superiority of wealth creation over war, afford attractive, albeit limited explanations as to the future decline of war. None of these prospective theories are devoid of fundamental criticisms or have empirical validity to replace war as a policy option and promote alternatives vested in warless futures.

The vulnerability of endism theories and in particular the central tenet that the alternative of warless futures pertains to only a certain strand of the international community, allows leeway for future warfare to remain an alternative to further certain interests. Alternatives regarding future warfare span the width of non-destructive and non-lethal alternatives, RMA and information based precision destruction with little collateral damage to that of crude and indiscriminate warfare forms as portrayed in brutal insurgencies and terrorism. Although peer and near-peer warfare is maintained, competing ideas can be observed of a new warrior class replacing traditional

and state controlled military institutions. From this competition arise tensions between the formal notion of armed forces fighting peer and near-peer warfare under the aegis of the state, and that of non-state entities. The latter groupings are challenging the reigning paradigm by not only collapsing the state-military nexus through networking and virtuality, but as potential future peer or near peer competitors that are eroding perceived boundaries within which traditional armed forces prefer to operate.

Warless, or constructive alternative military futures, are dependent upon decision-makers embracing theories on war termination and alternative forms of future warfare. No universal or general theory for the decline of war and subsequently the decline of warfare are on offer. The different theories and quasi-theories presented here offer a range of alternatives to study movement towards alternative military futures, but remain mere alternatives challenging an established paradigm. The quest for constructive futures and prosperity still has to contend with destructive alternatives being nurtured within the military futures realm.

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