

FUTURES STUDIES AND ALTERNATIVE MILITARY FUTURES

F Vreÿ*

1. INTRODUCTION

The purpose of Futures Studies is threefold: To discover or invent, examine and evaluate, and propose possible, probable and preferable futures.¹ This triad of purposes is primarily addressed via futures research of which the essence is to generate alternative futures as choices for decision-makers.² It is within the idea of alternatives, it can be argued, that the purpose of Futures Studies find meaning. This in turn raises the difficulty of clarifying the future and therefore the practice of rather presenting it as alternatives than a rigid prediction. History however, points out that this was not always the case. Viewing the future as unfolding alternatives only came about after the First and Second World Wars as the connection between war and how the future is to be perceived became more lucid.³

If the argument is upheld that the importance of Futures Studies increases as the world becomes a more complicated realm, then current military-strategic complexities facing defence decision-makers should not be excluded or marginalised. Furthermore, if the rate of global change and resultant complexities are to increase, demands for clarity about military futures ought to increase as well. Future change and military futures therefore have an enduring interface in spite of efforts to downplay this relationship. Although Spies⁴ avers that military futures are not more complex than non-military ones, history clearly illustrates the dangerous potential of the deep destruction of war. The future of this destructive potential is increasingly debated and questioned in contemporary times and a rationale for investigating the link between Futures Studies and military futures.

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¹ W Bell, "The purposes of Futures Studies", *The Futurist*, November-December, 1997, p. 42.

² WI Boucher (ed.), *The study of the future. An agenda for research* (The Futures Group/NSF, Washington, 1977), p. 7.

³ IF Clarke, "From prophecy to prediction. The tale of the future in modern society", *Futures*, Vol. 6, No. 1, February 1974, p. 74.

⁴ PH Spies, Interview by the author with professor Spies at Nantes, Paarl, on the evolution and military connections of Futures Studies, September 2001. Professor Spies is a former head of the Institute of Futures Research of Stellenbosch University Business School.

This paper delimits and analyses selected, but important, connections concerning the future and destructive military matters. First, the historical connection of the future and military affairs is investigated. Following the historic line, the paper accentuates the continuing importance of keeping military matters in mind when considering the future. Arguing a case for enduring military futures follows this, as it is dangerous to contemplate the future without acknowledging the destructive military domain and shifts ameliorating the destructive straitjacket. The paper is concluded with a brief reflection upon the rise and importance of military futures and its enduring relevance.

2. FUTURES STUDIES IN HISTORY: THE FUTURE CAN BE DIFFERENT

Ancient historians and philosophers are deemed to be foremost contributors to the origins of studying the future. Historians were the first to contribute to a database of knowledge that made it possible to notice and understand that a way of life changes over time. It is furthermore significant that a soldier, the Greek general Thucydides, is being cited as influential in establishing the idea of change by accurately reporting military events of his time and in particular events related to the long Peloponnesian War (431-404 BC)⁵. It subsequently became possible to identify change from studying historical facts that in turn fostered an understanding that the past differs from the present. Once people realised that their culture had changed as time went by, it would become the impetus to probe the future to find out what it held and better understand its dynamics.⁶

The idea of one future (mostly optimistic) as representative of the future whether via prediction, prophecy, or merely describing what is to unfold, tended to be dominant during earlier times. In contrast to this optimism that inclined to dictate thinking and structure subsequent views about the future, military events and its affairs, keeping in mind the volatility of the social surface equilibrium⁷ challenged the presumed symmetry of the social surface of futures thinking.⁸ As science fiction⁹ grew as an early way of outlining the future and communicating it to society, two phenomena nudged the evolving futures field and the use of military coercion into closer proximity. The one was the persistent outbreak of wars and the

⁵ WFS, World Future Society (draft copy of updated version) at <<http://www.wfs.org/newmeth.htm>> c1999.

⁶ M Kressley, "The advent of futures studies", *The Harbinger*, at <http://entropy.me.usouthal.edu/harbinger/xvi/971111/konrad.htm>, 11 November 1997, p. 3.

⁷ B De Jouvenel, *The art of conjecture* (Basic Books Inc Publishers, New York, 1967), p. 37.

⁸ De Jouvenel argues that the social surface (strategic environment for military decision-makers) is not a static entity allowing for linear or accurate predictions about the future.

⁹ Jules Verne is the acknowledged father of science fiction that became a popular way of communicating to society perceived future developments in a simplistic, but interesting way.

other an understanding that the future is not to evolve only along pathways of optimism, prosperity and progress.

War, in retrospect, not only inserted elements of pessimism into futures thinking, but also introduced certain skills to bolster ways to address future uncertainty. War furthermore reiterated that human choice could send nations down a future path of war or that of peace - a matter addressed by HG Wells - and lead to destructive futures. The idea of a future utopia could and did become severely disrupted by humanity's choice of not conducting world affairs in a rational way.¹⁰ The non-military paradigm of progress that directed the exploration of particular futures for some time subsequently became severely challenged and towards the end of the 19th century had to trade some space to rising military influences. These influences originated from the military use of new technologies, and how military matters began to influence the future as well as presumed shapes of future warfare. Insights about future war became visible in late 19th century literature such as **The Battle of Dorking** (1871) about a future war between Britain and Germany. Later 19th and early 20th century apprehensions of Bloch and Neznamov on technology placing warfare beyond the reach of commanders and the control of man added a further futures dimension to military matters.¹¹ The prominence of future war became more prominent as the realisation dawned that studying the future could become fatally flawed if contemplated in the absence of this destructive phenomenon.

3. FUTURES STUDIES: DEMARCATING THE ENDURING MILITARY DOMAIN

Since September 1969 a regular column by IF Clarke appeared in the futures journal **Futures**. This column addressed certain observable trends in the development of Futures Studies although the field did not officially exist for much of the earlier period addressed by Clarke. In spite of not being the aim of his arguments, topics addressed in Clark's columns include persistent themes connecting warfare and studying the future as well as influences of past or future warfare. This connection or presence can be illustrated as follows.

¹⁰ IF Clarke, "The pattern of prediction 1763-1973. HG Wells. Exponent of extrapolation", **Futures**, Vol. 2, No. 2, June 1970, p. 172.

¹¹ RF Baumann, "Historical perspectives on future war", **Military Review**, Vol. LXXVII, No. 2, April 1997, pp. 43-4.

Table 1. Observations of the military variable in forecasting the future.

Futures Publication	Topic	Warfare and future focus
1. December 1969, 1/6	Forecasts of future wars 1871-1914.	Predictive fiction to indicate future threats to society.
2. June 1970, 2/2	HG Wells. Exponent of extrapolation.	Forced choice between good and evil. The atomic bomb and a new kind of future warfare.
3. September 1970, 2/3	HG Wells. Preacher and prophet.	The accurate predictions by HG Wells of armoured and air warfare.
4. December 1970, 2/4	Methods of prediction 1918 - 1939.	The impact of WW1 on technological forecasting and extrapolation.
5. March 1971, 3/1	Anxious anticipations 1918-1939.	War as a future threat to society and the destructive nature of new weapons.
6. June 1971, 3/2	The tribulations of technology.	WW2 influencing futures literature to focus on surviving future military catastrophes.
7. February 1974, 6/1	The tale of the future in modern society.	War as a major phenomenon and rising focus of futures literature.
8. December 1975, 7/6	Ideal worlds and ideal wars 1870-1914.	Future war featuring side-by-side with other views of the future.
9. December 1976, 8/6	The idea of the future 1784-1984.	Improvement and progress remains disrupted by regular occurrence of military matters such as World Wars One and Two.
10. August 1977, 9/4	The Soviet Union, the future and futures research.	Military demands and focus of futures research in the USSR.
11. February 78, 10/1	Prophets, predictors and public policies 1870-1970.	A persistent influence of war in examining the future and techniques to do so.
12. April 1978, 10/2	No sub-topic	The fallacy to forecast in the absence of war and alternative military futures
13. June 1980, 12/3	A future without futurologists 1770-1870.	Future war destroying the dream of constant progress.
14. April 1985, 17/2*	No sub-topic	Military events being a stimulus for steering futures thinking.

* Intermediate period filled by a period of essays on US futures thinking and its development.

The above selection represents a component of articles on the evolvement of futures research and eventually Futures Studies. From fifty-one articles (September 1969 to December 1980) the above fourteen with their salient military content were

identified as they portrayed the early influence of war. A total of 14 articles (27,45%) from fifty-one reflect clear arguments (whether in their topics or subsequent content) about the influence of war on futures thinking. The extent to which a time line is drawn from 1871 to 1945 a continuous presence of military matters and themes becomes visible with its culmination in the devastating French-Prussian, First and Second World Wars.

Futures literature since 1870 reflected outlines about how future war was to unfold, for what purpose and who was to be the future dominant party or actor.¹² The realisation that war had to be projected into the future became accentuated by the Franco-Prussian War of 1870 and reinforced by the resultant literature on the topic such as **The battle of Dorking**, **The stricken nation** and **The Great War of 189-**¹³ However, even during the late 19th century forecasting in the technological and social domains remained somewhat selective and partial although it included a focus upon future war. The latter focus lingered as a topic of interest, but not with the sole aim to prevent future disaster.¹⁴ The work of HG Wells on technology and its invasion of society are perhaps a first warning against future disaster. Wells outlined what is possible and might happen in future - including warnings of future catastrophe. During the late 19th and early 20th centuries he closely attended to future developments in warfare as found in his publications **Tanks**, **The land ironclads**, **The war of the worlds**, and **The war in the air**. Wells judged warfare as one factor that influenced future change whilst undergoing change itself and therefore the necessity to predict such changes due to its deep impact upon future events. He therefore accentuated its potential devastation and that humanity should not underestimate it.¹⁵

The outbreak of the First World War in 1914 fundamentally influenced how the future was viewed. It not only undermined the idea of unlimited progress and prosperity, but also introduced a sharp rise in pessimistic futures with a central military theme through publications such as **People in ruins**, **Pestkrieg** and **Day of wrath**.¹⁶ Fear of how man decided to use technology in a destructive manner also created fear of technology. Subsequent forecasts of future war defined it as a phenomenon moving from a preferred clinical affair to one barely excluding society and thus to be ignored at one's peril.¹⁷ Modern society now had new and

¹² IF Clarke, "From prophecy to prediction. Ideal worlds and ideal wars 1870-1914", **Futures**, Vol. 7, No. 6, December 1975, p. 518.

¹³ IF Clarke, "The pattern of prediction 1763-1973", **Futures**, Vol. 1, No. 5, September 1969, p. 557.

¹⁴ IF Clarke, "The prophecy to prediction", **Futures**, Vol. 7, No. 3, June 1975, pp. 240, 243.

¹⁵ IF Clarke, 1970, "The pattern of prediction 1763-1973. HG Wells. Preacher and prophet", **Futures**, Vol. 2, No. 3, September 1970(a), p. 273.

¹⁶ IF Clarke, "The pattern of prediction 1763-1973. Anxious anticipations 1918-1939", **Futures**, Vol. 3, No. 1, March 1971, pp. 72,75.

¹⁷ **Ibid**, p. 76.

destructive factors to reckon with and toying with merely one future view became insufficient if not outright dangerous. Futures outlooks became a stark choice between good and evil and that the future could no longer be contemplated as only utopian.

Following in the footsteps of World War 1, the Second World War effected its own impact upon understanding the future. Although World War 1 introduced a technological slant to forecasting, it also reiterated two earlier views. One, technology was not to be used as a benevolent agent only and two, war could no longer be viewed as a mere clinical military affair between armed forces. These viewpoints found fertile ground in how technology, disaster and its potential perils were projected into the future and gave rise to much of the post World War Two literature about the future and destruction.¹⁸ Consequently, a further shift took place by predicting the future as more than a singular spectacular aspect with a bias of prosperity and progress for this created much scope for criticism. Reality just did not support the preference of prosperous futures.

War not only functioned as a futures variable that introduced pessimism. It also contributed knowledge and skills on forecasting and predictions about the future. These contributions had a direct application in the civilian realm with its preferred interest in more constructive and optimistic developments. As military decision-makers were constantly involved in forecasting future events and planning for the future¹⁹ at the strategic and operational levels of war, this honed their skills to think and probe the future.²⁰ These two domains demand of military decision-makers to fathom the future and plan for future wars and its operations. They therefore become compelled to work within a futures realm with its adjacent difficulties and needs. Such an exposure and need, it is argued, are quite prone to cultivate a sound futures based outlook. This skill or art did not remain unnoticed and it is quite probable that it is even more in demand during current times of uncertainty and complexity faced by military institutions and their decisions-makers.²¹

Past literature promotes an understanding of efforts to delineate important ways and means to present the future to society. It includes an observable independent variable, warfare as military coercion that co-directed the developmental pathway of Futures Studies. Concerning war and the future, this duo compelled a realisation

¹⁸ IF Clarke, "The pattern of prediction 1763-1973. The tribulations of technology", *Futures*, Vol. 3, No. 2, June 1971(a), p. 170.

¹⁹ IF Clarke, "From prophecy to prediction. Prophets, predictors and public policies", *Futures*, Vol. 10, No. 1, February 1978, p. 73.

²⁰ SJ Tangredi, "All possible wars? Towards a consensus view of the future security environment 2000-2025", *McNair Paper No. 63*, November 2000. <http://www.ndu/inss/macnair/mcnair63/6301.html>

²¹ *Ibid.*

or recognition of the dangers involved and of avoiding it or adequate preparations if unavoidable. As expectations about the future developed via past events, future war remained on par with other phenomena to encourage the idea of the future as an examinable field of investigation.²² Technology substantially influenced this line of thinking and it is subsequently briefly addressed.

Narrowing down the type of war that could break out became increasingly important if not crucial. New matters of technological innovations and its diffusion entered the realm of war and created new riddles that had to be solved in advance. It therefore had to be known if and when war was to be expected.²³ Technological forecasting for example contributed to finding technical answers for military problems. Liddell Hart's **Future war** is one example and it depicted quite accurately some elements of how warfare might unfold in future.²⁴ This futures outlook remained vulnerable in the sense that it projected future warfare in a preferred manner and in isolation from the opposition. It allowed for set views and strategic culture to reign supreme and furthermore contributed to false futures and a false sense of 'getting it right'. This increased the difficulty of bringing about (radical) military change via technological innovations. It furthermore hindered new theories and views of future warfare to diffuse and take effect. No substantial or comprehensive ways to indeed investigate the future transpired amidst military affairs increasingly changing and playing their role to influence national futures. A dangerous and destructive void subsequently developed that heightened the probability of no or wrong future outlooks and a repeat of the First World War.²⁵

Although no sophisticated views about the future rose to prominence during the late 19th century, what did transpire is to be viewed as the first stage in the development of the futures field. As technology diffused, the necessity increased to determine what is possible and its future manifestation(s). In this regard Jules Verne outlined what to expect by describing what lies ahead via the use of science fiction and the benevolent use of technology. Science fiction drew unexpected attention from society and even governments as it addressed those future realms that remained unexplored and thus afforded a glimpse of possible futures.²⁶ The extent to which it also dawned that technology was in fact not to be used as a benevolent agent only, this insight and its intimate connection to future war fostered an understanding that some factors continuously worked for destructive military change. This understanding was harnessed to influence opinions and draw attention to somewhat

²² IF Clarke, 1978.

²³ IF Clarke, "From prophecy to prediction", **Futures**, Vol. 7, No. 4, August 1975(a), p. 335.

²⁴ IF Clarke, "The pattern of prediction 1763-1973. Methods of prediction 1918-1939", **Futures**, Vol. 2, No. 4, December 1970(b), p. 379.

²⁵ Clarke, 1975(a), p. 379.

²⁶ Clarke, 1969, p. 467.

neglected matters of national defence. The necessity of this becomes apparent if one considers the increasing dangers pointed out by futures literature of viewing the future acting in the absence of credible alternative military futures.

4. FUTURES STUDIES AND MILITARY FUTURES: AN UNCERTAIN RELATIONSHIP

The link between the future and war did not remain prominent in the field of futures research. This link became less conspicuous and as it shifted towards a lack of focus, it drew the attention of some futures theorists and those working in the policy domain. In a brief editorial in the February 1974 issue of **Futures**, Dror had harsh criticism for what he perceived as a rising disequilibrium in the issues preferred and researched by those active in the futures field. This preference, according to Dror, resulted in the absence of war in realistic studies about the future.

Although violence and war came to be deemed illegitimate and not a critical focus, Dror avers that such an approach is wishful thinking as the future is vulnerable to all kinds of wars. Actors make deliberate decisions about war that are enhanced by the march of technology. The urge therefore to think that humanity is to withdraw from making war is unduly optimistic. It remains necessary to at least consider the probability of its manifestation and impact. Hereby theorists are able to identify problems in advance and assist in recommending measures to deal with it. As a social responsibility this demands from futures researchers to invest some of their time towards addressing hard issues of war and violence.²⁷

Kaldor and Robinson (1978) support the criticism of Dror that war is often avoided in Futures Studies in lieu of the notion that the fear of destruction is to prevent war. They argue however that war is not to be ignored or merely noted, but not further investigated, as it is not to be wished away. It represents a challenge that the field of Future Studies must come to terms with - it should not be studied only when it serves some subordinate purpose or need. War is too complex and destructive to be properly understood by opportunistic and intermittent research.

The views of Dror²⁸ and that of Kaldor and Robinson²⁹ are however from a period when military matters were prominent, but its future not topical. The extent to which the period following the Cold War extends this lack of focus, once again

²⁷ Y Dror, "War, violence and futures studies". **Futures**, Vol. 6, No. 1, February 1974, p. 2.

²⁸ **Ibid.**

²⁹ M Kaldor and JP Robinson, "War" in C Freeman and M Jahoda (eds), **World futures. The great debate** (London, 1978), p. 343.

underlines the perceived absence of the military focus in futures research and the need to attend to it. Within the past decade, questions of war, warfare and its future experienced a renewed challenge to the prevailing view of its use and utility. The period following 1989 once again became one of fundamentally questioning the future role and utility of war. This time round it became more complicated and demanded convincing arguments from defence decision-makers to defend national military forces for future war. Increased transparency, fewer resources, a clamour for new defence thinking and achieving sufficient clarity on military futures became an extended challenge to defence decision-making.

5. UPHOLDING AND STRENGTHENING THE MILITARY LINK IN STUDYING THE FUTURE

Bauman³⁰ posits that how we think about the future finds expression in our views of future war. If the future results from change and the latter is better understood over time by new explanatory theories, thoughts on future war need to adjust. The linear pattern of change, change unfolding through distinct stages and constant change as a result of evolution, all fostered analogous shifts in military thinking about the future unfolding of wars. Thinking about future war and piercing the uncertainty that shrouds it took on certain patterns to conform to:

- a search for enduring principles to transcend the ideas and effects of constant change;
- minimising or at least understanding the unpredictability of change;
- matching phases of development to warfare and fitting each phase to what was achieved during a preceding phase.

The above three tenets reflect some effort to confine and make future war more manageable or understandable. Concerning evolution and survival of the fittest, a rival view dawned on countries waging wars at different stages against different opponents to determine who was to survive.³¹ In part, this was also the pathway towards thinking that new realities emanating from change could not always be understood from past views. The latter supposed military change, but the real difficulties were bound up in understanding this change, as it remained obscure. Such uncertainty allowed for different interpretations to arise about how future war could unfold as different eras gave rise to different views on the matter.³² Hereby the difficult art of accurately forecasting future war became accentuated once again amidst the rising need to narrow down the scope of uncertainty.

³⁰ Beaumann, p. 40.

³¹ **Ibid.**, pp. 40-2.

³² **Ibid.**, pp. 43-4.

A further way to maintain the military link within futures thinking is to research and report on domain matters of future warfare. According to Clarke's **Forecasts of future wars** it is possible to infer that bringing future warfare into futures thinking is not a dramatic new endeavour. Keeping it in the realm of futures thinking and Futures Studies is perhaps more of a challenge. Over the period 1871-1914 for example only two years went by without tales of future war to warn society about what is possible and to stress the danger of laxity concerning new methods of warfare. This activity and its topics drew in military and non-military parties to partake in outlining wars of the future.³³ As war grew in posture, it became a constant focus of futurists.³⁴ War therefore increasingly featured side-by-side with alternatives such as more pacifist expectations and non-military outlooks upon the future.³⁵

Following World War One the practice of extrapolation found fertile ground as new means were developed which in turn opened up new possibilities to understand the future. Thus new publications as well as new anxieties about the future appeared.³⁶ As destructive futures and specifically those with a military content, became 'visible', it dawned that "man must live in peace or be destroyed" and therefore the need for pointing out future dangers.³⁷ This, in turn supports later views of Dror, Freeman and Jahoda that wars of the future is not to disappear by ignoring them or deeming them improbable.

On the matter of future the most important question facing futures research is to forecast war.³⁸ Although it is not nearly possible to forecast the totality of events leading to war, prevision makes it possible to identify some of them from the literature that appeared in the run up to World War Two. Kaldor and Robinson³⁹ for example defined the durability of future war in terms of the following:

"Preparedness for war, nowadays called defence, has long been accepted and (sic) integral part of the functioning of modern society....[and] ...War will remain a potential discontinuant for so long as states continue to prepare for it by equipping themselves with mass destruction weapons; but a future in which war-preparedness is not embedded may also be discontinuous with the present."

³³ IF Clarke, "The pattern of prediction 1763-1973. Forecasts of future wars 1871-1914", **Futures**, Vol. 1, No. 6, December 1969, pp. 553-4, 7.

³⁴ Clarke, 1974.

³⁵ Clarke, 1975, pp. 517-8.

³⁶ Clarke, 1970(b), p. 376.

³⁷ Clarke, 1971, pp. 71, 75-6.

³⁸ WI Boucher, "Attitudes towards forecasting in Political Science and Sociology. A comment on social forecasting" in WI Boucher (ed.), p 50.

³⁹ Kaldor and Robinson, p. 344.

Futures Studies, through its proponents, therefore has to face up to the continued possibility of war breaking out as long as states continue to prepare and equip for it.⁴⁰ This necessity is driven by war containing the threat of deep and massive destruction for societies. Even in contemporary times war and deep destruction manifest in spite of military conflicts not evolving along the continuum of large-scale wars and weapons of mass destruction. So called new conflicts at the beginning of the 21st century are greatly destructive and its format and targets promote destruction and ruin. The threat thus remains telling in a strategic environment where large-scale wars are no longer readily contemplated.⁴¹ It is therefore difficult to ignore or deny this phenomenon in the quest for order, security and peaceful futures. As long as alternative futures include chaos and order, insecurity and security, military and non-military factors, alternative military futures are to be considered part of the equation. Ignoring military conflict in futures studies therefore holds destructive future risks of its own.

Allowing the interplay of future war and futures that are more amicable inspired ideas about the future. The image of some future war destroying the dream of constant progress had attention flooding towards thinking about the future.⁴² Furthermore, the legacy of war demands some forecast of future events as well as the strategic environment and this is not irrelevant to efforts of upholding future peace.⁴³ According to Helmer⁴⁴ futures research is by default a branch of operations research that originated from assisting decision-makers with analysis and information during World War Two. Its utility was noted, as problems that decision-makers had to contend with became more long term and complex. This need and previous experience began to merge and the military connection realised to address the domain of future warfare.

The military connection in the shift or perceived shift is also visible in the views of Dator who pointed out the military need as a strong impetus to Futures Studies. Although largely from the perspective of what evolved in the US, Dator outlines the strong connections between the US military establishment and RAND (Research and Development), with Alvin Toffler of Tofflers Associates and the Institute for Alternative Futures as examples.⁴⁵ Implied in his comments is also the number of retired military personnel shifting to these futures institutions and

⁴⁰ **Ibid.**

⁴¹ R Mandel, **The changing face of national security** (London, 1994), p. 36.

⁴² IF Clarke, "The pattern of prediction. The future without futurologists 1770-1870", **Futures**, Vol. 19, No. 3, June 1980, p. 244.

⁴³ IF Clarke, "Almanac of anticipations", **Futures**, Vol. 17, No. 2, April 1985, pp. 180-1.

⁴⁴ W Helmer, "An agenda for futures research", in Boucher, p. 244.

⁴⁵ J Dator, Hawaii University, response during interview via e-mail dated 8 December 2000.

working with and for the military. Dator even argues that a preoccupation with the future is perhaps more evident in the military domain than in the civil sector. It is however not only in the USA that the futures-military connection is so apparent. Other prominent powers also display such connections, but not as prominent and pervasive as found in the USA. One such power is the current Commonwealth of Independent States (CIS) and the former USSR.

6. ENFORCING THE MILITARY-FUTURES LINK: THE CASE OF THE FORMER USSR AND CIS-RUSSIA

A chapter by Boucher called "Forecasting when the future is known: The case of the Soviet Union", outlines elements of the futures-military connection in the former USSR. Cold War Russian perspectives stated the future as a clear and uncluttered outcome and war as a pathway for achieving it. The foreseen future in fact seems to be utopian in kind with instruments of law and order, including the military, to disappear at some future point in time.⁴⁶ Such a future society without any need for government, police and soldiers can be construed as a quite optimistic outlook upon the future. What is however different from the traditional utopian view is that future became a catalyst for achieving it.

Nonetheless, for some period of time wars of different kinds were judged to be inevitable in actualising the preferred future.⁴⁷ Russian theorists who were involved in researching and 'discovering' the future also shared this image of the future. Studying the future also became more accentuated after the Russian showdown with the West over Berlin and Cuba and the alarm of the military at their inability to compete symmetrically.⁴⁸ War nonetheless remained a telling mean to effect the desired future outcome and attracted or demanded much attention and resources to promote the clarity of this difficult domain and preconceived future.

A more visible connection between the Russian military and futures research is observable in Soviet research during the Cold War. It included scenarios of possible future conflict, requisite mixes of forces related to the budget and military-economic matters as well as technological forecasting concerning qualitative weapons changes. The Russians preferred a continuous and systematic process of politico-military forecasting and demanded from research groups to develop predictive techniques to assist in military planning.⁴⁹ However, not only civilian

⁴⁶ WI Boucher, "Forecasting when the future is known. The case of the Soviet Union" in Boucher, pp. 138-9.

⁴⁷ *Ibid.*, p. 173.

⁴⁸ *Ibid.*, pp. 148-9.

⁴⁹ J Erickson, "From prophecy to prediction. The Soviet Union, the future and futures research", *Futures*, Vol. 9, No. 4, August 1977, pp. 337-8.

institutions and their 'futurists' addressed future Soviet military affairs and issues. Military theorists also contributed to Russian military futures over an extended period of time.

Future War (1898) by Ivan Bloch is an early example of a study on military futures and although a civilian, he spearheaded Russian military interest in the future of war.⁵⁰ Bloch quite accurately outlined certain features of future war that later found meaning in how a stalemate developed and bogged down military forces during World War One. Bloch's work was followed by a 1928 study under Tukhachevsky on forecasting future conflict for the USSR that fielded the authoritative Russian operational doctrine of Deep Operations and the idea of mobility.⁵¹ Following this a third Russian study of future war (**Military Strategy, 1964**) under Sokolovski appeared. Sokolovski addressed the question of military strategy in the nuclear age and a scientific understanding of the nature of future war. According to Sokolovski an understanding of new demands of war was of utmost importance to preparing armed forces and the country for a particular future.⁵² The fourth exercise in future war took place by the 1980s under Ogarkov. It followed on the debate about rapid technological innovation and new weapons whilst its focal points were continuity or radical change regarding future war. The latter represents an important break with previous Russian studies on future war for it subordinated military-technological futures to politico-military matters.⁵³ One of the latest Russian proponents of war and the future is Gareev whose work (published as **Future Warfare. If war comes tomorrow**) addresses military futures after the disintegration of the former USSR, the loss of its former republics and contains a strong Revolution in Military Affairs (RMA) emphasis.⁵⁴

For the Russians forecasting, foresight and the science of future war were tightly woven into the skills of commanders, considered a lever to overcome opponents and for them to cope with sudden or dramatic changes concerning military matters.⁵⁵ The Russian outlook on war was also strongly directed by the view that "(i)n its essence, military science is the science of future war". Although the focus shifted away from rigid party futures outlooks after the ascendance of Gorbachev, outlooks upon alternative military futures still had to cope with futures after the

⁵⁰ JW Kipp, **Forecasting future war. Andrei Kokoshin and the political debate in contemporary Russia. Andrei Kokoshin: Scholar and bureaucrat.** (Fort Leavenworth, January 1999), p. 4.

⁵¹ **Ibid.**, p. 7-8.

⁵² Sokolovski, "The nature of modern war" in FN Trager and PS Kronenberg (eds), **National Security and American society, theory, process and policy** (Lawrence, 1973), p. 100.

⁵³ Kipp, pp. 10-1.

⁵⁴ **Ibid.**, p. 13.

⁵⁵ JW Kipp, **The Russian Military and the Revolution in Military affairs. A Case of Oracle of Delphi or Cassandra** (FMSO paper presented at MORS Conference, Annapolis, Maryland, 6-8 June, 1995), p. 5.

demise of the USSR and a new role for the Russian military.⁵⁶ This opened up a second front for those dealing with alternative Russian military futures as the military lost ground and new competitive and toned down views such as those of Gareev entered the debate.

7. ARGUMENTS FOR ENDURING MILITARY FUTURES

Forecasting and building scenarios about the future without including military events and developments are judged to be inaccurate and even dangerous. It is thus also necessary to explore the probabilities and consequences of alternative political and military futures in forecasting. Too many imbalances in this regard have potential military consequences that cannot be ignored.⁵⁷ This remains important as the lingering phenomenon of war still upsets or threatens to upset favourable views of the future.⁵⁸ Although contemporary futures theorists tend to display some aversion to war, the enduring nature of war is visible in the following view of Colin Gray depicting the difficulty of escaping the reality of a world system tainted by war and its continuous or recurrent demands:

"On the one hand is the tradition of the scholar who struggles to reform, or revolutionise, the warprone, semi-anarchic world system of international relations. On the other hand is the tradition of the scholar who tries to work with that war-prone system, and who seeks to improve the performance of his side."⁵⁹

Demands for military security are not always prominent, but they always return - even if only cloaked in a new garb.⁶⁰ This view is closely related to the certainty that some part of humanity at different times and places continue to experience bad times that tend to re-occur and invoke the need for military coercion or the threat thereof. Strategic history in no way indicates that the future should be viewed in undue optimistic terms and neither posits the demise of military coercion. The latter's future role and use are perhaps to be modified by adjustments to the ways and means that are utilised, but not its purpose. It is a fallacy to confuse dramatic changes in the ways and means with the future purpose or need for military coercion.⁶¹ The purpose of military coercion is an enduring concern and not to be

⁵⁶ **Ibid.**, p. 6.

⁵⁷ E Fontela, "From prophecy to prediction. Political and military forecasting". **Futures**, Vol. 10, No. 2, April 1978, p. 90.

⁵⁸ Clarke, 1978, p. 72.

⁵⁹ C Gray, **Modern strategy** (London, 2000), p. 9.

⁶⁰ **Ibid.**, p. 362.

⁶¹ **Ibid.**, p. 364.

entangled with dramatic changes influencing instruments and ways to direct or achieve policy objectives.

The Tofflers predict that as a society changes, it takes its military along. The continuous shift of society into the future knowledge domain is therefore not exclusive of its military institution.⁶² The latter is hereby also subjected to the realm of intangibles as the relationship between tangible and intangible methods of destruction is adjusted. This is bound to transpire from the movement of knowledge together with ideas, innovation, values, imagination, symbols and imagery from a peripheral to a dominant and central position.⁶³ Future military forces will therefore have to adjust and contend with new intangible and virtual provocations in addition to traditional challenges and structure their alternative futures along these new pathways, rather than prepare for their demise.

Military futures also need to be reconciled with shifts in outlooks on the use and utility of military coercion. States need to harmonise their traditional war fighting capabilities with a changing strategic environment where brute strength and firepower are fading in the face of demands for small, flexible and rapidly deployable capabilities as were tested by the US in the 2003 Second Gulf War. At the global level burden-sharing and jointness are becoming increasingly important for national military forces in order for them to cope with the rise in threats and vulnerabilities that defy the state-paradigm. The latter is again illustrated in the newly established African Union (July 2002) and the demand for new defence thinking to support its ideas of co-operative alternative military futures.⁶⁴ National defence budgets are on the decline as well whilst the complexity of threats are increasing and simultaneously defying traditional and unilateral solutions. Defence decision-makers are compelled to balance global and regional demands with those of the national level as they face increasingly complex military futures.⁶⁵ As this complexity grows, probing the future becomes all the more important in order to balance or design trade-offs between local competitive and global co-operative perspectives of the military's future.⁶⁶

A further future military matter is what Mandel refers to as that of "(w)ar and the instruments of force". The causes of war are increasingly shifting to dissatisfaction with political, economic and social change. This becomes infused with

⁶² A and H Toffler, "The new intangibles in Arquilla" in J Arquilla and D Ronfeldt (eds), **In Athena's camp. Preparing for conflict in the information age** (Santa Monica, 1997), pp. xiv-xv at <http://www.rand.org/publications/MR/MR880/contents.html>.

⁶³ **Ibid.**, pp. xiii-xiv.

⁶⁴ S Nyanda, Restructuring the SA military: Between domestic imperatives and external obligations (Paper by the C SANDF delivered at ÁGM of SAIIA, Wits University, 28 November), p. 10.

⁶⁵ Mandel, pp. 36-7.

⁶⁶ **Ibid.**, p. 49.

personalities, ethnic identity and inequality as well as a rapid increase in dissatisfaction and turmoil. Little of the traditional and predictable political, ideological and territorial incentives to direct future military planning and actions are to be assumed.⁶⁷ As this uncertainty grows, it clutters the future and though not primarily military in kind, containing and suppressing it calls for some form of military coercion.

The nature of future war is prone to change as well. It is both an activity of high technology and swiftness for some, whilst at the other end of the spectrum it is prone to degenerate into a fray where peace and war become indistinguishable. This goes for the protagonists and civilians as well and, as in Africa, the very objective of why fighting is taking place in the first case.⁶⁸ As for instruments of force, weapons profiles begin to span a spectrum from nuclear/chemical/biological to devastating conflicts fought with old technologies and even rudimentary homemade artefacts. The combatants reflect a similar spectrum that threatens a future where professional militaries are bound to lose control over the destructive instruments of force.⁶⁹ These observations invoke the earlier fears of Bloch and Nezmanov that the military may begin to lose its grasp on what war is to become, but not only due to technological advances.⁷⁰ Traditional national military forces therefore risk becoming outdated and redundant in future. Their traditional operating domains stand to disintegrate or become inoperable if they do not migrate alongside the changes reconfiguring their future-operating domain.

The danger of potential redundancy is accentuated, as the need for future military coercion is not to fade in a corresponding manner as post-modern or new wars, according to Kaldor, continue to loom. This upholds the need for appropriate military coercion, albeit in some dramatic new profile or posture. In terms of their goals, methods and financing, as opposed to the so-called old wars, new wars are on the rise and therefore part of the future and of military futures in particular.⁷¹ The enduring need for future national military forces is therefore not to disappear and the risk is rather one of inappropriate adjustment towards new military futures.

⁶⁷ **Ibid.**, p. 50. FN Trager and FL Simonie, "Introduction to the study of national security" in Trager, Kronenberg, pp. 38-9.

⁶⁸ Mandel, p. 51, DM Snow, **Distant thunder. Patterns of conflict in the developing world** (2nd ed, New York, 1997), p. 122.

⁶⁹ Mandel, pp. 52-3.

⁷⁰ Kipp.

⁷¹ M Kaldor, **New and old wars. Organised violence in a global era** (Stanford, 1999), p. 6.

8. ALTERNATIVE MILITARY FUTURES FOR THE 21ST CENTURY

Present outlooks upon alternative futures also display a propensity for preferences that in some way promote retaining the military option. Listing alternative futures that are regularly set forth, portrays the implicit or explicit presence of one or more alternatives that imply a need for military coercion, its threat or mere presence. It is also possible to paint a predominantly pessimistic and negative future as in **The coming anarchy** by Robert Kaplan or the inevitable negative and war-fighting outcome as found in **Clash of the civilisations** by Samuel Huntington. These alternatives mostly tend to support the pessimistic or destructive side of the future and an established role for future military forces.

The undue optimistic futures of earlier times and the presumed decline of military coercion that followed the demise of the Cold War reflect the dangers of marginalising future war. Both preferences proved to be overly optimistic for both wrongly assumed the demise of war and its institutions. However, in line with the aim of Futures Studies and the practice to set out alternatives, the reigning trend is to include pessimistic and conflict-prone future alternatives. Examples of such alternatives as the downside to more optimistic and utopian type alternatives are as follows:

Table 2: Illustrating pessimistic alternative futures.

Project	Leading entity or institution.	Pessimistic alternative(s)
1. SPACECAST 2020	US Air War College, Futures Group.	Rogue's world Mad Max's incorporated world.
2. Alternative futures AD 2000-2025.	WC Clemens, Boston University.	Fragmented chaos
3. Future revolutions: Unravelling the uncertainties of life & work in the 21 st century.	David Mecer.	Dark fears.
4. Scenarios for the new war: Post September 11, 2001.	New York University Interactive Telecommunications Programme.	Black market world, Gloom and boom, An empire stretched too thin.
5. The next South Africa.	Francis Fukuyama	The Lebanon Option
6. Southern Africa 2020.	Institute for Global Dialogue, Friedrich Ebert Stiftung, representatives from Southern Africa.	Danger, Ingozi Kotzi, Behind the slow tide.
7. The September Scenarios.	COSATU.	Desert.

8. The World and South Africa in the 1990s.	Clem Sunter (Anglo American).	The low-road - (Cautionary tale and Wasteland)
9. The Mont Fleur scenarios.	Pieter Le Roux and multi-disciplinary team.	Ostrich & Lame Duck scenarios.
10. Scenarios Europe 2010.	European Commission Forward Studies Unit.	Turbulent neighbourhoods.

- 1 - Air University, The world of 2020 and alternative futures. Maxwell AFB, USA.
- 2 - WC Clemens, WC 2000, Alternative Futures AD 2000 - 2025, Boston University, October 5.
- 3 - D Mecer 1998, Future revolutions, Orion Business Books, London.
- 4 - NYU, 2001, Scenarios for the new war , Interactive Telecommunications Programme, September 28.
- 5 - F Fukuyama 1991, The next South Africa SA International October 22/2.
- 6-9 - 2002, Southern Africa 2020. Five Scenarios, Johannesburg, June.
- 10 - C Bertrant et al, 1999, Scenarios Europe 2010, European Commission Forward Studies Unit.

Moving from mere optimistic linear views of the future to alternatives inclusive of the pessimistic implies a twofold role for the military factor as promoter as well as opponent of destructive futures. Military related developments feature quite central to arguments why the future was not to be viewed as only utopian. The extent to which pessimistic alternatives are formulated and form part of accepted present day practice to outline or approach the future, paves the way for arguing that designing future military options is not outdated thinking. It thus becomes necessary to consider military futures when contemplating how to address the pessimistic alternatives outlined in the examples stated in Table 2. Pessimistic futures are prone to give rise to dissatisfaction and eventually conflict to which the solution might well be co-located in the access to military coercion or the threat thereof. To this end, proper coercive forces are to be maintained to offset pessimistic alternatives from becoming primary agents directing the future.

Pursuing this line of thought raises the need to ponder future militaries within the realm of alternative military futures. If the future is characterised by increasing change and complexity, military forces are to face these matters in those futures they are expected to deal with. This raises the necessity to gain some understanding or insight into the dynamics that guide or challenge the evolvement of national military forces of the future. This is an ungainly process as outlined by a US Secretary for Defence on the use of special forces on horseback to guide modern

attack aircraft with precision guided munitions onto a Taliban target in Afghanistan in preparation for a cavalry attack by special forces and Afghans.⁷²

A more direct way to argue the case for military futures is to oppose the claim that war is obsolescent. History does not support the absence of war and neither recent claims that it has reached its final stage or that perpetual peace is about to break out.⁷³ Military forces are not obsolete, but have to face new futures that are complicated by the RAM - Revolution in attitudes towards the military. This is a concept used by Black to point out new realities demanding appropriate adjustments from national military forces that have to accommodate these shifts in forging their own futures.⁷⁴ RAM concerns shifts that emanate from a decline in a number of domains. One, the willingness to serve in the military. Two, feminism that is resetting the outlooks on military culture via a reconceptualization of masculinity. Three, military autonomy being penetrated and directed by public interest and four, a decline in conscription that simultaneously underlines and supports the professionalization of war to better cope with the rising sophistication of its ways and means.⁷⁵

The above difficulties are not restricted to Western outlooks, but are challenges for Oriental and Third World national military forces as well. China, Japan, South Africa, Thailand and Chile are but a few examples of national military forces striving to adjust to a new future strategic environment. China has to make choices concerning its move towards big power status and how to take along its military on this path towards a future information age military by 2020.⁷⁶ Japan has to decide whether it is to rearm and play a wider future role in the region and extend its military-strategic reach accordingly.⁷⁷ South Africa has to adjust its military forces to reflect political change and its commitment to new initiatives as demanded by national policies concerning the New Partnership for Africa's Development (Nepad) and the African Union (AU).⁷⁸ Chile and Thailand have to define their modernisation towards the future in the perceived absence of future external threats. The latter three also have to rid themselves of their past legacies and face competing domestic demands for funding in the face of cries demanding a peace

⁷² D Rumsfield, "Transforming the military", *Foreign affairs*, Vol. 81, No. 3, May/June 2002, p. 22.

⁷³ J Black, *War in the new century* (London, 2001), pp. 1-2.

⁷⁴ *Ibid.*, p. 9.

⁷⁵ *Ibid.*, p. 10-12.

⁷⁶ M Pillsbury, *China debates the future security environment* (Washington DC, 2000), p. 11.

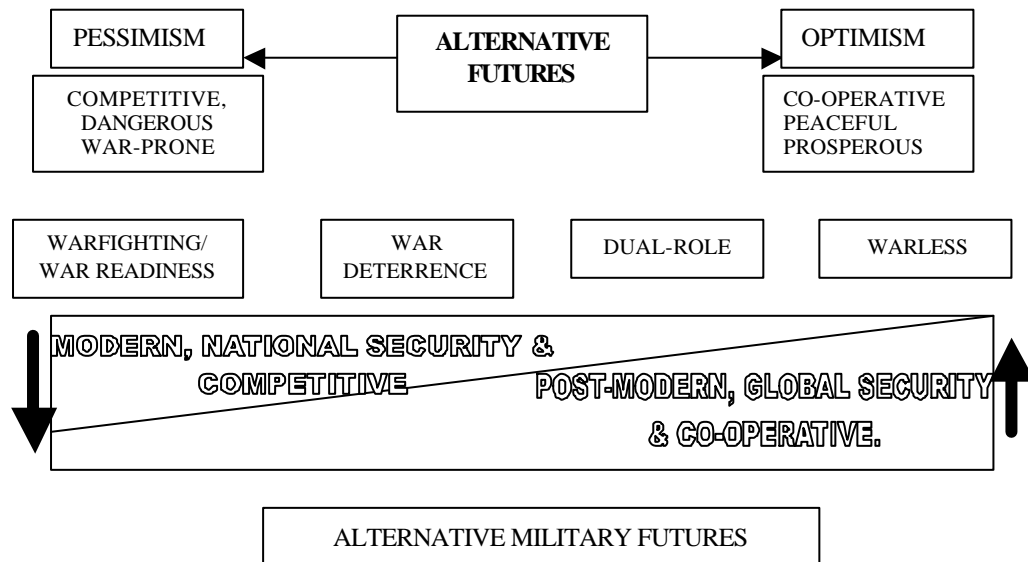
⁷⁷ Stratfor, "Will Japan re-arm?", *Stratfor Strategic Forecasting*, 1 May 2001 at <http://www.stratfor.com/siu/archive/052901.asp>

⁷⁸ RAS Hauter, Rear Admiral, Chief Director Strategy and Planning SANDF. Interview at Defence HQ Pretoria on future strategic matters and change facing the SANDF, 1 August, 2002.

dividend.⁷⁹ In total Demchak refers to one third of the world's states that are intending to modernise their militaries electronically. This, in turn, points to their future intentions and to have a future military option that coincides with the information wave that is to characterise future warfare to a larger or lesser extent.

Alternative military futures can be staggered along a continuum of pessimism to optimism with each reflecting a particular military alternative. This is illustrated in the following diagram:

Diagram 1: A continuum of alternative military futures.



The above illustration (Diagram 1) represents alternatives emanating from views by Moskos (1994) and Ashkenazy (1994) and is to be read in conjunction with the preferred type of future society that is to manifest. It posits that as societies change towards the pessimistic or optimistic end of the continuum, appropriate military alternatives accompany these shifts. The alternatives reflect that the strive towards or achievement of the optimistic end of the spectrum does not suppose the demise of a future military alternative in that it becomes inappropriate or to be dismissed. It rather reflects adjustments with its role, profile, staffing and resources assuming

⁷⁹ CC Demchak, "The RMA in the developing world", *National Security Studies Quarterly*, Autumn 2000, p. 3 at www.georgetown.edu/sfs/programs/nssp.

different parameters than those supposedly found towards the opposite end of the continuum.

Moskos is of the opinion that the posture, funding, staffing, officer profile, recruitment patterns and organisational roles tend to demarcate domains of the shift along this continuum.⁸⁰ Asherkenazy interjects democracy, transparency and certainty principles that dual role militaries promote amidst the shift to the optimistic side of the continuum. These views suppose a decline in the propensity and need to persistently be ready to fight destructive wars as promoted by the pessimistic warfighting domain of the above spectrum.⁸¹ It is thus possible to support humanity's alternative futures with appropriately designed alternative military futures as opposed to the idea that military institutions are cast into an immovable, destructive posture and thus relevant to some and irrelevant to other alternative futures.

9. CONCLUSIONS

This paper seeks to establish and uphold the link between studying the future and the relevance of military establishments to those futures pursued by humanity. A fundamental tenet is that if the future becomes all the more important as rapid change and complexity enter the picture, military futures need to be included for they are equally complex and quick-changing. Ignoring alternative military futures as being inapplicable is therefore challenged, as it is unduly optimistic to think humanity is to forfeit their utility.

The military link in predicting the future and societal change is visible from the historic origins of the futures field and in particular the early belief that military man has a role to play in creating a preferred future. From these early beginnings originated the utopian outlook on how the future might evolve. This idealistic and somewhat linear view changed as it dawned that war represents a discontinuity in progress and therefore needs to be included when considering the future. The idea of the future thus shifted from a linear projection of the present 'good life' to one of alternatives. These alternatives had to include pessimistic and even destructive futures as the reality of the latter increasingly influenced the international scene of the late 19th century. As a result the future became all the more viewed as a necessary field of study and not a mere informal activity for it included matters that promoted either great prosperity or massive destruction.

⁸⁰ CC Moskos, "Armed forces in a warless society" in L Freedman, *War*, (Oxford, 1994), p. 136.

⁸¹ D Ashkenazy, (ed) *The military in the service of society and democracy. The challenge of the dual role military* (London, 1994).

The prominence of military matters should be judged against their destructive potential and thus their continued presence in earlier futures thinking. This eminence declined over time and drew criticism since the absence of war was judged more a reflection of preferences in studying the future and not the disappearance of the phenomena of war and related military factors and events. As military phenomena did not disappear, upholding the military-futures link remained a lingering, but somewhat marginalised imperative.

The establishment of the military-futures link raises the question as to whether the recent decline in attending to military futures is not the result of difficulties to convincingly argue its future role and content and thus reflecting a fallacy rather than a de facto decline. The need therefore remains to convincingly argue for its continued role within a different future paradigm and not one of warfighting or nothing. The preference to ignore military matters nonetheless drew criticism from individuals such as Dror and Fontenel for they argued that military futures and war are appropriate fields of futures research. Although future war and military matters seemed to yield some of their former attraction, arguments for their continued relevance are to be found. Particular think tanks and theorists in the futures field maintain that war has not been replaced by perpetual peace. Governments still prepare their national military forces to operate in a future strategic environment - albeit along somewhat different ways than in the past.

No credible indicators point out a decline in the use of or threat of the military option, although a preference for the latter is perhaps more visible. This does not imply military business as usual, but quite the contrary. An important challenge facing the study of alternative military futures is to be convincingly clear about future needs, typology of future military forces and their future roles. Credible arguments about these matters are necessary to persuade present day societies about their future need for military forces. It therefore becomes essential to argue persuasively that it is dangerous to outline alternative futures for humanity and ignore the plausibility of war. Alternative military futures are therefore rather about refining the military option for the future and its appropriate future roles than extending war into the future as an immutable and unavoidable future dilemma. This need was illustrated in the way that the former USSR and CIS Russia pursued this pathway and adjusted the prominence and need for the military option over time.

If national military forces do accompany their societies into the future, they cannot avoid the changes that society has to confront. If they become outdated, they will become outmoded and forego their future utility to uphold optimistic futures and assist in fending off pessimistic alternatives. The need thus becomes obvious for

military forces to change for the sake of their own futures and that of their societies or risk rejection and become a destructive future problem in itself. From a futures perspective the changes and challenges are both about its relevance as well as its appropriate use at some future point in time. This imperative underlines the necessity to investigate the dynamics that underpin adjustments and shifts of national military forces into the future. As is illustrated in the above discussion, alternative military futures present options and the flexibility to accompany their societies as they progress or are forced towards less optimistic futures. These alternatives are however not self-sustaining or obvious phenomena. They result from and are refined amongst others by appropriate scientific research within Futures Studies to promote the future societal and military interface.