

## The Changing Character of War in the Information Age: The Case of the British Next Defence and Security Review

Anthimos Alexandros Tsirigotis

Are future wars among states going to be waged in cyberspace and not in the air, sea or ground? This paper argues that cyberwarfare is wrongly understood as the use of the Internet for military purposes and that, instead, it should be conceived as a new discourse on war. Cyberwarfare as discourse can be traced back in time well before the advent of cyberspace and it is about a whole universe of new meanings constructed around old ideas such as defence, security, threats and military force. By applying Corpus Assisted Discourse Studies in a corpus of the British national defence and security policies for the period 1957-2013, this work scrutinises how the semantics of force have changed through time. Accordingly, it was found a diachronic change in the semantic preference of the lemma *force*. Gradually, force stopped being associated mainly to military assets and its meaning changed so as to refer to the British ability to project its influence in the world. Cyberspace brings about changes in future wars because meanings around war are now constructed differently. This paper opens up the debate for a new research agenda on cyberwarfare which is discourse orientated.

### 1. Introduction

The swift and abrupt introduction of cyber capabilities into military operations has created conflicting arguments concerning their potential for changing the character of war. The stabbing question of whether or not cyberwarfare is a probable scenario has become a tug-of-war between those who consider that it will take place and those who reject it. *Cyber* has become the buzz word of at least the last decade being added as a prefix to practically every human activity. Upon the explosion of the Internet, fraud was instantly converted to ‘cyber fraud’, crime to ‘cyber-crime’, weapons to ‘cyber-weapons’ and war to ‘cyberwarfare’. The dynamics of the new medium was as influential as it self-imposed its lexicon on a wide series of activities. This practice was also adopted by social scientists who argued that world is heading to a new era during which Information Communication Technologies (ICT) have a catalytic role to play in ‘sanitising’ societies.

In war studies, Roennfeldt (2011) explains that the despotic influence of Clausewitz does not leave enough space for a new interpretation of the phenomenon of war. Meanwhile, some flamboyant titles such as ‘Preparing for a digital Pearl Harbour’ (Schwartz 2007) and ‘Preparing for a digital 9/11’ (Greenberg 2012) have created a war atmosphere in the cyber domain and coined cyberwarfare as the new bloodless way for states to wage wars. The often cited cases of Estonia (2007), Georgia (2008) and Stuxnet (2010) came to further raise these aspirations. In this way, the debate around the issue of cyberwarfare ended up being discussed as a completely new way for waging war according to which states do not have to use their traditional weaponry since attacks through cyberspace can have the same results. On the one hand, academics with an interest in war and strategy raised their voices against the abuse and misuse of the term *war* for describing a series of malicious activities through cyberspace and they explain “why the sky will not fall” (Gray 2013: 42). On the other end of the spectrum, an emerging school of thought argues that within the new political context, as

defined by the new communication technologies, war and military power need to be conceptualised afresh.

In line with critical thinking<sup>1</sup>, this paper does not conceive cyberwarfare in terms of technology; cyberwarfare is not about waging war through cyberspace. In the following lines, therefore, the purpose is, firstly, to explain why cyberwarfare should be conceived not in reference to its technology but, instead, as discourse that constructs the reality of modern wars. Cyberwarfare as discourse emerges gradually as new meanings are constructed around *defence, security, power* and the *identity of threats*. But more, how military force is understood is a core issue of this new discourse. Accordingly, the second objective of this paper is to scrutinise the diachronic semantic changes of *force* in a corpus compiled by the British national defence and security policy documents published from 1957 to 2013. By applying Corpus Assisted Discourse Studies (CADS) (Partington et al. 2013) it was found that, in the British context, force has lost its 'pure' military semantic preference; now, force is more about how to project the British influence in the world, which was not the case some decades earlier.

## 2. Literature review

In 2011, after the milestone cyber attacks against Estonia (2007), Georgia (2008) and an Iranian nuclear plant (2010), some scholars tried to bring the debate about the so-called cyberwarfare back on the right track by emphatically arguing that "cyberwar is not coming" (Betz & Stevens 2011: 88) and that "cyber war will not take place" (Rid 2011: 6). Betz and Stevens (2011) accentuated the marginal, if any at all, strategic potentials of cyberwarfare as a political means for the states to impose their will on their adversaries mainly due to the attribution problem. An orphan attack, namely an attack stemming not from an internationally identifiable political entity, is bereft of any power to bring political results to the advantage of its perpetrator. They acknowledge, however, the contribution of cyber weapons to serve as an accomplishment to the hard power of the kinetic weapons. In essence, this point of view supports that the new capabilities offered in cyberspace will be adjusted to the existing war paradigm and that, as much as revolutionary or spectacular they may seem, ultimately they will be assimilated by the geography of war. This school of thought revokes the literature concerning the sea changes that the air power was supposed to bring about for quick and decisive military victories (Rattray 2001) and which, in the end, proved to be wishful thinking. Similarly, Betz and Stevens (2011: 89) contend that cyber power does not bring any rupture with the past in the strategic thinking, for "technology cannot make up for all the weaknesses of strategy; often what it gives with one hand it takes away with the other".

Rid (2011) rejects cyberwarfare as the next war paradigm because the force that cyber weapons appear to have is neither violent nor instrumental and political in nature. He also rejects the utility of cyber attacks because they exert force only through a "mediated sequence of causes and consequences" (p. 9) and not straightforwardly, let alone that, by now, there have not been any considerable life losses due to any cyber attack. He further accentuates their indirect and unqualified nature by explaining that they lack the political authority needed in order to be converted from sheer disturbance to useful political means of coercion (Rid 2013). Thus, they are bound to remain unqualified, or as Liff (2012: 425) dubs

---

1 In war studies, critical thinking underscores that the reality of wars (how they are conducted) is constructed within discourse. In contrast to realism, to study war phenomenon critically means that it is not followed a linear way of thinking that would try to bring all the possible parameters of war into a single equation. Critical thinking asks different questions which intend to probe why, in different eras, people think of war in a specific way; belligerents' identities, the reasons for resorting to war or how power is understood are malleable meanings constructed within discourse (Lynn 2003; Porter 2009; Barkawi & Brighton 2011).

“as a destabilizing weapon, although warranted, may be exaggerated”. In that way, he defends the enduring nature of war (Gray 2010: 15-53) in the global Information age which still remains a mixture of passion, chance and rationality.

Nevertheless, an emerging school of thought proposes that the new reality changes the way in which war and military power should be conceptualised. Karatzogianni (2006) was among the first researchers to start talking about cyberspace as a new political space. Its attributes define the new types of conflict which, as she argues, takes two forms: ethno-religious and socio-political. In what ways this non-dimensional space alters also the military conflict was under examined until recently.

Stone’s research examines in what sense attacks through the new medium may serve war objectives (2013). He rejects Rid’s (2011) argument that violence has to be lethal if it is to have any war value. Stone argues that the military value and impact of any attack, whether cyber or not, on the outcome of war should not be evaluated on the basis of how much lethal it is. He underscores that the western liberal way of war rests on exactly this idea, namely on the disassociation of force, violence and lethality. In this triangular scheme, Stone (2013: 106-107) believes that cyber weapons have potentials in the axis of force – with violence playing the role of ‘violence multiplier’ even without exerting any physical force. Within this framework he concludes that cyber attacks ‘could constitute acts of war’.

What the above mentioned contributions show is that cyber reality or what is called as the global Information age (Simmons 2013) changes, first and foremost, the way that people now talk and think about military power and war. As far as power is concerned, actors in cyberspace are powerful depending not on what material resources they possess but on their ability to promulgate their own images and narratives (Kim et al. 2012). Betz and Stevens (2011: 50) name this new conceptualisation of power ‘productive cyber power’ and define it as “the constitution of social subjects through discourse mediated by and enacted in cyberspace, which therefore defines the ‘fields of possibility’ that constrain and facilitate social action”.

Roennfeldt (2011), in line with Betz and Stevens (2011), argues that there is a need to reconceptualise war in what he dubs *Productive war*. The latter is in stark contrast to the compulsory power of kinetic war and, accordingly, modern political entities become powerful in ‘discursive battlefields’ and not in war battlefields. Roennfeldt (2011: 46) proposes the disassociation of power with violence and he argues that “power now rests on legitimacy, [and therefore] communication has replaced force as the decisive means in power politics”. These non-territorially defined battlefields are created in what Roennfeldt calls the ‘local centres of power’, in which anyone is empowered by “producing the discursive effects that reproduce and modify discursive patterns of domination” (2011: 56).

Singh (2013) further explains the theoretical foundations of this new way to conceptualise power. He argues that ICT are powerful because they can frame new identities and impose new meanings in world politics. This is how he defines ‘meta-power’ which is not traced on present time but, instead, on precedent time frames. People interact in actual time through cyberspace and, in essence, what they do is to work collectively for defining the conceptual social frameworks of the future. This is why ‘meta power’ precedes ‘instrumental power’. He explains (Singh 2013: 7) that “when nation-states fight territorial wars, similarly the meaning of a nation-state or security understood in territorial terms has been *imagined* through prior interactions”.

Within this new political context the utility but also the nature of war may now become a contested issue as well. To that point, the findings of the committee on the use of force ordered by the International Law Association (2005-2010) offers useful insights (O’Connell 2012). Its objective was to report on how war is defined in international law. The main finding of the Committee is that war is an ill-defined term in international law and that it is now replaced by the term armed conflict. It is worth mentioning here the tendency in international law to define more restrictively the exertion of violence in world politics. The

term war is now considered to be a rather vague one and, instead, there is a tendency to elaborate a stricter law framework which meticulously describes the exertion of physical violence in international relations.

To conclude, recent research on the changing character of war in the Information age is directed towards how the new reality of cyberspace defines the way that societies now frame war phenomenon. This is more about how cyberspace changes the way states perceive military power, how they define its purposes and utility and also how they implement it. Hence, cyberwarfare is not about whether or not cyber weapons will finally manage to coerce an opposing army or if they will substitute traditional warriors in the land, sea and air. Cyberwarfare is about a universe of new meanings constructed around war; it is a new discourse that emerges in the conduct of modern wars. The following section explains why it is necessary to disassociate cyberwarfare from its technology and conceive it discursively.

### **3. Cyberwarfare as discourse**

Critical realism offers the philosophical and theoretical prism for this work. In line with critical war studies, it is acknowledged that in the core of war always lies combat which is inherently violent. Nevertheless, its character is reducible neither to its technologies nor to its combats since they are constructed within discourse. Technology as a driver for change in the character of war is not considered here to have enough analytical power, for its development does not follow any predefined pattern, but is socially constructed (Jasanoff 2004). The use of the cyber dimension for the purposes of war does not suffice to explain why its character is changing. Technology, before taking a specific shape was, in first place, conceived as a meaning in the real world. Change, therefore, does not stem from the technology of weapons, but from the way that, in each era, war is problematised (Dillon and Reid 2009). How it should be conducted, for what reasons and who the enemy is; these are malleable meanings around which a specific war paradigm is given shape.

This idea is essentially what lies at the heart of the cultural turn and Lynn (2003: xix) explains that “the essential value of using a cultural approach in military history is precisely in distinguishing the mental from the material”. Technological determinism has resulted in reducing war to the fighting power of its weapons, and its epistemology to the analysis of its battles since it is there that the power of weapons is manifested. The discourse of war was considerably neglected until the cultural turn was proposed as a new research philosophy in war studies and military history (Lynn 2003; Porter 2009; Barkawi & Brighton 2011; Black 2013). Poststructuralism and critical realism inform the cultural turn in a way that now war studies and military history direct their research efforts more towards the understanding of how discourse creates the reality of war, while acknowledging that war is always about fighting. Barkawi and Brighton (2011: 136) underscore this turning point away from the supremacy of battles in war studies and they offer a more thorough view of the ontology of war:

It is an ontology that retains the power of war-centered analysis without limiting inquiry to a focus on war fighting. We hold on to the ontological primacy of fighting, but wrest it from the instrumentality its historicity demands.

To conceive cyberwarfare as discourse and not as a new technology which is simply applied to the conduct of modern wars determines how the object of research is constructed. Now, changes are traced in the realm of ideas, namely in how perceptions and beliefs are constructed and not in the “capacity for employing force” (Black 2013: 299). Accordingly, the technology of weapons, how they deliver their destructive force for the purposes of war, the construction of the identity of enemies, the objectives for deploying armed forces, the ethics of war and even victory and defeat; they are all constructed within discourse.

Among all these new meanings, a central one is how military force has been understood in different periods of time. The semantics of force, i.e. new meaningful constructions around what kind of force the UK needs and for accomplishing what purposes, along with all the above semantic changes compose the new discourse on war or what is commonly dubbed as cyberwarfare.

#### 4. The semantics of force

Military force was not understood in the same way throughout the 56 years span of the corpus. It was not creating the same mental images to the policy makers of the 60s and 70s as it was doing in the 90s and 2013. For the former, it was mainly about how to apply the force of kinetic arms to a specific area for protecting the UK. For the latter, military force was about a means for shaping the world in order to appease the differences between Britain's interests and those of her prospect adversaries. Tanks, jet aircraft and armies were the common base for policy makers to understand the idea of military power in all years. Yet what did not remain the same is that gradually their role started being questioned and not taken for granted.

This was not a change in terms of military technology - how much more different weapons were through years; it was the meaning itself of what kind of force was needed for defending Britain and making it safe. This section argues that gradually force stopped creating images of robust military forces that Britain should have for being safe. The force needed for the purposes of national defence and security gradually lost its pure military semantic preference to which it was mainly equated in the period 1957-1989. This is traced in three discursive changes.

The first one is an identity change. Military force stopped being identified primarily as ground, air or naval forces and, gradually, they were all identified mainly as 'armed forces'. Secondly, there was a change concerning the characteristics of that force. Initially, it was the size, cost and role of forces which were helping to create the image of force. Yet, later it was not these attributes of force that were put forward but, instead, policy makers were talking about 'force elements' that were withdrawn out of a pool of forces for serving policy objectives. Thirdly, force was not applied in the same ways in different periods of time. Forces were not only *stationed*, *maintained* or *deployed* in areas of interest but they also started being *delivered* and *projected* to the world in a tailor-made way. Lastly, although the purpose for applying military force has always been to influence the world, after 1989, influence emerges as a third and discrete pole to the force-power axis.

The following section presents the results found by applying Corpus Assisted Discourse Studies (CADS) (Partington et al. 2004; Partington et al. 2013) in a corpus of the British national defence and security policies published from 1957 to 2013. The corpus consists of 31 policy documents counting more than 700,000 tokens. Its wide time span makes it possible to pinpoint the diachronic changes and give the full picture of how the meaning of military force was gradually changing. The corpus was processed by means of the Sketch Engine software (Kilgarriff et al. 2004).

All these discursive changes point towards a change at the level of semantics (meaning making) of force. On the one hand, force having military semantic preference; it correlates force to the capability to deliver force physically to the areas of interest. On the other hand, the non-military semantic preference of the word which constructs its meaning as the ability to transfer the British power by influencing the world.

##### 4.1. Identity change: which force?

Military force is an issue of quintessential importance in every national defence and security policy review period. By applying the Word Sketch tool (Kilgarriff et al. 2010) to the corpus,

it was possible to examine the diachronic changes in what kind of force policy makers were interested in through time. The tool extracts the modifiers of *force*, i.e. the words that have such a grammatical and collocational behaviour in the texts that adds an attribute to the targeted lemma (here to *force*). The results are ordered by the strength of association measured by using log-Dice scores (Rychlý 2008). By doing so, it was found that up to 1989 policy makers were denoting forces more in reference either to their operating environment or their mission in the theatre of operations. Before 1989, policy makers talk about *air*, *naval*, *land* and *ground forces* or about *task*, *transport*, *combat*, *tactical*, *amphibious* and *general purpose forces*; whereas, after 1989, they use more the all-encompassing term *armed* and *military forces*. Table 1 shows how strongly the lemma *force* collocated with each one of these words for each respective period making it easy to pinpoint the diachronic differences. The changes for some of these collocations are spectacular as, for instance, for *ground forces* which, in the post Cold War period, is at the bottom of the list (before 1989 it was third). In contrast, *armed forces* followed an opposite trajectory from sixth place to the top.

1957-1989			1989-2013			Ranking change*
Word	Freq.	Score	Word	Freq.	Score	
British	63	10.46	armed	124	11.32	+5
air	56	10.27	British	49	9.93	-1
ground	38	9.93	reaction	40	9.86	new entry
nuclear	42	9.88	maritime	29	9.34	+7
task	40	9.76	military	51	9.27	+19
armed	30	9.72	nuclear	33	9.17	-2
strategic	32	9.67	joint	27	9.02	new entry
naval	27	9.41	air	26	8.92	-6
small	26	9.3	Soviet	21	8.90	new entry
conventional	23	9.29	regular	21	8.87	+10
maritime	24	9.25	Armed**	23	8.74	like 'armed'
transport	23	9.23	modern	18	8.63	new entry
combat	22	9.23	deployable	17	8.57	new entry
tactical	20	9.04	special	14	8.38	new entry
land	20	9.03	rapid	14	8.32	new entry
amphibious	15	8.72	conventional	14	8.30	-6
tanker	13	8.51	frigate	12	8.12	new entry
United***	19	8.43	naval	11	8.03	-10
theatre	13	8.39	augmentation	10	7.95	new entry
all-regular	11	8.32	amphibious	10	7.90	-4
Polaris	11	8.27	Reserve	11	7.89	+4
general	12	8.26	US	11	7.86	****
Pact	11	8.18	land	11	7.85	-8
military	14	8.17	main	10	7.82	new entry
reserve	11	8.16	ground	10	7.81	-21
<p>* The changes in the ranking of the entries are depicted for the period 1989-2013 against the earlier one (1957-1989).</p> <p>** The software can distinguish if the word was used after a full stop and, therefore, counts separately words in capital and lower case. In this paper, for assessing the changes in the ranking, words in capital and lower case were treated as equal.</p> <p>*** By analysing the concordance lines for this entry, it was found that 'United' was used in reference to the United Kingdom, United Nations and United States. Because of lack of consistency in its use, it was not further assessed.</p> <p>**** This entry is met in the structure 'US forces' which was also used before 1989. Yet, for the period before 1989, the software counts these instances under the entry 'United' which was used also for 'United Kingdom' and 'United Nations'. Thus, it was not deemed safe to further assess changes in the ranking of this entry.</p>						

Table 1. Word Sketch of the lemma *force* (modifiers).

This gradual absence of the different forces from the policy documents and their summation under the general terms *armed/military forces* raises questions regarding the reasons for

theirs underrepresentation within policies. Should this be interpreted as a sign of the limited value and role that, for instance, ground forces now have for the national defence and security? No. This would be arbitrary and ill supported. Yet, the question is whether this is a trace of change in how the meaning of force was constructed in the respective periods. The increased appearance of the different types of forces in the policy documents of the first period (1957-1989) means that the ‘universe’ associated with them was also present within these texts. Numbers denoting the strength and size of forces, various types of the weapons they use, names of the countries that possess these forces and geographical names linked to where they were deployed are mainstreamed in the policy texts of that period:

Britain already contributes Valiant jet bombers and Canberras to NATO tactical air forces [Ministry of Defence 1961: 6]

Ground forces of the United Kingdom, in concert with Malaysian, Australian and New Zealand troops, supported by our air forces, have dominated the Kalimantan frontier between Borneo and Indonesia [Ministry of Defence 1966: 8-9]

The main concern of the Alliance is the fact that the Warsaw Pact’s conventional ground forces in Central Europe [...] significantly outnumber those of the West in manpower and major equipments [Ministry of Defence 1975: 31]

The ground forces were heavily dependent on helicopters and tracked vehicles for mobility [Ministry of Defence 1982: 23]

Nevertheless, after 1989, the use of the term ‘armed forces’ instead of *ground, naval* or *air* forces results in their respective universe to recede as well. The texts of this second period are poorer in terms with military semantic preference than those before 1989. In the post Cold War period, discourse constructs force differently; from the specifically defined forces (e.g. *armed/ground/land/naval/combat/transport forces*) to the more ‘all-encompassing’ forces (*armed/military forces*). Some more information about the nature of these new forces can be found in the words that appear for the first time after 1989. The all-encompassing forces of the post-Cold War period have to be in a state of readiness (*rapid, reaction*) so as to be able to be transferred wherever necessary (*deployable*) and deliver their services in what is exactly necessary (*special*). In addition, due concern is given to the *joint* character that these forces should have by bringing closer the three services.

#### 4.2. How force is described

The question now is to probe in what policy makers were interested when they were talking about force. By means of the Word Sketch tool it was possible to construct the profile of *force*, by that meaning, the different attributes that force have had through the 56 years that the corpus covers (see Table 2 below). Now, the interest is in how *force* has been used for modifying other words (e.g. *force structure*) and in nouns used as object to *force* (e.g. *size of forces*). The analysis of this group of words shows that, during the first period, the interest was around the issues of forces’ size (*level, reduction*) and their organisation (*structure*). Nevertheless, after 1989, *force* appears to be used in more ways and creates more collocations.

After 1993, the interest continues to be around the issues of size and organisation of the forces but now some new collocations appear: *force element, package, projection* and *multiplier*. The words *operation* and *capabilities* were also used in the forms *force projection operations* and *force projection capabilities* respectively. To start with *force package* and *force element*, they were introduced in 1993 as part of the new organisational structure:

An important part of the analysis has been to identify the individual force elements, such as the number of destroyers or frigates, infantry battalions or aircraft of a particular type – the force package needed to

accomplish each Task. From this examination we can identify the total number of Military Tasks which each force element could theoretically be called on to perform. This step in turn provides the basic information necessary to assemble overall force structures for each force element. [Ministry of Defence 1993: 19]

Destroyers, frigates, infantry battalions and aircrafts, they all become *force elements* above which there are *force packages* which undertake Military Tasks. The various different weapons and organisational schemes (e.g. battalions, regiments) are compressed discursively into *force elements* and *packages* respectively. This is in line with the pattern found earlier concerning the summation of the ground, land, naval and air *forces* under the broader term *armed forces*. Both discursive patterns indicate that there was something changing as far as the meaning of *force* is concerned.

	1957-1989			1989-2013		
	Word	Freq.	Score	Word	Freq.	Score
Modifies	structure	9	10.18	structure	102	11.41
	level	19	10.14	element	35	10.46
	declaration	4	10.12	package	16	10.13
	reduction	14	9.27	projection	10	9.61
				multiplier	8	9.59
				level	28	9.57
				protection	5	8.21
				planning	5	7.90
				operation	18	7.75
				reduction	5	7.59
				process	5	7.28
				capability	7	6.17
	pp_obj_of-i	withdrawal	15	9.89	use	27
size		17	9.83	pool	9	9.58
cost		24	9.68	utility	9	9.56
deployment		12	9.49	effectiveness	11	9.36
shape		8	9.27	size	9	9.11
strength		11	9.24	legitimacy	5	9.06
role		14	9.09	deployment	10	8.93
use		9	8.66	withdrawal	5	8.79
presence		5	8.64	strength	5	8.49
balance		6	8.64	scale	6	8.32
level		9	8.50	development	9	7.88
effectiveness		5	8.49	element	5	7.71
proportion		5	8.47	cost	5	7.70
capability		9	8.29	part	5	7.18
support		8	8.17			

Table 2. Word Sketch of the lemma *force* (modifies and pp\_obj\_of\_i).

The next trace of this change is the collocation *force projection* which exemplifies how the meaning given to force was changing as the old discourses were clashing with the emerging ones:

In the Cold War, we needed large forces at home and on the Continent to defend against the constant threat of massive attack from an enemy coming to us. Now, the need is increasingly to help prevent or shape crises further away and, if necessary, to deploy military forces rapidly before they get out of hand. Most force projection operations of this kind are likely to be multinational. [Ministry of Defence 1998, Ch.5, para. 77]



From the one side, there was the fear of a visible, identifiable and approaching enemy who was making it indispensable to have ‘large forces’ for defence purposes. After 1998, on the other side, it was necessary to be able to project force; now, *force* as an abstract noun which was not necessarily identified as military forces. The need was to ‘prevent’ or to ‘shape’ crises instead of defending and, to this end, military forces were not the de facto solution (‘if necessary’). What is important to underscore is the change from needing *forces* to the need of *force*. *Force* as an abstract noun which is not necessarily equated, in terms of meaning, to military forces and does not necessarily bring to mind military units, soldiers or weapons started being constructed in the British national defence and security policies after 1998. This kind of force which does not have military semantic preference is not overtly expressed in the British policies; it is not expressed, for instance, as a diminished role given to military forces since they continue to be considered an essential guarantee of national integrity.

Nevertheless, it is latent within discourse. A trace of the change in the meaning of force is in the way that the collocation *force projection* was used diachronically from 1998 to 2013. Its deeper examination yields interesting results which point towards an effort to change the meaning of force needed for the purposes of national defence and security. The term appeared in the Strategic Defence Review White Paper and in all the Defence White Papers of the Hoon review period (1999-2005). In the Brown review period (2007-2010), it was not used at all whereas it appeared again in 2013 in the seventh report of the committee which works for the next Defence and Security review due to be published in 2015. The idea behind *force projection* was always to deploy forces in crises areas (no matter how much far away they were from the British home bases), in short notice and working jointly with allies. Yet, gradually, more ideas were attached to what exactly was projected by means of such operations. The two examples below give an idea of the effort to link projection not only to force but to power and influence as well:

Power Projection: Rather than directly intervening directly, the UK, in concert with allies might wish to deploy stand-off military capabilities that are able to deliver significant force to deter or coerce. [Ministry of Defence 2003: 5]

Under current circumstances and plans, Britain will be unable to Deter, Contain, Intervene against or Influence some of those that would do us harm. Without the Hard Power and latent Force represented by a genuine British Carrier Strike Capability, the projection of British political influence and military power on the world stage will not be as effective or potentially possible and we shall not be able to protect our Maritime interests - including our vital energy supplies. [House of Commons 2013: Ev w33]

In the 2003 Defence White Paper, entitled ‘Delivering security in a changing world’, one of the tasks of military forces is the projection of power by means of ‘stand-off military capabilities’. The aim is to deliver force; force with military semantic preference (i.e. military forces) which is delivered by such distance that it is still possible to project the British power even though forces are not deployed in the theatre of operations. To put it differently, the objective now is to be powerful not by deploying forces but by projecting power. Force is not demonstrable to the capability to ‘intervene directly’ but, instead, to the ability to project the British power. This becomes the prerequisite and armed forces are asked to adapt to this new meaning of force.

*Force projection*, as used initially for denoting the deployment of forces in big distances, gave way to *power projection*. In 2013, projection was expanded even more; projection of British influence appeared during the workings of the Defence Committee of the House of Commons for the next Defence and Security review. In the written evidences given by Admiral Sir John Woodward, influence is added to force and power and it becomes a necessary tool for national defence and security purposes. The effectiveness of military equipment is evaluated in terms of how much it contributes to the projection not only of force but of British influence as well:

Providing that one does enjoy the available power projection capability of Strike Carrier Battle Groups, a further form of supportive and beneficial influence is provided by the continuous deployment of individual warships (destroyers, frigates and/or corvettes) throughout the oceans of the world-whether conducting goodwill missions, disaster relief, anti-piracy and anti-drug patrols, etc. [House of Commons 2013: Ev w28]

## 5. Conclusion

Public debate usually asks whether future wars among states will be waged in cyberspace and not in the three dimensional world. This paper showed that to answer this question, it is, first and foremost, necessary to scrutinise the changes that take place in the discourse on war in times of increased interconnectivity. This paper examined the use of the lemma *force* in the British national defence and security policies for a period of 56 years and unearthed that its meaning has undergone substantial changes. From the physical exertion of power, during the first three decades of the corpus, to the ability to project British influence to the world, in the last two decades of it, force has not been understood in the same way. Although the nature of the texts of the corpus used defines strict limits to how force can be understood when it comes to national defence and security issues, this paper proved that there are changes at the level of the semantics of force. It is only by scrutinising all these diachronic changes on the discourse of war that it will be possible to have a comprehensive view of how modern wars change. Future research has, therefore, to focus on explaining why and how cyberspace has made it possible for these changes to emerge. For doing so, it is necessary to examine the discourse that constructed cyberspace; what ontological and epistemological changes cyberspace has brought about and how these are linked interdiscursively to the semantic changes manifested in the discourse of modern wars.

**Acknowledgements.** I would like to thank Dr. Melani Schroeter and Dr. Sylvia Jaworska for their guidance and valuable help in my efforts to acquaint myself with critical discourse analysis and corpus linguistics.

## References

- Barkawi, T., & Brighton, S. (2011). Powers of war: fighting, knowledge, and critique. *International Political Sociology* 5, 126-143.
- Betz, D., & Stevens, T. (2011). *Cyberspace and the State: Toward a Strategy for Cyber-Power*. London: Routledge.
- Black, J. (2013). *Introduction to Global Military History: 1775 to the Present Day*. London: Routledge.
- Dillon, M., & Reid, J. (2009). *The Liberal Way of War: Killing to Make Life Live*. London: Routledge.
- Gray, C.S. (2010). *The Strategy Bridge: Theory for Practice*. Oxford: Oxford University Press.
- Gray, C.S. (2013). *Making Strategic Sense of Cyber Power: Why the Sky is not Falling*. Carlisle, PA: Strategic Studies Institute – U.S. Army War College Press.
- Greenberg, K.J. (2012). Preparing for a digital 9/11. Available at <<http://www.infowars.com/preparing-for-a-digital-911>>.
- House of Commons (2013). *Towards the Next Defence and Security Review: Part One*. Seventh Report of Session 2013-14, HC197, Volume II. London: The Stationery Office.
- Jasanoff, S. (2004). *States of knowledge: the co-production of science and social order*. London: Routledge.
- Karatzogianni, A. (2006). *The Politics of Cyberconflict*. London: Routledge.
- Kilgarrieff, A., Rychlý, P., Smrz, P., & Tugwell, D. (2004). The Sketch Engine. In Williams, G., & Vessier, S. (eds) *Proceedings of the Eleventh Euralex Congres*. Lorient: UBS, 105-116.
- Kilgarrieff, A., Kovář, V., Krek, S., Srdanović, I., & Tiberius, C. (2010). *A Quantitative Evaluation of Word Sketches*. Leeuwarden: EURALEX.
- Kim, H.M., Lee, D., & Feiock, C.R. (2012). Network power and militarized conflicts. *Armed Forces & Society* 38, 291-317.
- Liff, A.P. (2012). Cyberwar: a new 'absolute weapon'? The proliferation of cyberwarfare capabilities and interstate war. *Journal of Strategic Studies* 35, 401-428.
- Lynn, J.A. (2003). *Battle: A History of Combat and Culture*. Boulder, CO: Westview Press.
- Ministry of Defence (1961). *Report On Defence 1961, Cmnd. 952*. London: House of Commons Parliamentary Papers.

- Ministry of Defence (1966). *Statement on the Defence Estimates 1966, Part II, Cmnd. 2902*. London: House of Commons Parliamentary Papers.
- Ministry of Defence (1975). *Statement on the Defence Estimates 1975, Cmnd. 5976*. London: House of Commons Parliamentary Papers.
- Ministry of Defence (1982). *The Falklands Campaign: The Lessons, Cmnd. 8758*. London: House of Commons Parliamentary Papers.
- Ministry of Defence (1993). *Defending Our Future. Statement on the Defence Estimates 1993*. London: House of Commons Parliamentary Papers.
- Ministry of Defence (1998). *Strategic Defence Review White Paper, Cmnd. 3999*. London: House of Commons Parliamentary Papers.
- Ministry of Defence (2003). *Delivering Security in a Changing World. Defence White Paper Supporting Essays, Cmnd. 6041*. London: House of Commons Parliamentary Papers.
- O'Connell, M.E. (2012). *What is War? An Investigation in the Wake of 9/11*. Leiden: Martinus Nijhoff.
- Partington, A., Duguid, A., & Taylor, C. (2013). *Patterns and Meanings in Discourse: Theory and Practice in Corpus-Assisted Discourse Studies (CADS)*. Amsterdam: John Benjamins.
- Partington, A., Morley, J., & Haarman, L. (2004). *Corpora and Discourse*. Bern: Peter Lang.
- Porter, P. (2009). *Military Orientalism*. New York: Columbia University Press.
- Ratray, G.J. (2001). *Strategic Warfare in Cyberspace*. London: MIT Press.
- Rid, T. (2011). Cyber war will not take place. *Journal of Strategic Studies* 35, 5-32.
- Rid, T. (2013). More attacks, less violence. *Journal of Strategic Studies* 36, 139-142.
- Roennfeldt, C.F. (2011). Productive war: a re-conceptualisation of war. *Journal of Strategic Studies* 34, 39-62.
- Rychlý, P. (2008). A lexicographer-friendly association score. In Sojka, P., & Horák, A. (eds) *Proceedings of 2nd Workshop on Recent Advances in Slavonic Natural Language Processing*. Brno: Masaryk University, 6-9.
- Schwartz, J. (2007). Preparing for a digital Pearl Harbor. *New York Times* [Online edition], 15 October 2012.
- Simmons, B.A. (2013). International relationships in the information age. *International Studies Review* 15, 1-4.
- Singh, J.P. (2013). Information technologies, meta-power, and transformations in global politics. *International Studies Review* 15, 5-29.
- Stone, J. (2013). Cyber war will take place! *Journal of Strategic Studies* 36, 101-108.

---

Anthimos Alexandros Tsirigotis Anthimos Alexandros Tsirigotis is a fourth year PhD student at the Graduate Institute of Political and International Studies (University of Reading). His research probes how cyberspace changes modern wars and argues that, in the Information Age, the discourse of war constructs new ways to account for the notion of power and the protection of life. His work draws upon critical war studies and applies both Corpus Assisted Discourse Studies and Critical Discourse Analysis to unearth semantic changes around the war phenomenon. Email: a.tsirigotis@pgr.reading.ac.uk