

How is a small power influenced by the Revolution in Military Affairs? The Danish Example

As the United States-led battle in Iraq in 1991 began a revolution broke out. This revolution was in the way war can be conducted and heralded a new age of precise and effective warfare. Or at least that was what some theorists insisted. Others only saw it as a continuation of long traditions. In the following years and inspired by more United States (US) led campaigns a swarm of academic articles and books have discussed the 'revolution'.

But in the undergrowth of the coalitions in both 1991 and 2003 have been lesser powers for which the war experience in Iraq has provoked just as much thought over the future of war fighting. These lesser cases, however, has not been described as thoroughly as they have not been seen as driving forces in what has been called 'the Revolution in Military Affairs' or 'force transformation'.

This paper will try to shed some light on how the Revolution in Military Affairs (RMA) has influenced the junior partners of the US, by looking at Denmark, a participant in both Iraq wars. It will start out by broadly describing the discussion over RMA, then sketch out the Danish security situation and the current reform of the military. Based on these findings it will end up with a general assertion of how RMA can be seen to influence aspects of Danish security policy and defence.

The Revolution in Military Affairs

The present day discussion over the direction of military development can be traced back to Soviet concepts of a 'Revolution in Military-Technical affairs.'¹ The developments in nuclear technology and the dark promise of mutually assured destruction prompted the US to develop high precision, miniaturised systems. The central technologies in the future development began to crystallize beginning in the 1970s:²

- Precision guidance
- Remote guidance and control
- Munitions improvements
- Target identification and acquisition
- Command, control and communication
- Electronic warfare

Technology is still central in the contemporary debate over RMA. The 1991 Iraq war relied heavily on new technology to let the coalition defeat the world's fourth largest army, one with a 'traditional' doctrine. A massive air campaign using precision guided munitions (PGM) to some extent showed how information technology had come to play an ever larger role in modern warfare, as the Iraqi Command, Control, Communications and Intelligence (C3I) was taken out, rendering the ground forces easy prey for numerical

¹ Freedman (1998) p. 18

² Ibid, p. 21

inferior but technological superior coalition forces. The 1991 war was debated and nuanced up through the 90s, for example by the debated air-campaign in Kosovo. During this period both US and other countries set out to reform, change or transform their military forces as to be able to utilise the new technology to its full extend. This led to the abolition of conscription in some European countries.³

In 2003 it only seemed as if the technological gap had widened even more between the US and its potential enemies. Now the integration of information networks into a 'system of systems' let battlefield commanders have a technological overview of the 3-dimensional 'battle space' that almost promised to dispel the 'fog of war' and hit any enemy target from a safe distance with high precision. Technology lets American commanders plan and execute missions with few troops and a promise of few casualties and collateral damage on both sides.

This technological advantage means that no force in the world would be able to take on the US in a conventional battle in the near future. But more cautious theorists have showed that RMA, real 'revolution' or not, is not only reliant on technology but just as much on how politicians and officers are ready to use the technology as well as the potential enemy's reciprocal reaction and strategy.⁴ This realisation is informed by Clausewitz's notion of military means as a continuation of politics and thus political circumstances must play a role in any meaningful discussion of RMA.⁵

The overwhelming technological advantage of US will force allies and foes alike to seek new ways to define themselves. These ways will be sought in political and tactical landscapes and few countries have so far tried to compete with the US in technological prowess.⁶ To this comes that the most likely conflicts in the near future will not be desert warfare but rather asymmetric wars and operations other than war.

Lawrence Freedman has identified this amalgam of technology, war fighting and policy that is RMA as a strategic matter. World politics as well as politicians' ends for using military means are just as important. Therefore the 'revolution' is rather a 'Revolution in Strategic Affairs.'⁷ The term RMA will be used in this broader sense in the following.⁸

The RMA discussion is very much centred on the US experience. This is due to the US technological superiority as well as the active, forward-looking US policymaking on this area seen as a driving force of RMA. This force is seen in Secretary of Defence Rumsfeld's emphasis on 'transformation' as well as the *Joint Vision 2010*, that acknowledges the geopolitical *status quo* but

³ Miller (2001)

⁴ Cohen (2004)

⁵ Clausewitz (1976) p. 81

⁶ Cohen (2004), p. 398

⁷ Freedman (1998) p. 73

⁸ While retaining the term 'RMA' as this is mostly widespread

presses for preparations for the day that a peer competitor can stand up to the US.⁹

The application of RMA to Denmark seems to be a choice between two forms. Either one compare how well Denmark lives up to the concept of RMA, as it is defined by the US effort in the field. This could be done by ascertaining how well Danish forces and technology integrate with a US coalition partner or how Danish Foreign policy fits into the US counterpart. Metaphorically speaking the Danish effort is measured by the US yardstick.

Or one could try to dislodge the term RMA from the US context and define how Denmark is obtaining its own distinct RMA. In other words constructing a unique measuring instrument (a nanometre-stick perhaps) that allows for a tailored measurement of the Danish effort. However this measurement must still be able to be abstracted to the US RMA being the 'dominant RMA'. The last of these two applications seems most viable for two reasons.

First of all as mentioned above most theorists seems to agree that none save US can really follow their version of the RMA due to economical and technological reasons. Secondly because of the sheer difference between the two cases. If one accepts that RMA is as much a politico-strategic phenomenon as well as a technological one, it is clear that as countries have different politico-strategic conditions, so must their version of a RMA be different.

The following will focus on three areas of change in Danish defence thinking: Policy, organization and technology.

The Danish Security Situation

At a glance Denmark's military and security-policy development since the fall of the Berlin wall looks very much like that of other European small powers. A sudden vacuum of conventional, direct threats have evolved with the collapse of the Soviet Union and the democratisation and eventual membership of EU for eastern neighbours like Poland and East Germany. This has meant a general need for reorientation. But compared to its Nordic neighbours Denmark (the only Nordic country with dual membership of NATO and EU) has chosen a more active stance.¹⁰ This led to a growing internationalism during the 1990s, first with the contribution of a Corvette in the 1991 Iraq war, later with extensive participation in peacekeeping missions in the Balkans. This new involvement in international security has been termed 'international activism'.¹¹ In the US led coalitions in Afghanistan 2002 and Iraq 2003 Denmark has shown that it will engage in actual conflict and war, even without the blessing of UN and NATO, dimensions of international cooperation that Denmark traditionally has focused very much on.

The new, more aggressive and active approach seems to be a priority for Danish politicians that wants to be able to politically influence conflicts before,

⁹ Rumsfeld (2002), Freedman (1998) p. 73

¹⁰ Pilegaard (2004) p. 35

¹¹ Heurlin (2001) p. 22

during and after by active engagement of troops.¹² This is unthinkable in a unilateral scenario with Denmark as sole protagonist and thus alliances and coalitions continue to play a central role for Danish policy.

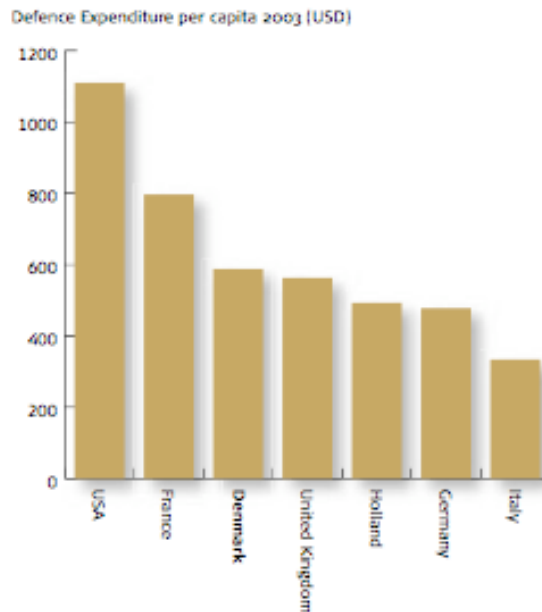


Figure 1. Military Expenditure per Capita. Source: Danish Ministry of Defence (Undated)

Strong and active link to US is emphasised in this alliance building.¹³ Denmark was on 'the Atlantic side' of the debacle between EU and US over the 2003 Iraq war. This was done out of a realisation that US is the main guarantee for Danish security, but also emphasised the awkward relationship to EU for a Country that has opt-outs on the Western European Union Defence cooperation. This paradoxically meant that had EU chosen to go to war in Iraq instead of US, Denmark could not have participated. Denmark supports the Petersberg tasks, but cannot participate itself.

The official policy of Denmark is that of one of an integrator between EU and the US, and as a member of the UN security council 2005-07 it has drafted 39 initiatives to bring EU and US closer together.¹⁴ Denmark participates in NATO's Rapid Reaction Force.

All in all one can identify a major change in Danish foreign policy thinking on the application of force. Thus the 'International Activism' can be seen as a pretext and component in a specific 'Danish RMA.'

Danish Military Developments

This change in policy lead to an observable change in military action. In a ten year period from 1994 to 2003 the Danish military found itself in a number of situations unlike anything experienced since the war against Prussia in 1864: its first ground battle using tanks (Bosnia, 1994), first aerial attacks (Kosovo

¹² Rasmussen (2003)

¹³ Danish Ministry of Foreign Affairs (2003)

¹⁴ Danish Ministry of Foreign Affairs (2004)

1999), first use of PGM fired in anger (Afghanistan 2002), naval convoy protection (Strait of Gibraltar 2002-), first major scale use of Special Forces abroad (Afghanistan 2002) and first non-UN sanctioned war (Iraq 2003).

Mostly these missions have been regarded as successes in public. This leads attention to the fact that the growing political reliance on military power is reciprocal to the growing experience of the military. Eliot Cohen criticises much RMA theory of 'top-down' thinking¹⁵ and it cannot be ruled out that the change of Danish foreign policy has been inspired by the Danish military experiences in the period in a 'bottom-up' fashion, but it is hard to be precise about the interrelation of these factors.

Since 1990s the Danish military has been transforming its force structure. The most profound 'revolution' in observable terms came in 2004 with a new Defence Agreement 2005-2009. As a pretext to this the Danish Prime Minister Anders Fogh Rasmussen posed five demands to the future Danish military, emphasising speed, organic transportation capabilities, professional and highly trained forces and a general reshuffling of the Total Defence organization.

The Defence Agreement emphasises this in the following way:¹⁶

- Danish Defence will be reorganised to provide operational capacities that enable Danish Defence to mobilise and deploy forces promptly and flexibly in international operations and to maintain deployed capacities corresponding to some 2,000 personnel (1,500 from the Army and 500 from the Navy and Air Force).
- The current mobilisation defence and affiliated structure are to be abolished. The remaining staff and support structures are to be streamlined to meet the exact needs of the operational units, including total defence and other domestic tasks.
- The tasks of the national emergency management effort, the Home Guard and Danish Defence are to be gathered under the sphere of the Minister of Defence.
- The present compulsory military service scheme is to be reorganised and targeted on total defence. At the same time, this compulsory military service scheme will form the basis for military recruitment to the professional force. This construct is meant to embed Danish Defence in the Danish community.
- The total number of operational units is to be reduced in exchange for a focused and qualitative reinforcement of the remaining units.
- Several military barracks and establishments are to be closed.
- Financial resources will be released for deploying Danish military contingents in international operations.

All in all, this leads to a much smaller force, focused on international operations. This very much lives up to RMA thinking about 'just in time'

¹⁵ Cohen (2004) p. 396

¹⁶ Danish Ministry of Defence (2004)

defence,¹⁷ as well as taking the nature of future conflicts into account by deemphasising the territorial defence of Denmark.

The reorganization of the Danish defence is very much in keeping with the development in US and EU and with the RMA tendency to professional forces. However it is interesting to note that there is a uniquely Danish twist to transforming the forces. Instead of abolishing conscription altogether or keeping it intact, a third way is chosen. A very short introduction and training period is meant to induce a number of young recruits to sign up for the professional force, where they will get the actual training for international operations. This shows that a political goal (to maintain the Defence's connection to society via conscription) is forming the direction of the military development. This is another strand in the forming of a unique 'Danish RMA.'

Danish Military Technology

As Danish Defence transforms from being a total territorial defence to an activist international one, so does its material procurements. Traditionally the Danish Defence has not been overly blessed with fund allocation during the 20th century. It has been focused on infantry and a coastal defence navy. Denmark has a limited defence industry, with shipbuilding and electronics as the most notable cases.

Most of the Danish military technology is of US or European produce (see appendix at the back of this paper).

A number of specific cases (short of a comprehensive analysis of Danish Defence procurements) can be illustrative to identify the technological changes accompanying the other changes in Danish Defence.

Flexible Ship Design

In the 1980s the Royal Danish Navy was to replace 22 old and near obsolete vessels, including 8 minesweepers, 8 patrol boats and 6 torpedo boats. But funding was not sufficient to replace them one to one with new vessels. This led to the development of the 'Standard Flex' concept, a new range of 14 patrol boats (*Flyvefisken* Class) built around special container slots. These could then be fitted with weapons or systems to allow every single vessel to fill several roles, such as patrol ship, guided missile ship, mine layer/sweeper and pollution control ship. The configuration of every ship can be changed in a single day as to fit needs.¹⁸

The Standard Flex system was devised because of financial problems, but turned out to be a perfect solution for the post cold war era (The first ship was launched in 1989). The Standard Flex system is now informing the production of a new range of Danish vessels. The first of these are two Flexible Support Ships of the *Absalon* class that are equipped with a 'flex-deck' as well as the Standard Flex container system. This means that these new ships can fill a range of roles, from transportation of an Army Battalion to floating hospital or

¹⁷ Freedman (1998) p. 13

¹⁸ Søværnets Materielkommando (2003)

Command Post. This allows deployment of the Royal Danish Navy in wide range of international operations, from humanitarian to war fighting with one single class of ships. The genesis of the Standard Flex system surely seems to suggest that parts of the 'Danish RMA' has been driven by technological innovation 'bottom-up'.

Aircraft

Denmark has no domestic aircraft industry and thus relies on foreign procurements. At the moment Denmark is a part to the US Joint Strike Fighter (JSF) programme after the Government and four companies have paid 892 million Danish Kroner to be in.¹⁹ This secures Denmark the right to buy these aircraft when ready and, it is hoped, to secure Danish industry contracts in developing the technology. But the JSF programme has been criticised for being unfocused to the future missions of the US.²⁰ Furthermore it is not sure how much industrial advantage Denmark will get from this, as the US defence industry is very keen on keeping the project American.²¹ This underscores two important elements of a 'Danish RMA': First of all that Denmark is all-dependent on the US when it comes to very complex technologies like aircraft. This dependence could backfire in the terms that Denmark might get involved in monolithic projects less than tailored to Danish needs.²² Second it shows that private enterprises plays a role in the 'Danish RMA', just as it does to a growing degree in other countries.²³ The Standard Flex ships are also build using civilian technology and with civilian business partners.

Network Centric Warfare/Operations

The main feature of much RMA theory is the 'dominant battle space awareness', the linking of sensors and shooters in a network that gives real time information to those who needs it.²⁴ This is especially a revolution in land warfare, as remote sensing has been the norm in navies and air forces for a while. Denmark has a long way to go in this aspect of RMA, whereas countries as Sweden are considerably more advanced.²⁵ The procurement of a new Command and control systems (C3I) as well as preliminary acquisition of a modern fire-support system has been agreed²⁶ and the 'Blue Force Tracker' system is being tested at the moment in Iraq.²⁷

The problem is that Danish forces will not have the capability to provide for all the necessary sensors in such a system, with no surveillance aircraft, satellites or long range UAVs. Denmark has a tactical UAV capability but it has never been fully operational.²⁸

¹⁹ Domino (2004)

²⁰ Boot (2003) p. 57

²¹ Breum (2005)

²² Denmark is in a joint venture with Sweden to develop a new artillery system.

²³ Baylis (2002) p. 247

²⁴ Cohen (2004) p. 401, Freedman (1998) p. 11

²⁵ Lemche (2003) p. 17

²⁶ Danish Ministry of Defence (2004) p. 7

²⁷ Brøndum (2005a)

²⁸ Brøndum (2005b)

This forces the Danish Defence to consider participating in a Coalition Information Networks like the US Global Information Grid.²⁹ This would mean that a Danish commander would not 'own' all his own information and that Danish technological procurements would be needed to always be able to be 'plugged in' to the US system, thus forcing the Danish military to keep a certain technological pace. It illustrates to what extent US dominates central technological features of the RMA.

The technological disadvantages could however be offset by organizational strengths. A fully integrated communications and control system suggests a flatter structure and greater empowerment to junior commanders. The smaller Danish force with roots in popular conscription might find it easier to implement.

Conclusion

The above shows that a distinct version of a 'Danish RMA' is orbiting the US led RMA when it comes to technology, and a more general international system of alliances in political matters. It does not give any meaning to see the 'Danish RMA' as a separate entity all together.

But the Danish take on the RMA is distinct. Being dependent on bigger powers and alliances as it is, there are still very special traits that testament that the Danish transformation does not only copy templates from other countries.

Most notably here is the political 'revolution' of active internationalism. The increasing utilization of military deployments might have seen insignificant for larger powers in terms of scale but has marked a watershed in Danish security policy. Successful experience might have influenced back on subsequent policymaking, which in turn has led to a demand for a more deployable force. The organizational changes to facilitate rapid reaction have been paired with the continuance of a form of conscription. This continuity of an older system might both signal a political wish for popular anchoring of the forces and a general unwillingness to embrace an all-professional force.

The technological development has been less of a revolution. But from the above it is clear that the Danish Defence has procured flexible systems that allows for many uses on a limited budget. The Standard Flex is the most obvious symbol of this. When it comes to foreign systems it is clear that Denmark is dependent on partners, especially the US. But this paper also suggests that an eclectic use of the RMA's technologies is a trait of small powers.

All in all the investigation shows that Denmark is indeed being influenced by RMA in areas of policy, military organization and technology, but that this is happening in a way that shapes a distinct 'Danish RMA'.

²⁹ Lemche (2003) p. 20

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