Part of a wargame as seen at the Wargaming Symposium Connections UK 2015 held at King's College London, 8-10 September 2015.
Photo: Eric Jacopin.
Wargaming: An Overlooked Educational Tool

Lieutenant Colonel Ivor Gardiner, British Liaison Officer for US Special Operations Command, looks at how the use of traditional commercial wargaming for the British Army can be used to train young military leaders.

Wargaming is nothing new to the British Army. Currently, it exists as a tool as Course of Action (COA) Wargaming, which is largely an essential confirmatory check rather than a ‘proper’ wargame. Wargaming must be considered more seriously as a tool to educate and develop the military brain. It has a direct association with developing the Conceptual Component. Within the British Army it is generally misunderstood and habitually under-utilised. There is significant - and distinctly affordable - utility to be gained from introducing traditional commercial wargaming into the professional military. This article considers the utility of commercial wargaming as a tool to aid in conceptual development.

Within the British Army, wargaming is primarily used as part of the Seven Questions (7Qs) of the Combat Estimate. However, it lacks a proper adversarial element. During the planning phase, the plan will become flawed if most, or all, dangerous enemy actions and responses have not been articulated.

The missing aspect in British military wargaming is the adversarial. It is this aspect, and the replacement of military judgement by the use of variable factors and the ever maligned use of dice to determine outcomes, which results in much of the misperceptions directed towards wargaming. The result is usually a somewhat dismissive attitude and an assertion that it is a game of dice not much different from Risk and is more associated with ‘childish things’.

In 1812, the Prussian Army used Kriegsspiel for training its officers. The Army Chief of Staff at the time, initially skeptical, departed from his introductory session proclaiming: ‘This is not a game! This is training for war! I must recommend it to the whole army.’ It was implemented as a major Army reform - a large focus on educational training - as a tool for the General Staff. It allowed Prussian officers to become more independent and responsible and became very popular among the officer corps. The utility was proven by the Austro-Prussian and Franco-Prussian wars of the late 1800s; both overwhelming victories for the Prussians against all expectations. By the time these conflicts were fought, the Prussian General Staff had fought the battles through on table tops numerous times. It is something the German military persisted with. It surprises me that we in the British Army have a tendency to be dismissive over the utility of true wargaming as a military educational tool. If nothing else, its efficacy in training the Prussian, and later German, General Staffs is well proven.
Is There a Place for Wargaming in the British Military Today?

Within our doctrine, one third of our Fighting Power comprises the Conceptual Component; the thinking aspect of our profession; yet we seem to apply little time and attention to it. There has been a long standing joke that too much interest in history or ‘shop’ discussion marks you as a ‘a beard’; somewhat dull and boring. If you indulge your interest via the medium of wargaming, you are clearly also ‘a geek’. Ours is the profession of arms! Fail to take it seriously, or adequately study it, and going wrong becomes distinctly more probable with catastrophic consequences.

I started wargaming with commercial wargames at 13 with a game called Squad Leader, which allowed for the re-fighting of historical skirmishes and battles, from platoon all the way to battalion size but executed at the level of half sections, sections and individual vehicles and specialist weapons. The formal process of military decision-making came easily as a young infantry officer in the South African Defence Force as I already had some grasp of estimates. At RMAS, applying the Estimate came easily and intuitively whilst many struggled with it. It should become a familiar tool for all of our young officers. I concluded that much of my understanding was down to thought processes applied in wargaming. The deduction: wargaming could serve as a process for training estimates. Wargaming in military real-world planning is very different from the wargaming done as a hobby. Many principles, however, remain the same. As such, it struck me that wargaming might be a useful tool in training young officers in the 7Qs.

We train officers on the 7Qs, amongst other ways, by conducting Tactical Exercise Without Troops (TEWTs); hypothetical scenarios in made-up countries and usually met with scant enthusiasm by young officers. I thought: ‘What if instead of the tired old TEWTs, I use Advanced Squad Leader (ASL) to get junior leaders to plan and actually conduct engagements against each other?’

This would add elements of real historical encounters and competitive instinct would (hopefully) be aroused. As a rifle company commander, I instructed my three platoon commanders and company 2IC on basic infantry rules and then gave them scenarios to plan around. The one scenario involved the seizing of a bridgehead in an urban environment.

The planners had to consider the principles of urban warfare, obstacle crossings, withdrawal under contact, delaying operations and defensive and offensive operations - from opposing perspectives. They were then given a fixed time to plan, after which they were required to brief me on their planning considerations, COAs and chosen COA, along with all the standard product required from the 7Qs. They would then execute their plans with me as umpire and I would run it into 2 or 3 game turns; enough time for things to start going wrong (the ‘no plan survives contact with the enemy’ bit), and to test their contingency planning. Two of them scored top on Junior Officers Tactical Awareness Course (JOTAC) courses and one successfully completed Officers’ Week Selection. Significantly, they ‘begrudgingly’ enjoyed the process. It was agreed that it was far more stimulating than TEWTs. I firmly believe the utility of wargaming as a real world planning tool helped contribute to their
A deeper understanding and familiarity with planning, and I am informed by all of them that so do they. As a result - belatedly - I introduced ASL to the Mess as a training tool.

**The 1st Battalion Royal Irish Experiment**

As CO of 1st Battalion the Royal IRISH (1 R IRISH), I had real opportunity to expand on my belief in the utility of wargames as tools of learning. The following are the areas in which I see wargames as adding value and some examples of how we used them within 1 R IRISH; and very cheaply at that:

**Education:** Our young officers have exposure to the 7Qs at RMAS and Brecon. It is not extensive enough to make the process second nature and is typically under Directing Staff (DS) pressure. Use thereafter is also most often as part of a ‘Military Secretary (MS) moment’. Opportunity to familiarise oneself with the 7Qs is thus too little. Exposure can and should be frequent enough to make the thought processes involved second nature and with an element of fun and competition; executing your plan against an opponent equally intent on winning. Our TEWT process invariably sees a military judgement discussion of a plan that ultimately sees the planner leave with a sense that with some tweaks and some new lessons learnt it would succeed. It excludes the element of chaos that comes from plans unravelling against ‘an enemy with a vote’ and the understanding that, in war, things go wrong and even the soundest plan may fail or need some rapid decision making and re-evaluation under stress to recover from the frictions of conflict.

This education must start as early as possible at Sandhurst (RMAS)! A simple wargame system should be adopted and taught at RMAS. It could be an existing commercial wargame, or bespoke systems such as are used in Sweden whereby 1:50 000 maps of local areas are transferred onto hexagonal wargame maps and existing units recreated as wargame counters for use with a simple rules systems. Such a system could very easily be adapted to fit TEWTs with mapping of local training areas in the UK; simple rules taught and then a system created that can be used from RMAS all the way through to Staff College. These could be used by units to prepare for Command and Staff Trainer CAST; which I also believe should see the execution phases against a live, free-play enemy.

Within my own unit, and due to my personal familiarity with the system, I used the ASL Starter Kit (ASLSK) system for the conceptual development of my Officers’ Mess across the board. I started by donating my own complete ASLSK set of 3 modules and also by purchasing additional modules to allow each Company to be able to sign them out and take them away on exercise. A single module for ASLSK 1 can be purchased for £20 and is the size of a coffee table book. I allocated 2 months of training sessions to walk and talk the Mess...
through the rules and processes then assigned scenarios and teams. To encourage usage, there were some key tenets I applied:

• This must not cost them money. We used Mess library funds to purchase some additional modules and one games retailer even donated some modules to the Battalion.
• It must be done as part of work, not in addition to. I set afternoons aside for conceptual development and arranged for COA briefs and executions of plans during working hours.
• It must not be led by the Officer Commanding (OC) but rather subaltern focussed. OCs can be separately briefed by their subalterns to generate learning and discussion. OCs must also be challenged by allocating scenarios where they engage each other.
• These activities are not part of the Officer’s Joint Annual Report (OJAR) process and must remain enjoyable. What can be an OJAR point is how much attention elements of the Chain of Command give to conceptual development to encourage the use of the games, but not to mark the efforts. This will encourage OCs to persevere with it.
• When conducting planning, teams must apply our own doctrine and use the 7Qs to ensure these become familiar tools and second nature activities.

Vindication for me came in several ways:

• It allowed me to actively engage with my Young Officers (YOs) education and development. I got to spend many hours with them engaging in discussion and game play. Initial reserve was rapidly replaced by teams of enthusiastic YOs becoming oblivious to my presence when in the heat of executing their plans. They were truly gaming their profession!
• Tangible competition crept in with associated bragging rights within the Mess - a sure sign of enjoyment.
• Discussion of our doctrine became familiar and unprompted in the Mess environment.
• Obvious levels of comfort in using the 7Qs.
• Several officers went off to perform at the top of their cohorts on various career courses. We used ASL to prepare officers to go off on the Captain’s Warfare Course. Our RAO was accordingly prepared by the Ops Officer (OpsO) and she came top of her syndicate in the 7Q process and, if I recall correctly, 3rd on her course.
• After the Army Wargaming Symposium that 1 R IRISH coordinated at Shrivenham in 2014 other unit Commanding Officers (Cos) informed me that they were starting to use ASL in a similar way and even challenging each other’s officers to games. I also had some units calling me for recommendations on games to purchase.
• One of the Companies, through competitive spirit, purchased their own copy to get some additional ‘training’ done.
• Non-Commissioned Officers (NCOs) also started learning the rules so they could challenge their platoon commanders. I witnessed several games between sergeants and subalterns and had the NCOs briefing me on their planning procedures and COAs.
• At the Army Wargaming Symposium two teams were used to game a small scenario and then present it to an audience, after which the Senior Officer CAST(N) asked me if I had overseen all the staff planning the team had briefed on. When I assured him I had not but left it entirely to them, with Captain leads, he declared that they had shown better output than he had seen from many Battle Groups (BGs) going through CAST. Some of this product is used in the following illustrations. The slides were taken from their presentation material and include snapshots from the planning process, execution phase and After Action Reports (AAR). It includes an ASLSK map for a 1945 clash at Aachen, Germany. Hexes are 40m x 40m and include stone and wooden buildings, woods, orchards, wheatfields and paved and dirt roads. I have cherry picked and started with the German Q2 deductions slide.
The scenario saw an American attempt at Company plus strength, with an attached Engineer flamethrower fire team, to break in to the outskirts of Aachen against a German scratch defence of a Company with some additional Light Machine Guns (LMGs) and Medium Machine Guns (MMGs) and two fortified buildings. Both sides applied the 7Qs and British doctrine for their operation. The outcome was a German victory. The AAR identified key lessons including the effective German use of reserves triggered by DP and the US failure to be flexible and exploit an unforeseen opportunity and emphasising how a slavish US approach to sticking with the original plan allowed them to become fixed. Crucial to all this was that the procedure, execution and lessons identified all came from the participants. The benefit is in permitting YOs to conduct planning but also to execute those plans and experience plans going wrong and having to adapt. The experience of losing also focuses the mind into considering how and why all plans are not perfect. The combination of learning whilst engaged in competitive and enjoyable activity is a powerful combination. Losing also tends to want to make the losing faction re-engage at the soonest opportunity.

**Staff Training:** The benefits of this are obvious. As with all such educational tools, it can be used to appoint personnel to their staff positions. It can be generated, using commercial games systems, at the unit or formation level and conducted at no expense or great time demand. It is simple to execute, very cheap to resource and requires no specialist software programmers. The average commercial game costs between £30-£60. There are also simple bespoke systems such as The Rapid Campaign Analysis Toolset (RCAT). RCAT was developed by Cranfield University at the behest of Dstl in 2012/13 and allows the user to set-up whatever scenario is asked for in order to demonstrate - and have the participants experience directly - what the fate of the deliberately designed force package could be once kicked into the operation. The aim is not to convince the target audience with computers, glossy presentations et al, but to get the decision makers involved as closely as possible. The experience proves the value of this concept and the applied manual simulation. The direct ‘play’ of the target audience combined with a zero time lag when it comes to modifying the scenario and/or the forces, parameter settings, overarching conditions, etc turned RCAT into a universally accepted approach to analyse possible alternatives for the future before it is too late. It proved an effective tool in staff training and in influencing real world planning. Incorporating something similar into Staff Colleges, units and formations would provide affordable, practical, educational and enjoyable systems of staff training and development.

**Battlefield Studies:** The concept of a *Staff Ride* was also deemed by the Prussians to be an essential aspect in developing military thinking and education. A staff ride differs from a guided battlefield tour in that it is an educational technique for studying leadership,
decisions taken and whether alternatives could have been employed; and it requires active participation, where each group member assumes the role of a participant in the battle, and he is questioned by the others as to the view on what occurred on the battlefield.

Our battlefield studies must be interactive as a norm. I have conducted three battlefield studies; to Monte Cassino, Leros and the Ardennes. In each of them I used wargame maps, counters and limited rules to enhance the experience. Wargame maps are often the product of aerial photographs from the time, and orders of battle for well designed and researched wargames have frequently been more accurate than those recorded by historians. By using wargames, opposing sides can be appointed to apply the 7Qs to work out their own plans, and then compare to the real plans of the time. It also allows for some degree of execution to explore some ‘what ifs’, decision points, contingency plans etc. It is extremely effective and helps to bring the experience more to life. For the Battle of the Bulge study, the two opposing teams did fight through the battle before we conducted the study. This meant that, by the time we were on the ground, everybody had a thorough understanding of the terrain, force laydowns and challenges faced by commanders at the time. This was particularly relevant to the conceptual development of the Light Mechanised capability when drawing lessons from KG Peiper’s experience in the Ardennes terrain.

**Force and Capability Development:** The use of wargaming, to a degree, is already utilised within the areas of Capability (Cap) and Force Development (FD). Having completed two jobs involving Cap Dev I have seen middling use made of wargaming. Its use has matured considerably as applied by DSTL. This is not traditional adversarial wargaming, but such scenarios can be tweaked to give more considered understanding of capability shortfalls and requirements as well as providing a sound platform for FD. Indeed, within the conceptual development of the new Light Mechanised capability I frequently wargamed scenarios in considering optimal restructuring and organisation. I sense this is a growing, and important, area of development.

Summary
Historical legacy in professional military wargaming is proven. I think we can draw much from the importance ascribed to wargaming by the Prussian Army. It would be trite to say Prussian military success was based on wargaming, but nobody could deny that the emphasis placed on the conceptual and educational aspects of training Prussian - and later German - officers, partly through the medium of wargaming, did not make a significant contribution. This utility has been recognised by British thinkers such as H.G. Wells and Basil Liddell Hart; more recently strongly encouraged by Major General (Ret’d) Andrew Sharpe CBE, who retired as Director of the Defence Concepts and Doctrine Centre (DCDC) and now heads...
up the newly established Centre for Historical Analysis and Critical Research (CHACR). Yet we fail to fully appreciate this fantastic tool. We place an emphasis on **Understanding** of the environment on modern operations, yet still fail ourselves to fully **Understand** the value that can be added to military conceptual development through the simple and affordable medium of commercial wargaming.

Wargaming provides the following:

- **A greater understanding of conflict**,  
- **Better decision makers and decision-making**,  
- **An opportunity to:**  
  - manage risk but without risking lives  
  - practise key skills in a joint, combined and interagency context  
  - reveal unintended consequences  
  - test assumptions  
  - build confidence, trust and pre-position relationships  
- **Exposure to:**  
  - the full spectrum of conflict at all levels, current and future  
  - the friction inherent in all military operations  
  - an adaptive thinking opponent  
- **A mechanism for:**  
  - exploring innovation in the art of war  
  - experimentation and exploring ‘what if’ questions  
  - developing and refining force structures and operational modus operandi  
- **Players facing the consequences of their own decisions (without penalty or MS implications)**  
- **An enjoyable, challenging and engaging environment; particularly for those with an interest in military affairs and history.**

Within 1 R IRISH I had opportunity to put theories to the test and see first hand the benefits to young officers’ education and professional development, enhanced battlefield studies and conceptual development. So what? So a single officer with a passion for hobby wargaming spent a bit of time using his hobby to develop a handful of young officers in the 7Qs and convinced himself it was a great idea.

This is where the weakness lies. If wargaming is to be recognised as a useful and affordable educational tool it must be formalised within the Army and not left in the hands of individual enthusiasts. It must start at RMAS and be inculcated in the mindset there. For the negligible costs involved in the purchase of off-the-shelf commercial wargames, there is so much to be gained.