

Oral Brief Notes:

INTRODUCTION

Good evening, today I will be using the example of the BEF's use and coordination of artillery in the First World War to support the statement that **'The capacity to learn and adapt to new circumstances has long been a hallmark of successful military organisations'**.

In 1914 the BEF deployed with five hundred artillery pieces the majority of which were 18-pdr guns not suited to trench warfare and the battles of 1915 highlighted the fire power superiority of the Central powers. The BEF's early failures were predominantly attributed to the lack of artillery both in equipment and ammunition a view that even after the war some theorists maintained. By the end of the war the BEF fielded 6500 artillery pieces, a third of which were medium and heavy guns with commensurate increases in ammunition supply from 871,000 in 1914 to over 26 million in 1915. This massive increase in the number of artillery and availability of ammunition however was not the reason for success. Without the ability to learn and adapt to new and emerging circumstances a military organisation will be unable to achieve success in combat. Military organisations must be agile in their ability to learn and adapt to maintain an advantage over their adversary. This will be demonstrated firstly in the shift in the utilisation of artillery, secondly the maturation of an artillery command and control structure that centralised fire power achieving coordination of fire and manoeuvre and finally I will highlight the importance of learning the correct lesson rather than attributing success to having more artillery.

THE SOMME

The Battle of the Somme was fought from the first of July to the first of November 1916. Using 1400 artillery pieces the attack on the first day was preceded by a seven day preliminary artillery bombardment with a priority of tasks of cutting wire, destruction of trenches and defences and the conduct of counter battery fire. The success of this artillery bombardment varied. For example the wire cutting had been effective in some areas but in others the wire remained undamaged. The cost to the British on that first day alone was 57000 casualties. Over the next three months the Entente and the Central powers combined would suffer over 1.5 million casualties. It was in this environment that the BEF identified the need for change, learned from the current landscape and adapted the utilisation of artillery.

UTILISATION OF ARTILLERY

In 1914 the BEF considered the role of artillery to be solely in support of the infantry. The Artillery Notes in Field Service Regulations stated artillery's task was to prepare 'the way for the infantry and to support and protect the infantry throughout its progress.' In the battles of late 1914 and early 1915 in particular Neuve Chapelle and Loos the limited amounts of artillery were tasked with destruction of trenches and wire obstacles. The limited success they achieved only seemed to reinforce the idea of destruction over neutralisation and any failures were attributed to not having enough artillery which resulted in longer preparatory bombardments at the cost of losing surprise. The implications of learning these incorrect lessons resulted in the artillery plan for the Battle of the Somme.

The artillery plan for the Battle of the Somme Sir Henry Rawlinson, the commander of the 4th army, wanted an intense bombardment of defences just prior to the assault in order to cut the wire and destroy the trenches whilst maintaining an element of surprise. Instead a seven day preparatory bombardment was preferred due to reliance on artillery to achieve destruction of German trenches and cut the wire obstacles. This reliance on artillery destruction resulted in the overall failure of the assault. The moderate success of some divisions however offered an opportunity to understand these failures. The moderate success on the southern flank was attributed to a variety of reasons however the two that enabled the BEF to reconsider their use of artillery was neutralisation of German artillery prior to the assault and the divisional fire plans resembling something closer to a creeping barrage neutralising the enemy thus enabling the troops to clear the trenches as the artillery lifted. During the Somme campaign the BEF learnt that the quote attributed to Petain that 'Artillery conquers and Infantry occupies' had limitations and artillery could not simply be utilised to destroy. This was demonstrated in the utilisation of artillery in 1918.

As described by Jackson Hughes in *The attack on the Hindenburg line*, the attack in 1918 was 'was an assault using the destructive power of the heavy artillery to conduct counter battery fires. The infantry had limited objectives ensuring they remained within range of the artillery. Artillery groups were allocated to directly support the infantry assault with an intense and deep creeping barrage in order to neutralise the German position. The heavy artillery groups, which was by far the majority, were allocated to engaging German artillery fire which was identified through air observation, flash spotting and sound ranging techniques. Surprise was achieved through the technical methods adopted by the artillery and collaboration between artillery and intelligence. Importantly the use of artillery to conquer and the infantry to occupy had shifted to a combined arms operation where artillery neutralised in order for infantry to close with, kill and capture.

COMMAND AND CONTROL STRUCTURE

From 1914 until the end of the Somme campaign the artillery was commanded up to the divisional level. Whilst artillery advisors existed at the corps and army level they were more administrative and was made clear by General Haig insisting 'that the commander at each level was entirely responsible for making tactical plans within the framework of his own general scheme' meaning that the artillery advisor, depending on the commander, may have very little involvement in the planning of artillery resulting in very different artillery plans across the front. General Haig also prevented artillery advisors at Army level from giving orders to corps and divisional levels further preventing coordination. The impact of decentralising artillery to the divisional level is evidenced by the lack of coordination at the Battle of the Somme. The lack of coordination from higher headquarters is further evidenced in the commander of 18th Division request for his barrage on the first of July 1916, to start in front of his own trenches and advance forward with his division. The denial of this request does indicate some involvement from higher headquarters but given it was denied because it was considered dangerous and would delay the flanking divisions it is likely this denial came from the Corps commander rather than the artillery advisor. Fortunately rather than making the same mistake they had in 1915 and simply requesting more guns the BEF quickly conducted an investigation into the successes and failures of the Somme campaign. Ironically this was possible as they could analyse the divisional artillery plans to determine why they

were successful or not. It was from this investigation the necessity for the centralisation of command and control was identified.

The recognition of the need for centralisation and coordination of artillery at the corps and army level resulted in the development of artillery organisations that had allocated specific tasks from a central coordinating point being the General Officer Commanding Royal Artillery whose position was cemented as a commander as opposed to an advisor. This enabled the consolidation of the Heavy Artillery group who worked directly to the corps or army headquarters, a mobile artillery group consisting of 18-pdrs who provide that intimate support to the brigades and division and two medium groups designed to be flexible enough to participate in the creeping barrage and counter battery fires.

SUCCESS?

Prior to the Somme campaign General Haig stated of the BEF failures to date, that 'if only they had enough artillery they could walk through the German lines'. The belief that it was artillery that gained and defended ground and that battles were won by artillery and lost by lack of artillery was opposed by leading theorists like Fuller and Liddell-Hart in their evaluation post-war. Fred Vigman in *The theoretical evaluation of artillery after World War I* highlights the theorists focus on the amount of artillery and describe artillery as a dominant weapon but not the decisive weapon. Other views presented by Vigman, assessed that the weight of artillery was what ground the Germans to a halt. The battles leading up to the Somme demonstrates that this idea is incorrect. It is true that from 1914 to 1918 the amount of artillery increased from 250 guns at Nueve Chapelle compared to the 1400 artillery pieces at the Somme and yet failed to achieve success. It is a limited view that more artillery wins battles and success cannot therefore be attributed solely to more ammunition and guns. Rather it is evident their success was attributable to the BEF's ability learn and adapt in order to centralise, coordinate and employ artillery for a unified purpose. Haig in 1918 understood that without centralisation and coordination, the issues he faced at the Battle of Somme that were attributed to poor use of artillery, would have continued but simply on a larger scale.

CONCLUSION

It was through identifying and learning from their failures the BEF was able to successfully identify new roles and strategies for artillery to better use their resources on the Western front in 1918. Many of these developments are relevant today in particular the centralisation of artillery can be seen in the concept of artillery tactical tasking. In this way it is demonstrated that learning and adaptation forms the very foundation and hallmarks of successful military organisations.