

Running head: BATTLE OF BEERSHEBA

The Battle of Beersheba  
Strategic and Tactical Pivot of Palestine

Zachary Grafman

A Senior Thesis submitted in partial fulfillment  
of the requirements for graduation  
in the Honors Program  
Liberty University  
Spring 2013

Acceptance of Senior Honors Thesis

This Senior Honors Thesis is accepted in partial fulfillment of the requirements for graduation from the Honors Program of Liberty University.

---

David Snead, Ph.D.  
Thesis Chair

---

Robert Ritchie, M.A.  
Committee Member

---

Randal Price, Ph.D.  
Committee Member

---

Brenda Ayres, Ph.D.  
Honors Director

---

Date

### Abstract

The Battle of Beersheba, fought on October 31, 1917, was a vital turning point in the British campaign against the Ottoman Turks. The battle opened a gap in the Turkish line that eventually resulted in the British takeover of Palestine. The British command saw the cavalry charge of the 4th Light Horse Brigade as a new tactical opportunity, and this factored into the initiative for new light tank forces designed around the concepts of mobility and flanking movements. What these commanders failed to realize was that the Palestine Campaign was an anachronistic theater of war in comparison to the rest of the Great War. The charge of the 4th Light Horse, while courageous and vital to the success of the Battle of Beersheba, also owed its success to a confluence of advantageous circumstances, which the British command failed to take into account when designing their light tank forces prior to World War II.

### The Battle of Beersheba: Strategic and Tactical Pivot of Palestine

World War I has taken its place in the public perception as a trench war, a conflict of brutal struggle between industrial powers that heaped up dead and wounded and forever changed Europe's consciousness. However, the war also involved campaigns which, though peripheral to the famous Western Front, nonetheless had an impact on the powers involved and the destiny of the regions in which they occurred. The Palestine Campaign, fought between the British and the Ottoman Empire in the ancient setting of the Holy Land, was one of these campaigns. While not decisive to the course of the war, this series of engagements in 1917 and 1918 charted the course of modern Middle Eastern history and provided a showcase for almost anachronistic military tactics and battles. The Battle of Beersheba on October 31, 1917 was a small part of a much larger action by British General Sir Edmund Allenby, and played an integral part in the success of British strategy in this campaign, as well as forming a part of a series of cavalry actions that influenced later British tactical doctrine. In taking this small town through a dramatic cavalry charge, the Australian Light Horse not only cemented their place in the annals of military legend, but also served as the point of a massive assault that Allenby used to roll up the Turkish line and take Palestine. The Battle of Beersheba was the key tipping point of the British campaign in Palestine, and the charge of the Australian Light Horse would later have a large impact on the British military extending into the Second World War.

With the war on the Western Front bogged down in the horrors of trench warfare, the British government felt the need to open a new front, both to boost morale at home and to open new strategic possibilities.<sup>1</sup> The Germans had been able to bring the Turks

---

1. Eitan Bar-Yosef, "The Last Crusade? British Propaganda and the Palestine Campaign, 1917-18," *Journal of Contemporary History* 36, no. 1 (January 2001): 90.

into the war, which was an early diplomatic defeat for the British, who historically were interested in maintaining the Ottomans as a stable buffer state.<sup>2</sup> Once the Turks became belligerents, Prime Minister David Lloyd George became convinced that British dominance over a destroyed Ottoman Empire's territory in the Middle East was essential to crafting a colonial empire after the end of the Great War.<sup>3</sup> By 1917, the British were facing an altered situation, up against steep odds with the recent Revolution hampering Russia's ability to contribute to the war effort. Lloyd George needed a new strategy to salvage something from the conflict.<sup>4</sup> There were other considerations as well: British strategists sought to eliminate the vulnerability of the Suez Canal as well as secure British access to Middle Eastern oil.<sup>5</sup> Beyond these local strategic functions, Lloyd George had long believed in the viability of a southern attack on Turkey, and hoped that the Palestine Campaign could offer him his opportunity.<sup>6</sup> The Palestine Campaign also offered a vital

---

2. Elizabeth Monroe, *Britain's Moment in the Middle East, 1914-1956* (Baltimore: Johns Hopkins Press, 1963), 23. Monroe states, "For a century, foreign thrusts towards India had been parried by a policy of keeping the Ottoman Empire whole, and using Turkish Arabia, Persia, and Afghanistan as a glacis which Britain did not want to occupy, but could not afford to see occupied by an enemy. With the entry of the Young Turks into the war, the first became enemy territory and the road to the other two lay open to subversive agents. The change was fundamental, and produced a quick succession of political and military reflexes" (24).

3. David Fromkin, *A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East* (New York: H. Holt, 2001), 301.

4. Brock Millman, "A Counsel of Despair: British Strategy and War Aims, 1917-18," *Journal of Contemporary History* 36, no. 2 (April 2001): 253-254. Millman details, "...A grand strategy began to develop, in furtherance of the new vision which advocated a movement to peripheral warfare as a concession to an altered reality, as a way of putting Britain in a position to participate in a peace conference, and of gaining those contingent and instrumental war aims which would have to be salvaged from what would be, essentially, an Entente defeat" (253-254).

5. Nigel Steel, "'The Great Ride': Romani to Damascus," in *Lawrence of Arabia and the Light Horse*, ed. Robert Nichols (Canberra: Australian War Memorial, 2007), 2.

6. Fromkin, 265. According to Fromkin, "From the beginning of the war, Lloyd George had argued that Germany could be beaten by an attack through the Balkans. Defeating Turkey would open up the Balkans to such an attack."

morale component to the British government, at a time when military and propaganda successes were increasingly difficult to find.<sup>7</sup>

While later British strategy and diplomacy in the Middle East would become a hopeless morass of conflicting goals and confusion, the early stages of the Palestine Campaign presented the clear and definable goals Lloyd George desired. From its position at the base of the Palestine region, the British wanted to drive north, pushing the Turks back and claiming Jerusalem.<sup>8</sup> In combination with this drive, a propaganda campaign on the home front would "...convey two principal messages: the immutable barbarism of the Turk and the illegitimate and destructive nature of his empire."<sup>9</sup> The British portrayed their entry into the Middle East as a liberation of those under Ottoman control and made diplomatic promises to a number of peoples, mainly Arab, which they ended up unable to keep.<sup>10</sup>

The British gave the challenge of invading Palestine to General Edmund Allenby, a cavalry general fresh from the Western Front. Allenby was a personal, hands-on commander who seemed perfect for a task that required definite, newsworthy results to raise morale.<sup>11</sup> According to David Fromkin, "Allenby's commission from the Prime Minister

---

7. Millman, 249; Bar-Yosef, 90.

8. Monroe, 38. He states, "The prospect of a British capture of the Holy Land appealed to Lloyd George as a man of religious upbringing, a romantic and a citizen of the British Empire."

9. James Renton, "Changing Languages of Empire and the Orient: Britain and the Invention of the Middle East, 1917-1918," *The Historical Journal* 50, no. 3 (2007): 648.

10. Ibid., 652. Renton argues that "...The British government sought to portray the advance of British imperial troops into the Orient as a war of liberation for Zionism, Arab, and Armenian nationalism"; Millman, 261 and 270.

11. David Bullock, *Allenby's War: the Palestine-Arabian Campaign, 1916-1918* (London: Blandford Press, 1988), 66; Sir Archibald Wavell, *Allenby: A Study in Greatness* (London: George G. Harrap and Co., 1941), 190, 198.

was to invade and occupy Palestine and to take Jerusalem before Christmas.”<sup>12</sup> The situation when Allenby took over from the previous commander of the Egyptian Expeditionary Force, General Sir Archibald Murray, was less than promising. The British had already fought two engagements at Gaza, without much success.<sup>13</sup> In fact, these attacks had proved successively more dismal, the first ending in a retreat just before objectives were reached due to lack of water, and the second faltering early against the Turks who held excellent positions.<sup>14</sup> These attacks involved “a frontal ‘Western Front’ type of assault” according to Yigal Sheffy, and even included a gas bombardment during the Second Battle of Gaza.<sup>15</sup> In these battles British commanders utilized their cavalry elements as mounted riflemen, dismounting them when they came into contact with the enemy as per the prevailing doctrine of the day.<sup>16</sup> British forces would later employ more traditional cavalry tactics at Beersheba.

When Allenby took command of the Egyptian Expeditionary Force, he immediately set in motion changes that infused life into a tired force.<sup>17</sup> Lieutenant General Philip Chetwode had already developed a plan for a new British offensive, and Allenby quickly

---

12. Fromkin, 308.

13. Wavell, 188-189.

14. Steel, 6.

15. Yigal Sheffy, “Chemical Warfare and the Palestine Campaign, 1916-1918,” *The Journal of Military History* 73, no. 3 (July 2009): 814, 819.

16. G.W. Nutting, *History of the Fourth Light Horse Brigade, Australian Imperial Forces, War 1914-1918 and Egyptian Rebellion 1919* (Kemp Place Valley: W.R. Smith and Paterson, 1953), 28-29, Australian Light Horse Studies Centre.

17. Wavell, 190.

adopted it.<sup>18</sup> With the southernmost Turkish line stretched from Gaza in the west along to coast to Beersheba in the east, Chetwode recommended an elaborate double feint of sorts: a surprise attack against Beersheba concealed by a false buildup at Gaza, then followed up by an actual attack at Gaza once the Turkish left crumpled.<sup>19</sup> In a way, this strategy can be seen as the culmination of the British command's apparent fascination with flanking and hook maneuvers, which they also employed in local tactics utilized at Beersheba.<sup>20</sup> Allenby began to make tours of the front and involved himself directly in preparations for the campaign.<sup>21</sup> According to Wavell, "The plan itself was simple...to concentrate a superior force against the enemy's left flank [Beersheba], while inducing him to believe that his right [Gaza] would again be attacked."<sup>22</sup> In execution, however, the operation involved elaborate maneuvers and immense amounts of manpower, all in order to deceive the Turkish and German commanders who faced Allenby in the desert.

---

18. Robyn Van-Dyk, "The Charge of the 4th Light Horse Brigade at Beersheba," Australian War Memorial, <http://www.awm.gov.au/blog/2007/10/30/the-charge-of-the-4th-light-horse-brigade-at-beersheba/> (accessed June 26, 2012).

19. Roger Ford, *Eden to Armageddon: World War I in the Middle East* (New York: Pegasus Books, 2010), 332; Wavell, 191, 201 and 208.

20. Bruce Gudmundsson, "Allenby's Turning Tactics," *The Quarterly Journal of Military History* 19, no. 4 (Summer 2007): 80. The author notes the tactical flanking maneuvers that would be used at Beersheba itself, but the principle seems to hold for the larger strategy Allenby and Chetwode developed, as they planned to break and turn the Turkish flank before assaulting Gaza.

21. Wavell, 198.

22. *Ibid.*, 201.



tine.<sup>24</sup> Another factor that made for difficulties was the competition and problems between the Turkish Army proper and their German allies. The German role on the Turkish front was quickly becoming that of plugging all the gaps and trying to push the Turks to make a cohesive stand.<sup>25</sup> No doubt partially due to these troubles, the Ottomans and their German allies were under no illusions as to the delicacy of their position. They “...fully expected Allenby's offensive, and believed the blow would fall late in October or early in November [1917].”<sup>26</sup> Allenby was assaulting a prepared enemy across difficult terrain, and would need to employ decisive action and careful deception to succeed.

Of vital importance to Allenby's movement against the Turkish flank was logistical and counterintelligence preparation. Simply from a logistical perspective, the maneuver presented a number of problems. Allenby shifted pack animals to the Beersheba flank because of the difficult terrain, which prevented the use of mechanized units there.<sup>27</sup> In fact, this terrain would prove so adaptable to mounted tactics as to provide an almost anachronistically ideal battleground for the work of cavalry. In order to support the battle plan he had in mind, Allenby's engineers worked to establish forward supply dumps of water and reopen cisterns that had been blocked by the Turks, all in an attempt to secure sufficient water supply for the movements of the British units across the desert.<sup>28</sup> The order of battle directed that “[Lieutenant General Sir Edward] Bulfin's 21st Corps was to

---

24. Bullock, 69. This was so bad that “...One-quarter, or 10,000, of the whole army personnel was sick in hospital at any given time.”

25. *Ibid.*, 71.

26. H.S. Gullet, *The Australian Imperial Force in Sinai and Palestine, 1914-1918* (Sydney: Angus and Robertson, 1923), 372.

27. Bullock, 67.

28. Gullet, 378-379.

direct a holding action against Gaza while [General Sir Henry] Chauvel's Desert Mounted Corps and Chetwode's 20th Corps delivered the master stroke to the Turkish left..."<sup>29</sup>

Allenby had good reason to choose Beersheba specifically as the target of his assault on the Turks' left flank. A small town on the eastern end of the Turkish position, "Beersheba was a locally significant junction of road and track...but it was the wells that were most critical to the game plan."<sup>30</sup> The problems involved in this assault were the difficulties of transporting the force over poor roads and supplying them with water, especially the horses of the mounted units. As a result, Wavell notes that "The early capture of the Turkish detached force at Beersheba, with wells intact if possible, was...a keystone of the plan."<sup>31</sup> As part of the intense preparation for the attack, engineers rediscovered and readied wells at Khalasa and Asluj, making possible some of the difficult maneuvers Allenby had in mind.<sup>32</sup> This was vitally necessary as "Man and beast would require a daily 400,000 gallons [of water] in the 30th Corps and Desert Mounted Corps alone."<sup>33</sup> With water such a key part of any strategic or logistical discussion in desert warfare, it even dictated Allenby's tactics. The orders issued to the 4th Australian Light Horse Brigade included specific directions to hit the Turks from behind and capture the wells at Beersheba "...In order to form a base for future operations Northwards."<sup>34</sup>

---

29. Bullock, 73.

30. *Ibid.*, 74.

31. Wavell, 201.

32. Nutting, 25. Van-Dyk also mentions this issue: "The greatest problem for Chauvel was to find sufficient water in the Beersheba area for his mounted troops... At Asluj the old wells were found and a fortnight's work put them into working order. This made the attack on Beersheba a feasible operation."

33. Bullock, 67.

34. W. Grant, "Brigade Operation Order No. 37," October 30, 1917, in *4th Australian Light Horse Brigade War Diary, October 1917*, Canberra, Australian War Memorial, 40-41.

Allenby's command put immense effort into concealing the true nature of their plans and maneuvers from the Turks, both in selling the feint at Gaza and hiding the buildup at Beersheba.<sup>35</sup> This subterfuge consisted of a concerted counter-intelligence campaign that aimed to fix the Turkish commanders' attention on Gaza, where they had previously defended against two unsuccessful British attacks, while simultaneously moving a large force undetected into position at Beersheba, the opposite end of the front lines. A daring counterintelligence action helped to conceal the true intentions of the British. It originated with one Col. JD Belgrave, and was actually carried out by Capt. ACB Neate, who rode up towards Turkish lines, faked a wound, and pretended to accidentally drop a bag stuffed with false orders and maps, all for the enemy's benefit.<sup>36</sup> The British also maintained the ruse by a large-scale artillery bombardment of Gaza in the days leading up to the British strike at Beersheba.<sup>37</sup> Finally, the arrival of the new British Bristol fighter aircraft took air dominance away from the German air force in Palestine, giving Allenby the crucial ability to maintain a counterintelligence smokescreen working while he shuffled troops around just out of view of the enemy.<sup>38</sup>

The result of this excellent deception was that the Turks and their German allies remained convinced that the previous British attacks at Gaza were being repeated, even as evidence began to trickle in to the contrary.<sup>39</sup> H.S. Gullett summarizes the situation

---

35. Gullett, 372-375.

36. Fromkin, 311; Ford, 338, 464.

37. Steel, 6. Ford elaborates: "Surprise would be of the essence, of course, and it would be vital to mount a diversionary operation designed to convince the Turks that the British were willing to batter themselves senseless against Gaza city once more" (332).

38. *Ibid.*, 336.

39. Ford, 338. He goes on to note that "It is clear that by 28 October Kressenstein's staff was well informed as to the build-up; it was at that point that the effects of the 'haversack' ruse...were felt, the Ger-

excellently when he notes that while “The enemy fully expected Allenby’s offensive, and believed the blow would fall late in October or early in November,” it was simultaneously true that “Neither [the Turkish leader] nor the German leaders believed it was possible for Allenby to fling his chief strength on the Beersheba flank.”<sup>40</sup> Through his careful planning and the cunning of his intelligence team, Allenby had gained the element of surprise, and now he simply had to exploit his advantage.

This task fell to the mounted troopers of the Australian Light Horse. The ALH was originally organized as a mounted rifle unit rather than a true shock cavalry force. These hardy riders, used to conditions in Australia, were perfectly suited to the harsh terrain, open spaces, and mobile combat of the deserts of Palestine.<sup>41</sup> Formed in the early days of the war and disbanded shortly after its end, they seemed perfectly placed in engagements that would capture the imagination of the British home front.<sup>42</sup> After the British defeat at Gallipoli, the ALH were combined with the New Zealand Mounted Rifles to form the ANZACS, and placed under the command of Lieutenant General Harry Chauvel.<sup>43</sup> Unlike some of their other mounted counterparts, the ALH was armed with infantry weapons only and did without the additional cavalry saber that some other mounted units in the theater were equipped with.<sup>44</sup> Peter Burness notes, “The light horse was not meant

---

man commander persisting in the belief that what he was seeing was a feint aimed at drawing his attention away from Gaza.”

40. Gullett, 372 and 373.

41. Peter Burness, “The Australian Light Horse,” in *Lawrence of Arabia and the Light Horse*, ed. Robert Nichols (Canberra: The Australian War Memorial, 2007), 12 and 16.

42. Ibid., 21. “The Australian Light Horse existed for less than 50 years, through peace and war.”

43. Steel, 4-5.

44. C. Falls, G. MacMunn, and A.F. Becke, *Military Operations: Egypt and Palestine* (London, H.M. Stationary Office, 1930), 57-58, Australian Light Horse Studies Centre.

to fight from horseback with sword or lance as cavalry did. The light horseman's mount gave him mobility, but in action he would dismount to fight on foot; in battle one man in four was usually required to be a horse-holder."<sup>45</sup> However, even though they tended to receive less glamorous assignments than their military ancestors, Burness records that

Australians saw their light horsemen as an elite. Even in drab wartime dress there was an air of dash and glamour about them. In stereotype at least, they combined the qualities of the rural pioneer with those of the natural soldier. There was perhaps some substance to this romantic view. Drawn heavily from the country towns and properties, where ownership of a horse and the ability to ride demonstrated that a man was both fit and solvent, light horsemen were considered to possess hardiness, independence, and initiative.<sup>46</sup>

These qualities would soon serve these horsemen well, as they would be called upon to serve in an uncharacteristic and vital role in the coming battle.

With the preliminary ruse complete, a similar deception occurred at the tactical level near Beersheba. The basic plan was to send the 20th Corps forward against Beersheba while looping the Desert Mounted Corps to the rear.<sup>47</sup> The 20th Infantry was to capture the actual garrison through a frontal assault, while the Desert Mounted Corps, which included the Australian Light Horse, would take the town and vital water supply.<sup>48</sup> The Brigade Orders for the attack note "Tasks for the Desert Mounted Corps are (a) attack Beersheba from the East so as to envelop the enemy's left rear and (b) seize as much water supply as possible in order to form a base for future operations Northwards."<sup>49</sup> In short, Allenby planned a classic flanking maneuver, in the hopes that the inexperienced

---

45. Burness, 12.

46. Ibid.,12.

47. Bullock, 75.

48. Wavell, 211.

49. Grant, "Brigade Operation Order," 40-41.

Turkish troops would be surprised by the appearance of the mounted troops from the east. In his summary of the battle, Robyn Van-Dyk lists the odds: “Beersheba’s defences were held by 1,000 Turkish riflemen, nine machine guns and two aircraft...on the night of 30 October about 40,000 allied troops moved towards Beersheba....”<sup>50</sup> Allenby wanted victory, and was willing to commit disproportionate force to get it.

With their objectives set, the British troops began moving into position on October 30, 1917. As noted by C. Falls, G. MacMunn, and A.F. Becke in their campaign history, “The marches before the mounted troops were therefore long. That of the A. & N.Z. Mounted Division from Asluj to Bir el Hamam was 24 miles, that of the Australian Mounted Division from Khelasa through Asluj to Iswaiwin 30 miles, that of the 7th Mounted Brigade about 17 miles.”<sup>51</sup> The British command was aware of the dangers of losing the element of surprise or of artillery and air attacks breaking up the mounted columns; therefore, they gave specific instructions on how to deal with these threats. These included strict light discipline and bans on smoking, as well as order against officers carrying sensitive information and maps with them while on march.<sup>52</sup> After they arrived at their objectives on the morning of the 31st, the Turkish commander of the garrison, Ismet Bey, was shocked “...By the appearance of two cavalry divisions to the east, not having contemplated that the British mounted troops would move, at any rate in such numbers,

---

50. Van-Dyk. Bullock sums up: “Irresistible force was now in position...the EEF thus possessed twice the infantry, nine times the cavalry, and three guns for every two Turkish guns, generally throughout the battle line. The concentration, however, had made the threat against Beersheba far worse...a total ratio advantage of eight to one” (73).

51. Falls, MacMunn and Becke, 52-53.

52. Grant, “Brigade Operation Order,” 40-41.

so far from water.”<sup>53</sup> Kress von Kressenstein, the German commander in communication with Bey, later noted that the Turks had sighted the British mounted troops with aerial scouts as well as through intelligence, and states that Bey attempted to reallocate his own cavalry forces to deal with this new threat.<sup>54</sup> In many ways, Kressenstein’s account of the battle reads like a man’s attempt to shift blame for a catastrophe onto a subordinate, but the reality was that neither the Turks nor the Germans had realized what was actually going on until it was far too late to do anything about it.

Bey had little time to properly deal with the mounted troops his garrison had sighted in the hills to his flank, but by now the main British attack was fully underway. Chetwode's infantry opened the battle with an artillery bombardment, intended to break up the barbed wire in front of the Turkish trenches and to further fix their attention on the infantry attack.<sup>55</sup> Quickly realizing that he was about to come under heavy attack and his position was untenable, Bey urgently requested reinforcements from Kressenstein. However, the German commander had completely fallen for the deception and expected a full scale attack at Gaza, especially since the British had been bombarding the city steadily to maintain the ruse.<sup>56</sup> The Turks were stranded and under assault.

---

53. Falls, MacMunn and Becke, 54.

54. Friedrich Freiherr Kress von Kressenstein, *Mit den Tèurken zum Suezkanal* (Berlin: Otto Schlegel, 1938), 277, Australian Light Horse Studies Centre.

55. Gullett, 386.

56. Falls, MacMunn and Becke, 54; Bullock, 75.

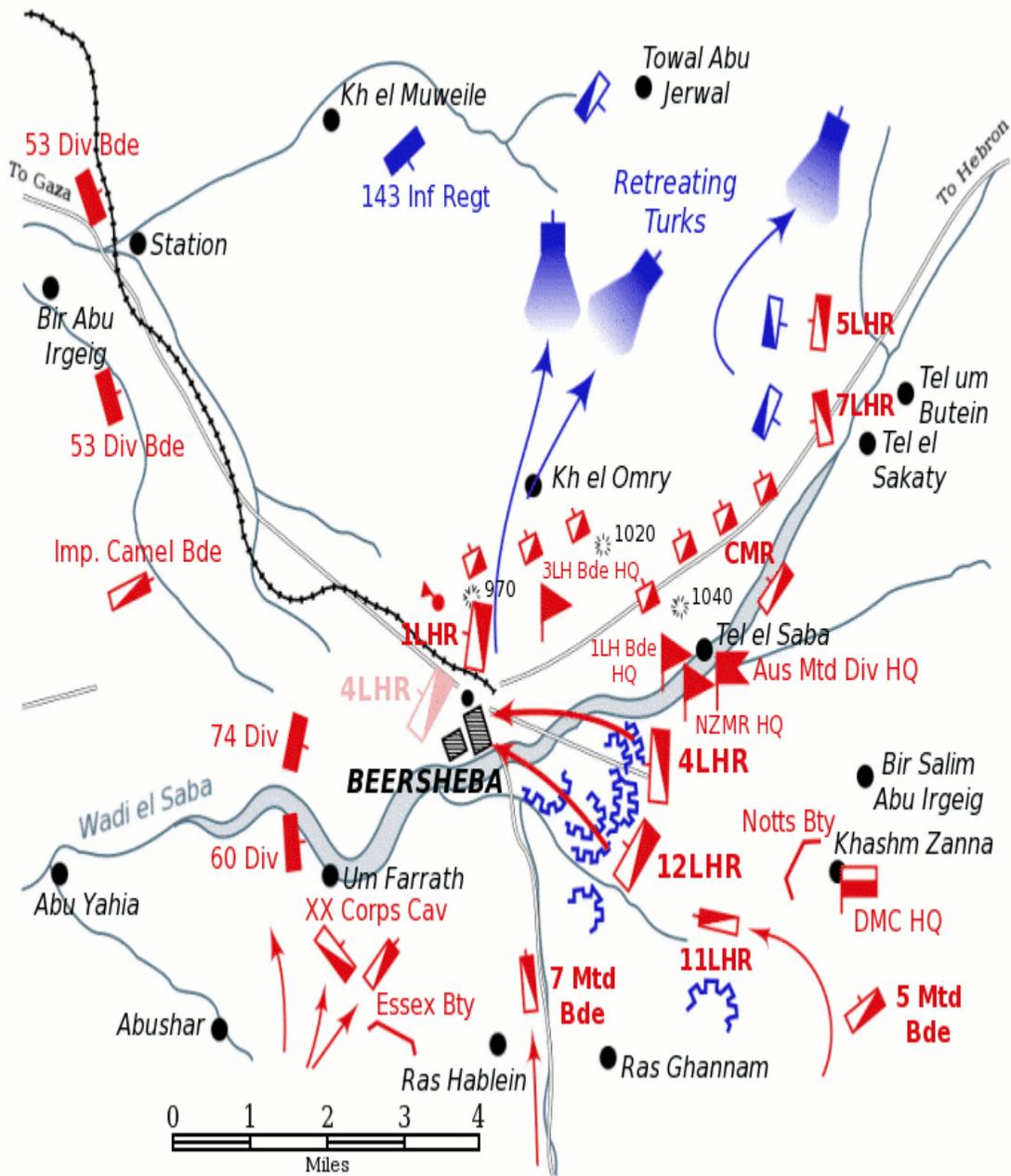


Figure 2.<sup>57</sup>

The 20th Corps began their attack, in concert with some of the ALH and other mounted units, who were as usual utilized as mounted riflemen.<sup>58</sup> While most of their

57. From Wikimedia Commons, [http://en.wikipedia.org/wiki/File:Battle\\_of\\_Beersheba\\_map.png](http://en.wikipedia.org/wiki/File:Battle_of_Beersheba_map.png). Detail of movements at the last stage of the battle.

movements met with quick success, they had difficulty taking Tel el Saba, a hilltop that the Turks held with a small garrison and a machine gun detachment. This small force stubbornly held out until the British finally regrouped and took the hill.<sup>59</sup> However, the British were not in full possession of Tel el Saba until about 3 p.m. that day, and this delay would have crucial effects on the rest of the battle.<sup>60</sup>

Kressenstein attempted to explain Ismet Bey's actions during the battle, and the story he told is one of a desperate commander making every effort to save a doomed position. Kressenstein detailed:

Ismed sent the Cavalry Division to the heights northeast of Beersheba with orders to prevent an encirclement of Beersheba by the enemy Light Horsemen. One of those many conical hills in this region, Tel el Saba, controlled the surrounding area but was inadequately held so Ismed had it occupied by a battalion consisting of 300 rifles and 6 heavy machine guns. With two battalions of the remaining reserves, he moved quickly to close the broad, five kilometre gap between the left wing of his prepared position at Tel el Saba and Ras Ghannam.<sup>61</sup>

Other sources make clear that the Turkish cavalry were actually able to prevent the Australian Light Horse units from completely surrounding Beersheba. This had been done early on the 31st, when Bey first realized that he was about to be completely flanked by enemy cavalry.<sup>62</sup> As the day wore on, the Light Horse units to the southeast of Beersheba

---

58. Falls, MacMunn and Becke, 56-57.

59. Kressenstein, 278. He further recounts: "...During the morning, with some assistance, the New Zealand brigade commenced a frontal assault against Tell el Saba. The open area provided no cover which allowed the Turkish machine gun fire to bring the attack to a stand still. Only after the English employed fresh forces and developed a comprehensive attack against both the north and south flanks of Tel el Saba, they succeeded in taking by storm the Turkish position at 3 pm. The under strength Turkish battalion entrusted with its defence doggedly held out with great courage and in so doing fulfilled its obligation."

60. Alexander Kearsley, *A Summary of the Strategy and Tactics of the Egypt and Palestine Campaign, with Details of the 1917-18 Operations Illustrating the Principles of War* (Aldershot: Gale & Polden, 1931), 21, Australian Light Horse Studies Centre.

61. Kressenstein, 277.

62. Falls, MacMunn and Becke, 56.

took cover in the foothills to avoid Turkish shells lobbed in their direction.<sup>63</sup> In other words, the Turks had done the best with what they had, bravely defending their positions in the face of overwhelming numbers. However, by 3 p.m., with Tel el Saba finally in British hands and dusk falling, the situation was becoming critical for the British units as their timetable quickly eroded. It was at this point that the Australian Light Horse was called upon to step into the gap and take its place in military history.

With daylight fading fast and the mission's main operational objectives, the critical wells at the center of the town, still untaken, British command needed a solution that would bring a quick and decisive end to the battle.<sup>64</sup> Their answer, paradoxically in this war of the machine gun and the barbed-wire no-man's-land, was a cavalry charge. After waiting for hours through the day and enduring both shelling and intermittent bombing by the few planes the Turks possessed, General William Grant, commander of the 4th ALH, ordered the Australians into the saddle.<sup>65</sup> General Grant ordered his 12th Regiment: "Use your bayonets as swords. I wish you the best of luck."<sup>66</sup> Improperly armed for the maneuver, and executing an attack which was counter to the prevailing military wisdom of the day and to their experience during the campaign to that point, "...Around 800 light

---

63. Van-Dyk. The author quotes one Private Hunter, who later stated "The Turks immediately started shelling us with heavies. Good cover and tact on our part prevented casualties."

64. W. Grant, "Report on Operations (Attack on Beersheba)," November 2, 1917, in *4th Australian Light Horse Brigade War Diary, October 1917*, Canberra, Australian War Memorial, 45-47. "It was essential that the place be taken quickly, as the horses had not been watered since the previous day and had made a night march of over 30 miles."; Ion Llewellyn Idriess, *The Desert Column: Leaves from the Diary of and Australian Trooper in Gallipoli, Sinai, and Palestine* (Sydney: Angus and Robertson, 1951), 250-251. Idriess, who participated in the battle, makes clear the high stakes of the engagement, including the fact that the British were relying on being able to rewater the horses at Beersheba itself, and would have to make an extended retreat to water if they failed to capture the town.

65. Nutting, 26.

66. Van-Dyk.

horsemen moved forward in line. Over the final two kilometres they charged at full speed, smashing into and through the Turkish trenches.”<sup>67</sup>

As they charged, a Turkish machine gun position opened fire in enfilade, but a supporting British artillery unit quickly returned fire and silenced the Turkish guns.<sup>68</sup> Meanwhile, Turkish artillery and riflemen from the trenches opened fire, but were unable to stop the charge, and the British units swept through the Turkish trench line and into Beersheba. According to the Kearsy account,

[t]heir forward squadrons galloped over the two front lines of trenches, then dismounted and attacked the occupants with the bayonet. The remainder of the Brigade galloped into the town and captured 1,100 prisoners and ten guns of the Turkish 27th Division. Also they prevented the Turks from destroying more than two of the seventeen wells in the town. The 4th A.L.H. Brigade lost 31 killed and 33 wounded.<sup>69</sup>

In a single swift action, a daring and high-risk cavalry charge into the teeth of a defended trench line effectively won the battle. The British were in possession of the town, had eliminated the garrison from action, and were now in control of one end of the Turkish line, exactly the situation Allenby needed. Importantly, they also controlled the vital wells and were now in a position to press their advantage. Beersheba had gone largely according to plan, a definite rarity in battle.

The report on the battle issued by the 4th ALH Brigade noted that “All ranks behaved in a most admirable manner and fearlessly charged several successive trenches at the gallop, in many cases in the face of severe machine gun and rifle fire. The rapidity of

---

67. Steel, 6.

68. Grant, “Report on Operations,” 46.

69. Kearsy, 21.

the attack seemed to demoralize the Turks and also avoided their artillery fire.”<sup>70</sup> Their assault had not only taken the town, but had also opened the door for Allenby’s successful advance to Jerusalem. As G.W. Nutting puts it, “[t]he fall of Beersheba commenced the rout which ended in driving the Turks out of Palestine...the flank of the Turkish Army turned.”<sup>71</sup> The success was not complete: later events prevented Allenby from immediately following up his initial advantage, plagued again by the crucial water issues even after the capture of the Beersheba wells. Nevertheless, the crucial gap in the line had been opened, and from this point forward in the campaign, the Turks would be on the defensive. The campaign was certainly not won at Beersheba, but it was a crucial hinge on which the tide of battle turned in the favor of the British.<sup>72</sup>

Speaking in strategic terms, Beersheba created a vital crack in the Turkish defenses that enabled Allenby to eventually roll up their flank and push his way north. While this movement was neither immediate nor uncontested, the eventual result of the campaign was British victory, with the Ottoman Turks driven from Palestine.<sup>73</sup> Kearsy’s account sums up the battle’s place in the campaign by stating “This preliminary operation was thus completely successful owing to the fact that the Turks were surprised, and that the final assault was carried through with great determination and rapidity.”<sup>74</sup> British victory here was much more than a sideshow to the Great War, however. As Roger Ford

---

70. Grant, “Report on Operations,” 44.

71. Nutting, 28-29.

72. Steel, 6-8. Steel notes that “Allenby hoped to swing the Desert Mounted Corps north-east to catch the retreating Turks. But, unable to find water easily, they made slow progress, making contact with only the Turkish rearguard. Despite these difficulties, by mid-November the Turkish forces had been divided.”

73. Ibid.

74. Kearsy, 21-22.

notes, "...With the Americans on whom the British and French pinned so many of their hopes proving very slow off the mark, and with the collapse of the Eastern front...Lloyd George badly needed a hat, and a rabbit to pull from it. The hat was the Middle East, and the rabbit was the defeat of the Turks in Palestine."<sup>75</sup> In addition, the events of this campaign, especially the famous charge of the Light Horse, would have an important impact on events leading up to the next World War.

The most important effect of the Light Horse's dashing charge, for better or for worse, was to force the British command to reassess their evolving tactical doctrine regarding mounted troops.<sup>76</sup> During World War I, there had been an active debate raging as to what role cavalry, in the sense of a classic sword-armed horseman, would be able to play on a battlefield dominated by innovations such as the trench warfare, barbed wire emplacements, and machine guns.<sup>77</sup> While previously, the prevailing notion had been that modern war technology had made the pure cavalry unit obsolete, success at Beersheba led some to revisit this problem and even argue that cavalry could make a comeback.<sup>78</sup> With this question in mind, military men and scholars since the war have long debated the significance of the ALH's cavalry charge, seeking to establish exactly why it was successful and how that experience should apply to tactical doctrine.

Further probing into the famous charge reveals that, while certainly a decisive and brave action, it depended on many less glamorous actions and conditions for its success.

---

75. Ford, 364.

76. Ibid., 340.

77. Jean Bou, "Cavalry, Firepower, and Swords: The Australian Light Horse and the Tactical Lessons of Cavalry Operations in Palestine, 1916-1918," *The Journal of Military History* 71, no 1 (January 2007): 102.

78. Ibid., 110.

In the first place, the Turkish defenders may have contributed through poor training and preparation to their own downfall. Several eyewitnesses, as well as the 4<sup>th</sup> ALH Brigade's official report on the battle, state that the British troops discovered Turkish artillery and rifles with their elevation sights fully set. This indicated that perhaps the Turkish troops, poorly trained and under the effects of an intimidating cavalry assault, failed to adjust their sights and were therefore firing above the heads of the horsemen as they charged.<sup>79</sup> Indeed, contemporary analysts placed much stock in the effects that the charge had had on the Turkish defenders, as in Hector Dinning's statement that "In the face of a body of galloping swords the bravest will falter and break, where, rationally, there is no excuse for it. The cavalry charge is the chief of all forms of Bluff in warfare."<sup>80</sup> Other sources also use the term bluff, including a German Staff Officer who claimed that the troops defending Beersheba were shocked that the British followed through with the charge, thinking it a bluff maneuver.<sup>81</sup> And of course, the supporting fire from the British gunners was vital to keeping the charge from being enfiladed with machine gun fire as well. But another, perhaps even more vital detail, emerges from the sources: the Turks failed to construct barbed wire defenses in front of their trenches. Subsequent commentators agree with Jean Bou on this point: "Had the Turkish defenses at Beersheba been wired, the charge by the 4th Light Horse Brigade could not have taken place."<sup>82</sup>

---

79. Idriess, 252; Grant, "Report on Operations," 45.

80. Hector Dinning, *Nile to Aleppo* (New York: The Macmillan Company, 1920), 198.

81. Nutting, 28. Nutting also notes that "Actually the [charge on Beersheba] was a gigantic bluff, because the Light Horse units were not trained in the use of the sword and, in any case, the bayonet is not a suitable weapon for this class of action, being too short and not sufficiently pointed for effective use."

82. Bou, 124.

All of these factors aided the spectacular success of the charge, but it seems that the British command paid less attention to the contributing circumstances than to the overall effect, which distorted their final interpretation. In fact, this shift in thinking had begun even before the close of the campaign, as British commanders began allowing their mounted units to engage in classic cavalry charges, steel in hand, when the situation allowed an opportunity.<sup>83</sup> British reassessment of the usefulness of cavalry tactics would continue into the interwar period, with fateful results for the effectiveness of British armored units.

The period between the World Wars saw a British military establishment attempting to make sense of the bewildering array of technological and tactical advances which had shown themselves in the last conflict, while simultaneously attempting to predict the nature of the next. In this way they were similar to the other great powers, who each were attempting to develop their own strategic and tactical answers to these new dilemmas. For the British military, this process was an evolutionary one, the product of argumentation and exchange between “a group of dedicated activists” that included theorists J.F. Fuller and Basil Liddell Hart.<sup>84</sup> These theories took many forms, based on the ideological development of the various theorists as well as the relative importance they placed on the armored vehicle in future warfare. Interestingly, by the late 1920s this discussion was already taking form around ideas which transposed the tank into normal cavalry doctrine, as seen in the “Purple Primer,” a tactical document which explicitly stated the possibili-

---

83. Ford, 340.

84. Azar Gat, *British Armour Theory and the Rise of the Panzer Arm: Revising the Revisionists* (New York: St. Martin's Press, 2000), 12-13.

ties of utilizing tank formations to do the work of horsed cavalry.<sup>85</sup> This document also included tactical formations designed specifically with flanking maneuvers in mind. Robert Larson describes this order of battle: “In essence, these formations consisted of a forward element that conducted reconnaissance and pinned the enemy to his position once he was located, and a shock element that maneuvered around an enemy so fixed and struck him from an unexpected quarter.”<sup>86</sup> These tactics were almost identical to those used at Beersheba, with the XX Corps’ infantry playing the role of the fixing force and the 4th ALH acting as the flanking strike force.

This basic theme was to continue throughout the interwar years, as British armor theory began to solidify behind a core of tactical doctrines. Many factors influenced this process, one of which was a British tendency to carry over tactics learned from peripheral conflicts in the British Empire.<sup>87</sup> This included the Palestine Campaign, which some military leaders saw as an answer to the problem of stagnation that had occurred in the trench warfare of the Western Front. The answer, according to this theory, was cavalry, which could be evolved according to the new opportunities of mechanized technology and utilized as it always had been, to disrupt and flank the enemy.<sup>88</sup> This quickly became the set direction of the British military establishment, and a new Mobile Division was created

---

85. J.P. Harris, *Men, Ideas, and Tanks: British Military Thought and the Armoured Forces, 1903-1939* (New York: Manchester University Press, 1995), 223-224. He qualifies: “In fairness to the British General Staff of the late 1920s it must be pointed out that no one thought of this booklet as definitive. It was an account of a process of doctrinal development still in progress and a basis for further thought and discussion.”

86. Robert Larson, *The British Army and the Theory of Armored Warfare, 1918-1940* (Newark: University of Delaware Press, 1984), 151.

87. W. Michael Ryan, “The Influence of the Imperial Frontier on British Doctrines of Mechanized Warfare,” *Albion: A Quarterly Journal Concerned with British Studies* 15, no. 2 (Summer, 1983): 124-125.

88. Harris, 254.

with the express purpose of converting old cavalry units into mechanized units, trading horses for light tanks but keeping tactics and doctrine almost intact.<sup>89</sup> J.P. Harris argues that this was detrimental to the overall utility of this force, as

The Mobile Division was seen too much as a direct replacement for the old horsed cavalry division. Most of its proposed functions: reconnaissance, the seizing of vital ground ahead of the rest of the Field Force, the protection of an exposed flank and maneuver against an enemy flank were old cavalry division roles...Indeed the division's composition as provisionally laid out in papers of 1934 and 1935 seems to have been designed more to find roles for otherwise redundant cavalry regiments than to create the most potent possible fighting force.<sup>90</sup>

In short, the Mobile Division became a replacement for forces such as the Australian Light Horse and mimicked in many ways their tactics of mobile flanking strikes. The idea of light tanks acting as a direct replacement for cavalry became a basic assumption to the British military command, and in many ways dominated the construction of their new armored units.<sup>91</sup>

Importantly, this evolution of tactical doctrine was not a total consensus, and in many ways left some of its original theorists behind, including Fuller and Liddell Hart, who had argued for the importance of the tank in warfare but reached differing conclusions in some respects than those adopted by the general staff.<sup>92</sup> Several factors contributed to the evolution which resulted in a British armored force that was largely composed of light tanks utilizing cavalry tactics. One was the phenomenon described by W. Michael Ryan, in which British commanders stationed on the frontier, often undersupplied

---

89. *Ibid.*, 261-262.

90. *Ibid.*, 259-262.

91. Gat, 7-13; Larson, 104, 181, and 189; Daniel Hahn, "Process of Change: the British Armored Division: its Development and Employment in North Africa during World War II" (master's thesis, U.S. Army Command and General Staff College, 1985), 29.

92. Larson, 93-96, 137.

and engaged in atypical forms of warfare, applied tactics of mobility which they had found effective to the new armored tactical doctrines developed between the World Wars. As a result, the new British light tanks were impractically light, both in armor and fire-power, reflecting a fascination with mobility and speed.<sup>93</sup> Another major factor was economic constraints, which led the British to favor cheaper tank designs and severely restricted their production ability, resulting in slimmed down cavalry-style striking forces.<sup>94</sup> Harold Winton argues for a focus on “imperial defense” similar to Ryan’s theories as well as a general “military conservatism” as primary factors in the creation of cavalry-based armor units. This conservatism led British leaders to attempt to translate their cavalry units and tactics into an armored context, rather than respond with openness to innovation in a new field.<sup>95</sup>

All of these factors were involved in a military policy that attempted to translate the successes of the peripheral campaigns of World War I into tactical doctrines. The problem with these theories was that they failed to take into account the fact that the ALH and similar units had succeeded, in part, because of a uniquely perfect set of conditions that might even be termed anachronistic relative to the general direction modern warfare was taking. The British had faced an inexperienced and poorly prepared Turkish force,

---

93. Ryan, 139-141. “Although these realities helped breed a remarkably innovative theory of mechanized warfare, a perhaps inevitable corollary was the compounding of the traditional British *idée fixe* that one could discover a magic formula whereby wars could be won on the cheap through legerdemain, maneuver, and mobility without resorting to the tasteless continental predilection for human destruction by power and weight.”

94. Harris, 238. “The impact of financial cuts on the development of British tanks in the early 1930s was dramatic and very damaging and the disruption of technical development at this period was to have a pernicious and lasting influence on the development of British military thought on armoured warfare.”

95. Harold Winton, *To Change an Army: General Sir John Burnett-Stuart and British Armored Doctrine, 1927-1938* (Lawrence: University Press of Kansas, 1988), 231. Winton states, “Thus military conservatism and imperial defense combined to make the Mobile Division primarily a reconnaissance and security unit, rather than an independent striking force.”

without reinforcements, in open terrain perfectly suited to cavalry maneuver; in short, conditions quite unlike what they would encounter against German forces in World War II. Regardless, the British high command had their recipe for tank warfare, and they continued to place trust in it throughout the interwar years and into the coming conflict.

While it would definitely be overstatement to trace the genesis of interwar and World War II British tank doctrine directly and solely to Beersheba, it also seems clear that the events of the Palestine campaign had an impact, especially when combined with the preexisting British tactical tendencies that Ryan points out. Jean Bou notes that “The charge at Beersheba...was but one of a rapid series of events that pointed to the continued tactical utility of sensibly executed shock tactics carried out under the right circumstances.”<sup>96</sup> Perhaps it was the very unexpected and heroic character of the ALH’s actions through the campaign that turned the prevailing doctrines on their head; after all, Bou records that when “...in late 1914 the 4th Light Horse Brigade had charged Australian Infantry in training...umpires declared that it had suffered nearly 100 percent casualties from machine gun fire.”<sup>97</sup> When Beersheba displayed a totally different result for the same tactic, it may have led tacticians to overlook the mitigating circumstances that had allowed for such a surprising result.

The shortsightedness of these strategic and tactical decisions would become clear when the British began to deploy their new light tank units at the beginning of World War II. Having developed the flanking maneuver, prominently utilized at Beersheba, into a complete order of battle, the British deployed specialized armored units made up of

---

96. Bou, 114.

97. Ibid., 110.

light tanks accompanied by “pivot” units of infantry designed to fix the enemy while the tanks looped around for the knockout blow.<sup>98</sup> However, these units were not effective against the German tank units, more heavily armed and armored and thus able to withstand anything the British tanks could bring to bear.<sup>99</sup> Indeed, the only theater in which these units met with success was Africa, where the British faced the Italians, another poorly trained and prepared army, in a theater of operations that “...was essentially a scaled-up version of Ottoman Palestine.”<sup>100</sup> However, even under ideal conditions, this success did not last long, as the Germans quickly developed and deployed countermeasure units to intercept and break up the British flanking squads.<sup>101</sup> Failing to correctly interpret the causes of their success in Palestine, British military theorists had thrown all of their efforts into a carefully devised system that was unable to meet the new challenges of rapidly evolving modern war. Ryan states that “...The very phenomenon which had produced mobile warfare therefore placed Britain at a tactical disadvantage during the Second World War.”<sup>102</sup> This disadvantage would continue to show itself as the British flanking column succumbed to the German blitzkrieg.

The Battle of Beersheba acted as the wedge that cracked open the Ottoman line in Palestine, and the events surrounding the battle and the storied charge of the 4th Austra-

---

98. Gudmundsson, 81; Hahn, 113.

99. Ryan, 141. The author sums up the situation as follows: “At the outbreak of war in Western Europe, Britain's motorized divisions were ill-equipped to stand up to German armored thrusts nor were they powerful enough to launch effective counterstrokes.”

100. Gudmundsson, 82-83.

101. Ibid.

102. Ryan, 139. In his view, “[m]echanized warfare perpetuated the mystique and effect of mounted fighting just as the cavalry arm and mounted infantry had done in days of yore when they were the decisive instrument in imperial warfare.” (141).

lian Light Horse had significant ramifications concerning later British tactical theory. It is important to remember, of course, that this battle alone neither won the campaign nor single-handedly rewrote the British Army's tactical doctrine. However, as pointed out by scholars such as W. Michael Ryan, the British Army did have a preexisting tendency to romanticize the techniques and strategy of frontier conflicts, which they attempted to translate into rules that did not necessarily apply well to European warfare.<sup>103</sup> The success of traditional cavalry, utilized as light shock troops rather than mounted infantry, in Palestine was an influential event in a relatively unimportant campaign. The British would not realize until the opening days of WWII that the charge of the Australians at Beersheba had been a glorious anachronism, a charge into the sunset of a bygone era rather than into a new tactical dawn.

---

103 Ibid., 123.

## Bibliography

- Bar-Yosef, Eitan. "The Last Crusade? British Propaganda and the Palestine Campaign, 1917-18." *Journal of Contemporary History* 36, no. 1 (January 2001): 87-109.
- Bou, Jean. "Cavalry, Firepower, and Swords: The Australian Light Horse and the Tactical Lessons of Cavalry Operations in Palestine, 1916-1918." *The Journal of Military History* 71, no 1 (January 2007): 99-125.
- Bullock, David. *Allenby's War: the Palestine-Arabian Campaign, 1916-1918*. London: Blandford Press, 1988.
- Burness, Peter. "The Australian Light Horse." In *Lawrence of Arabia and the Light Horse*, Ed. Robert Nichols. Canberra: The Australian War Memorial, 2007.
- Dinning, Hector. *Nile to Aleppo*. New York: The Macmillan Company, 1920.
- Falls, C., G. MacMunn, and A.F. Becke. *Military Operations: Egypt and Palestine*. London, H.M. Stationary Office, 1930. Australian Light Horse Studies Centre.
- Ford, Roger. *Eden to Armageddon: World War I in the Middle East*. New York: Pegasus Books, 2010.
- Fromkin, David. *A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East*. New York: H. Holt, 2001.
- Gat, Azar. *British Armour Theory and the Rise of the Panzer Arm: Revising the Revisionists*. New York: St. Martin's Press, 2000.
- Grant, W. "Brigade Operation Order No. 37." October 30, 1917. In *4th Australian Light Horse Brigade War Diary, October 1917*. Canberra, Australian War Memorial.
- "Report on Operations (Attack on Beersheba)." November 2, 1917. In *4th Australian Light Horse Brigade War Diary, October 1917*. Canberra, Australian War Memorial.
- Gudmundsson, Bruce. "Allenby's Turning Tactics." *The Quarterly Journal of Military History* 19, no. 4 (Summer 2007): 80-83.
- Gullet, H.S. *The Australian Imperial Force in Sinai and Palestine, 1914-1918*. Sydney: Angus and Robertson, 1923.

- Hahn, Daniel. "Process of Change: The British Armored Division: Its Development and Employment in North Africa during World War II." Master's thesis, U.S. Army Command and General Staff College, 1985.
- Harris, J.P. *Men, Ideas, and Tanks: British Military Thought and the Armoured Forces, 1903-1939*. New York: Manchester University Press, 1995.
- Idriess, Ion Llewellyn. *The Desert Column: Leaves from the Diary of and Australian Trooper in Gallipoli, Sinai, and Palestine*. Sydney: Angus and Robertson, 1951.
- Kearsey, Alexander. *A Summary of the Strategy and Tactics of the Egypt and Palestine Campaign, with Details of the 1917-18 Operations Illustrating the Principles of War*. Aldershot: Gale & Polden, 1931. Australian Light Horse Studies Centre.
- Kressenstein, Friedrich Freiherr Kress von. *Mit den Tèurken zum Suezkanal*. Berlin: Otto Schleigel, 1938. Australian Light Horse Studies Centre.
- Larson, Robert. *The British Army and the Theory of Armored Warfare, 1918-1940*. Newark: University of Delaware Press, 1984.
- Millman, Brock. "A Counsel of Despair: British Strategy and War Aims, 1917-18." *Journal of Contemporary History* 36, no. 2 (April 2001): 241-270.
- Monroe, Elizabeth. *Britain's Moment in the Middle East, 1914-1956*. Baltimore: Johns Hopkins Press, 1963.
- Nutting, G.W. *History of the Fourth Light Horse Brigade, Australian Imperial Forces, War 1914-1918 and Egyptian Rebellion 1919*. Kemp Place Valley: W.R. Smith and Paterson, 1953. Australian Light Horse Studies Centre.
- Renton, James. "Changing Languages of Empire and the Orient: Britain and the Invention of the Middle East, 1917-1918." *The Historical Journal* 50, no. 3 (2007): 645-667.
- Ryan, W. Michael. "The Influence of the Imperial Frontier on British Doctrines of Mechanized Warfare." *Albion: A Quarterly Journal Concerned with British Studies* 15, no. 2 (Summer, 1983): 123-142.
- Sheffy, Yigal. "Chemical Warfare and the Palestine Campaign, 1916-1918." *The Journal of Military History* 73, no. 3 (July 2009): 803-844.
- Steel, Nigel. "'The Great Ride': Romani to Damascus." In *Lawrence of Arabia and the Light Horse*, Ed. Robert Nichols. Canberra: Australian War Memorial, 2007.
- Van-Dyk, Robyn. "The Charge of the 4th Light Horse Brigade at Beersheba." Australian War Memorial, Canberra.

Wavell, Sir Archibald. *Allenby: A Study in Greatness*. London: George G. Harrap and Co., 1941.

Winton, Harold. *To Change an Army: General Sir John Burnett-Stuart and British Armored Doctrine, 1927-1938*. Lawrence: University Press of Kansas, 1988.