

# Book Reviews

## Comptes rendus de livres

### Technical Determinism: Examining the Armour in Armoured Warfare

R. H. CALDWELL

David Fletcher, *The Great Tank Scandal — British Armour in the Second World War, Part 1*, HMSO London, 1989. 141 pp., £12.95. ISBN 0-11-2904602.

David Fletcher, *The Universal Tank — British Armour in the Second World War, Part 2*, HMSO London, 1993. 125 pp., £14.95. ISBN 0-11-290534X.

These two works are about British Armoured Fighting Vehicle (AFV) technology in the Second World War. They are *not* about armoured warfare in that conflict. Nevertheless, both books, which can be considered part of the evolving field of "Gray Historic Literature,"<sup>1</sup> make a significant contribution to the story of AFV design, development and production.

The author, David Fletcher, is well qualified for the task. He is Librarian at the Bovington Tank Museum at the Royal Armoured Corps (RAC) Centre, Bovington, Dorset, England. This museum houses one of the world's best collections of archival and secondary source material available to researchers of AFVs and armour at war in the 20th century. Fletcher had access to all the technical archival sources in the Tank Museum's Library, as well as to the museum's extensive collection of tanks and armoured cars. For the development of Part 2, he was able to use a complete collection of armoured regimental war diaries. Fletcher's explanation of British AFV design and development from 1939 to 1945 reflects the rich archival and material sources that were available to him.

There are, however, serious problems with Fletcher's work. Although the publications are well-illustrated and nicely produced in a

research report format with two columns of text per glossy page, the writing style is uneven and the manuscripts apparently were not edited. There are no sub-headings under main index headings, thus a single AFV index item, the A-12 Matilda for example, has 30 page numbers. If readers want to know the general characteristics of the A-12 Matilda they must thumb through all those page references! The overwhelming detail — and repetition — in these volumes cries out for section headings, and paragraph headings where the paragraphs exceed 500 words. Any number of textual or editorial methods could and should have been used to help readers find their way.

More importantly there are no footnotes or bibliography and no suggested reading list. This is a pity because Fletcher clearly is one of a small handful of military-vehicle historians who have forgotten more about AFVs than most people ever will know. It would have been useful to identify at the least the museum's references, if not the archival ones.

In addition to these problems of format, style and organization, Fletcher's overall approach concentrated too exclusively on tank technology.<sup>2</sup> This emphasis led him to adopt the "great tank scandal" interpretation favoured by A. J. Smithers, who declared that "with the war nearly five years old and with the last two of them...[spent] planning the battles in Normandy...the country was cluttered up with tanks, most of them obsolete or useless."<sup>3</sup> In concentrating on the technology, Fletcher was forced to exclude the context of technical development — factors such as military thought, doctrine, organization and actual armoured warfare experience. That context suggests that

there were reasons *other than technical* for Britain's failure to sustain its distinguished reputation in the Western Desert after Rommel's arrival. According to Field Marshal Carver, "The relative quality of the tanks on both sides was fully discussed [in his *Tobruk* (1964)], and the conclusion reached that it was not as significant a factor as was claimed at the time."<sup>4</sup>

Fletcher's assumption in Part 1, *The Great Tank Scandal*, was that "British tanks of the Second World War have a frightful reputation" — hence the title. His aim was to "explain, to some extent, how this came to be," and why tank development "did not improve very quickly." But Fletcher qualified this indictment with the admission that, in fact, the subject was "not all gloom." On the contrary, he claimed that "Britain built some outstanding AFVs, and pioneered the expansion of armour into many specialized roles with a degree of ingenuity that was unmatched elsewhere, but she also relied heavily on overseas aid."

By the time Part 2 was published, however, Fletcher had come to the conclusion that the positive aspects of British AFV development were not really worth exploring. As he explained in the introduction, "From every quarter...I heard from people whose experience, either in industry or the firing line, coincided with what I had written about the poor standard of British tank development in the early war years." He described Part 1 as "a very sorry story of political, industrial and military ineptitudes that condemned British and Commonwealth soldiers 'to fight on ponies against an enemy mounted on fullsize horses'....The facts thus revealed fully justified the title."

Having found this technologically focussed constituency that was not much interested in the "outstanding AFVs," Fletcher's goal in Part 2 was obvious: to "carry the story forward" from Part 1. The difference, Fletcher declared, was that a complete set of armoured regimental war diaries were now available at his museum. These presented Fletcher with another pleasant surprise, because he was able "to get much closer to user opinion...[that] revealed all manner of things which the technical archives do not cover."

Fletcher used armoured warfare — the actual battles — only "as a backcloth" to his story. He argued that "a better grasp of the situation where tank availability, reliability and development are concerned will at least help to explain why certain battles turned out as they did." This largely technical explanation reinforced a historical school that could be called

the "All Technical School." What is offered is a technical way of explaining complex events like those that occurred in armoured warfare between 1939 and 1945. But there was much, much more going on, derived from *military thought* and action, not just from the research, design and development of AFV technology.

For reasons arising from the British use of armour in the First World War, and from the thinking of theorists during the inter-war years, by 1939 there were two schools of thought on armoured warfare in Britain: the "All Tank School," and the beginnings of an "All Arms School." The former saw tanks in independent mobile operations ranging deep into an enemy's rear, while the latter saw tanks employed for the direct support of infantry. Moreover, within the All Tank School there were differences between those who favoured a balanced force of arms with AFVs, and those who saw a force consisting almost entirely of tanks.

Even though the AFV resources to fulfill either theory did not exist in 1939, when the schools and their advocates were in powerful positions they influenced doctrine, which in turn influenced organization and directly affected tactical employment and the battlefield effectiveness of AFVs.<sup>5</sup> The result of this competition was that the British Army entered the war with three classes of tanks — infantry, cruiser and light. Of these, Infantry tanks emphasized armoured protection and armour-defeating firepower, cruisers relied on mobility and all-round firepower, and light tanks stressed reliability and a small battlefield signature.

The first part of the Western Desert war was seen as a brilliant success for the All Tank School. These operations demonstrated the effectiveness of British ideas, technology and even armour design. The workhorse AFV of the day was the A-12 Matilda with a small two-pounder (40-mm) main gun that fired only armour-defeating ammunition. Under the generalship of Wavell (Commander-in-Chief), Maitland-Wilson (GOC British Troops in Egypt) and O'Connor (GOC Western Desert Force, the early name for the Eighth Army) their Commonwealth troops advanced 800 km (500 miles) in under ten weeks, captured 130 000 prisoners, 380 tanks and 845 guns. Their one corps, XIII Corps, of two divisions destroyed ten Italian divisions. They suffered 1 928 casualties. Following the setback in France earlier in 1940, something seemed to be working well between December 1940 and February 1941, albeit against a lesser foe.

Then Rommel, and the Afrika Corps with their anti-tank gun screens arrived in theatre and Britain's reputation, self-esteem, ideas, doctrine and faith in their technology was dealt a major blow. Increasingly the All Tank School emphasis on more tanks than infantry (or anti-tank guns) proved ineffective. But this period of relative failure cannot be explained by AFV design and development alone. Analysts also have to look at the use of anti-tank guns and field artillery and the lack of *integration* of these equipments into the armour-infantry groupings in either infantry divisions or armoured divisions.<sup>6</sup>

During this troubled period of setbacks the All Arms school was vindicated but its success was also limited. The principles upon which it was based were far from easy to implement. Although the British had a long history of tank-infantry cooperation, reorganizing across regimental and corps lines demanded fundamental and sweeping changes within the combat arms of the British Army. This did not occur, and therefore neither of the schools provided the necessary doctrine and organization for success against the anti-tank screens. Not surprisingly this confused period did not produce either a well thought out, thorough concept of all-arms operations for armoured warfare, or clear and coherent design requirements for the equipment that was needed to make that concept work. If a historian is looking for scandal during this period, then the seeds of it were sown in 1941–42.

These weaknesses were hidden by the explosion in British AFV design and development — much of it flawed — following the success of early 1941, as well as by the introduction of American AFVs into British regiments. These American tanks — initially the Grant and the light M5 Lee, known affectionately as the Honey — and then the M4 Sherman, must be considered from two points of view. First they were independent developments, outside the loop of British AFV design and production. Second, these tanks were highly respected by the British (and Canadian) tank crewman.<sup>7</sup> Thus U.S. competition was added to the multitude of requirements that British industry had to meet. This complicated the process, because, it can be argued, the design requirements were flawed due to a lack of an ongoing doctrinal process that kept abreast of lessons learned through battle experience. By 1942 there were up to 16 different models of tank, including three American types, meeting the three British tank requirements.

In August 1942 Montgomery arrived as Commander-in-Chief Eighth Army to find a dispirited and under-equipped army that had lost its way. Monty's opinionated methods were needed in the fall of 1942 and early 1943. He fearlessly created Eighth Army plans (and necessary staffs to support his ideas), which were based on great attention to detail in offensive operations and a partial retention of the All Tank School's armour-heavy armoured division organization.

Monty was successful in spite of the limitations and problems in armoured theory, which reinforced the increasing weaknesses in British AFV design and production. He avoided these issues. There is not much evidence that Monty understood how to break through the anti-tank gun screens. He failed with his cruiser-based armour at Second El Alamein, and he failed again in Normandy in Operation GOODWOOD 18–19 July 1944, when he let "loose a Corps of three armoured divisions in the open country about the Caen-Falaise road."<sup>8</sup> Three weeks later First Canadian Army's Operation TOTALIZE failed when Monty's Canadian protégé, Lieutenant-General Guy Simonds, loosed two armoured divisions of Sherman tanks down the same road, only to bog down in front of anti-tank screens.

Even though his reputation waned with his failures, Monty persisted in supporting only one tank — the universal or capital tank was what he called it — which contributed to the gradual development late in the war of the Centurion, the triumph of British tank technology. This story presents the student of the war with an unsolvable question: if the British-Canadian-Polish 21 Army Group had been equipped with Comet or Centurion (with their 17 pounders) would Monty's Normandy and Rhineland battles have been any different? Or would the flawed doctrine and organization have blunted any technological edge that these AFVs provided?

The relationship between AFV design and development and armoured warfare can be explained by considering two pairs of functions or factors. The first pair consists of the tank technology imperative and the events on the wartime battlefields. The two are linked using after-action reports and lessons-learned correspondence. The second pair are military thought and doctrine on one hand and organization and all-arms tactics on the other. The link between these is the persistent two-pronged problem for the British (and the Allies) after 1941: how to defeat German anti-tank screens and defensive positions in depth, and how to

integrate anti-armour weapons (towed and tracked) into the all-arms organization. Unless these four themes, with their linkages, are analyzed concurrently, the analysis of events over time is at best very limited and at worst seriously flawed.<sup>9</sup>

Can British failures at armoured warfare be attributed solely to "the great tank scandal" — the two year gap in design, development and production progress — or should flawed doctrine, organization and tactics also be considered fundamental? Clearly the story of the British experience in armoured warfare in the Second World War cannot be told without examining the relationship between analysis, doctrine, organization, tactics, training and technology. These issues were inextricably intertwined in the early 1940s, as they are now. Fletcher seemed to understand this, but he didn't seem anxious to explore this crucial relationship. What he offers in its place is a limited version of events, dominated by tank technology.<sup>10</sup>

One of the legacies of Lady Thatcher's bottom-line Britain is that museums and other

institutions have been forced to make heritage pay. Museums seek wide appeal, understandably linked to the need for private funding. The Bovington Tank Museum has been a success in this regard. Not surprising then, the "Gray Historic Literature" that is produced at the museum is intended to appeal to the vast group of buffs, modellers and technical collectors who patronize the museum and who are in the tank technology constituency. Their view of the war is a practical one — clear cause and effect, and a right way and a wrong way — and these publications support that notion. But such material history without context would not find much sympathy with historians who believe that people and ideas shape events at least as much as technology.

I would recommend these two works — they are the best of their kind — with the caveat that they are written for "military-vehicle historians." They complement, but do not replace, some of the true jewels in the crown of AFV technology and armoured warfare history that are cited throughout this review.<sup>11</sup>

#### NOTES

1. Beverly E. Bastian and Randolph Bergstrom, "Reviewing Gray Literature: Drawing Public History's Most Applied Works Out of the Shadows," *The Public Historian* 15, no. 2 (Spring 1993): 63–77. Gray historic literature was described as having these qualities: 1. They have a specific purpose; they are practical works not intended as comprehensive or timeless histories of their subjects. 2. They have a particular client rather than a broad perspective of readership. 3. They have common physical characteristics, i.e. they are not published as books, 65–67.
2. Tank technology is understood in the British commonwealth to be the research, design and development and production of AFVs. The standard works are R. M. Ogorkiewicz, *Design and Development of Fighting Vehicles* (London: McDonald, 1968), and Rolf Hilmes, *Main Battle Tanks — Developments in Design Since 1945* (London: Brassey's, 1987). Chapter 4 of Hilmes' work, "Assessment of the Various Development Philosophies," lays the groundwork for Second World War development. Also Peter Chamberlain and Chris Ellis, *British and American Tanks of World War II* (Arco, 1975).
3. A. J. Smithers, *Rude Mechanicals — An Account of Tank Maturity During the Second World War* (London: Leo Cooper, 1987), 204. Fletcher cited a much earlier reference that used the term "Great Tank Scandal" immediately following the war. Smithers produced a companion work to the former book: *A New Excalibur — The Development of the Tank 1909–1939* (London: Grafton Books, 1988).
4. Michael Carver, *Dilemmas of the Desert War — A New Look at the Libyan Campaign 1940–1942* (London: Batsford, 1986) 141. *Tobruk*, (London: Batsford, 1964).
5. The best explanation of these events and developments can be found in several outstanding essays, including one by David Fletcher, in J. P. Harris and F. N. Toase (eds.) *Armoured Warfare*, (London: St. Martin's Press, 1990). An earlier effort is Kenneth Macksey's *Tank Warfare* (Rupert Hart-Davis), 1975.
6. The anti-tank factor deserves explanation. By March 1943 the excellent towed 17 pounder (about equal to the dreaded German 88-mm) was in service and by 1944 a U.S. self-propelled gun was also in use. These formidable weapons were owned by the Royal Artillery regiments of the commonwealth armies and were treated almost like a fourth combat arm. They were never integrated fully into the forward brigades of armoured divisions. The outstanding state of British *gun* design and development is demonstrated clearly by the rapid introduction of the towed 17 pounder into service (just over a year). Throughout 1943 AFV technicians sought to match the gun to an AFV, and the result was the best allied AFV in Europe — the Sherman Firefly. In the reviewer's opinion these two developments could not be accomplished concurrently. They were conducted quite quickly and this does not lend support to the "scandal" argument.
7. The only tank in British (and Canadian) service in Sicily (May–July 1943) and thereafter in Italy was the U.S. M4 Sherman.
8. Gerhard L. Weinberg, *A World at Arms* (New York: Cambridge University Press, 1994), 689. Weinberg took this quote from a letter Monty wrote to Brooke on 14 July 1944.
9. While the author erred in not casting his net wide enough to include all aspects of the "anti-armour factor," he was right in including the development of armoured cars in these works as part of the quest towards a main battle tank. Armoured car units — a 1944 corps

reconnaissance regiment could throw out 60 Staghounds across a two division front — had increased in power and reliability and they were a natural utility and security force to complement any armoured division. Had anti-tank guns been grouped with these units then they might have provided screens that secured (if not exploited) tactical successes and covered preparations for follow-up phases.

10. This version of events is a compelling one in many quarters. Blaming technology for battlefield ineffec-

tiveness eliminates the need for analysis of the human side of events — generalship, leadership, training, morale and so on.

11. Canadians in particular should note that the first-ever work on the Canadian armoured experience is forthcoming in the summer of 1995. John F. Wallace, *Dragons of Steel — Canadian Armour in Two World Wars* (Canada: General Store Publishing, 1995).

## **Paul Fussell, *Wartime, Understanding and Behaviour in the Second World War***

## **Michael D. Doubler, *Closing With the Enemy, How GIs Fought the War in Europe 1944–1945***

MARTIN KITCHEN

Paul Fussell, *Wartime, Understanding and Behaviour in the Second World War*, New York: Oxford University Press), x & 330 pp., illustrations. Paper \$16.50, ISBN 0-19-503797-9.

Michael D. Doubler, *Closing With the Enemy, How GIs Fought the War in Europe 1944–1945*, Lawrence, Kansas: University Press of Kansas, 1994, xiv & 354 pp., 11 photographs, 10 maps, 8 figures. U.S. \$40.00, ISBN 0-7006-0675-0.

Paul Fussell, who served as an infantry officer in France where he was seriously wounded, sees the Second World War as a meaningless struggle in which the mindless devotees of “chicken-shit” (or its approximate British equivalent, “bullshit”) sent hundreds of thousands of hapless young men to their deaths. They did not simply get killed, they were blown apart, the battlefield strewn with guts, brains and severed limbs. Soldiers were forced into a dreary uniformity and lost their identities. Their only forms of release were demotic language, cigarettes, drink and frantic masturbation. Life in wartime was mostly numbingly boring but was punctuated by periods of sheer terror in which even seasoned veterans soiled their pants. The military was incompetent, chaotic and wasteful; the normal state of affairs summed up in the acronym SNAFU.

War is indeed ugly and brutal, but the constant repetition of this unpleasant truth soon

becomes tiresome, and for all the lies, cruelty, suffering, hypocrisy, stupidity and vindictiveness, the Allied cause was a just one. The world had to be rid of Nazism, fascism and Japanese imperialism, and the struggle against these evils was far from pointless. In spite of the author's noble sentiments about the horrors of war, his sparkling prose style and his wide-ranging interests, it is not really clear what the book is intended to achieve. Much of what Fussell has to say about the social history of the war has been better said by historians such as John Morton Blum, Angus Calder and Paul Addison. As a study of the literature of the war years, it falls well below the standard set by his earlier study of *The Great War and Modern Memory*. The examination of popular culture is superficial, remarks on Germany in wartime are very wide of the mark, and there is a great deal that is downright false.

Much is made of the contribution by Cyril Connolly's *Horizon* to the war effort, in that it upheld civilized values. Its standards were “breathtaking” and it achieved an “unbelievable excellence.” The awful and indolent Cyril Connolly's “brave uncompromising attitude” sustained him through the “horrors and darkness” of the war. In fact *Horizon* only had a maximum of 5 000 subscribers and much of it was pretentious, snobbish, self-pitying drivel. Connolly's *bon mot*, “perfect fear casteth out love,” said here to be an injunction to a “new