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Retrieving the Cultural Biography of a Gun

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The meanings of objects change as the people with whom they are associated change. Over the course of an artefact's existence, the sum of these meanings constitutes a cultural biography, a life-story of the item. This is the case with objects associated with conflict, just as with those from other contexts; in this case, cultural biographies can have sharply contrasting phases. However, identifying the object in each of its changing relationships with people can be problematic. In the case of a World War I German 150 mm gun, that is one of the few of its type remaining in the world, this has been achieved by comparison of detailed characteristics, markings, and battle damage with historical photographs and surviving documentation. By these means, its role in the Battle of Amiens on 8 August 1918, and after its capture by the Australian Corps, can be pieced together. The biography of such a gun can include manufacturing technology, a means of destruction, a valued war trophy, a public exhibit, a neglected relic, a source of scrap metal, a museum showpiece, and even a children's plaything, but the gun investigated here was more fortunate. It is preserved in a museum, although its relationship to people could continue to change.

KEYWORDS cultural biography, WWI German artillery, 150 mm gun (15 cm Kanone 16 Kp), museum provenance, war trophies

Introduction

The information about human societies that archaeologists extract from things varies with the relationship of the material evidence to its socio-cultural context, a context that can change with time. Because objects have agency that affects human lives (Latour, 2005), it is important to consider their shifting impact on people, as well as the impact of people on them. Thus Appadurai (2010) wrote about 'the social life of things' and Kopytoff (2010) discussed what he called 'the cultural biography of things'. For the archaeologist it can prove difficult to recover such biographies, particularly because study of a specific object often relates only to the actual point in its life story from which it has been recovered by excavation or other means. Its complete biography would include phases of its manufacture as well as the variety of

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uses to which it might have been put. An object can also have a subsequent history, if it is recycled or placed in a museum display or a private collection. In short, the cultural biographies of objects can include both 'the birth of things' and 'the afterlife of things' (Campbell et al., 2011: 1280) and every stage in between. However, reconstructing a cultural biography is limited by our capacity to retrieve and interpret the relevant information. Although the idea that things can have recoverable cultural biographies has received some attention in recent years (e.g. Harley, 1987; Gosden and Marshall, 1999; Stengs, 2005), we know of relatively few attempts (e.g. Cornish, 2004) where such an approach has been applied to objects recovered from a conflict context. This can be especially problematic and will necessitate the integration of physical, documentary, pictorial, and oral evidence. Nevertheless, it is specifically the physical, archaeological data that deserve more attention than they have sometimes been given, although there has been some consideration of artillery in this context by Pearson (2000); Connah and Pearson (2002); and Pearson and Connah (2009). Lawson (2012) reconstructed the life-story of a Boer-War gun (but only from historical sources), and Smith and DeVries (2005) used some physical evidence in their analysis of fourteenth- and fifteenth-century European artillery; generally, archaeological approaches appear to have been uncommon. As Carmen and Carmen (2009: 48) have argued in the context of battlefield archaeology, a 'bottom-up approach' rather than a 'top-down approach' is needed, 'grounded not in military history but in archaeology'.

Conflict and the cultural biography of things

Battlefields present the archaeologist with taphonomic problems. The amount of physical evidence for a battle will vary depending on the length of the engagement, the number of combatants, the intensity and character of the fighting, the technology of the weapons employed, and the terrain on which the battle took place. Furthermore, following the battle there will often have been looting, salvaging of reusable items, burial of the dead, souveniring of memorabilia, and so on. Even long after the event there can be activities that will impact on the surviving evidence such as agriculture, land development, construction, and investigations by historians and archaeologists both professional and amateur. In addition, soil chemistry, climate, animal activity such as burrowing, and the length of time since the battle took place can have an impact on the evidence that survives. In short, the taphonomy of conflict can be particularly complex. Into this mix add the human passion for 'trophies', the collection of significant items formerly belonging to a defeated enemy, for propaganda, display, and possible preservation by the victor. The 'trophy tradition' has a long history, trophies being referred to over two thousand years ago in Greek sources, such as Xenophon and Thucydides (Brownson, 1918: 19; Forster Smith, 1921: 5). This practice was particularly well developed during and after World War I, when allied armies systematically collected items from the battlefields, amongst which captured artillery featured prominently. America, for instance, although a latecomer to the conflict, appears to have collected the most, including 3242 captured pieces of artillery, 4550 vehicles, 347 aircraft, and other items (Kahn, 1921: 5). Some of this material might have been sold and reused, but it appears that many of the guns were distributed to American states principally for display.

Valued trophies or 'gruesome junk'

There was the same fascination with trophies in Australia, even with its smaller population. In spite of the distance and expense of transportation from Britain and Egypt, 'about 800 guns, 3800 machine guns, 520 trench mortars, 217 motor vehicles, a number of horse vehicles, [and] tanks' arrived in the country (CAPD, 1917–19: 14,007–14,008). Most of these items, particularly the guns, were distributed to Australian cities, towns, and Army units for display, where in many case they still remain (AWM93 7/4/440; AWM93 27/1/153; AWM194; AWM262). In addition, some formed the nucleus of the subsequent museum at the Australian War Memorial (AWM) in Canberra. Interestingly, the latter institution avoided use of the word 'trophy', preferring to call these objects 'relics' (AWM38 3DRL 6673/667). This was in the context of some public criticism of such items, which one source called 'A Gruesome Scrap Heap', 'a ghastly collection of scrap iron' (*The Labor Call*, 21 January 1926: 12). In later years some of the guns were melted down during World War II (*Daily Telegraph*, 13 February 1942: 1), potentially reused, or treated as a source of particular parts (NAA SP1008/1 484/1/706A; *The Herald*, 4 April 1942: 5; *Sydney Morning Herald*, 18 April 1942: 10). Some were even buried to get rid of them (*The Argus*, 7 April 1937: 8; Clayton, 1996: 23–24; Billett, 1999: 49; Hunter, 2007: 13–16; Browning et al., 2008: 480), some were subsequently acquired by private individuals, and many are now unaccounted for. Although a considerable number are known to have survived, most of them have spent many years in an outdoor environment, often in public parks, and have seriously deteriorated (Browning et al., 2008; Passion and Compassion 1914–18; RAAHC Gun Register). Nevertheless, Australia arguably still has one of the largest collections of captured World War I guns in the world. This paper examines the archaeology of one such gun in an attempt to retrieve its cultural biography. It is a 150 mm German gun (referred to in Germany as 15 cm) captured at the Battle of Amiens and preserved in a controlled environment at the Australian War Memorial (Figure 1). It is one of only five such guns in the world that are known to survive, of which two are in Australia, two in America, and one in Canada (Passion and Compassion 1914–18).

The Battle of Amiens

At 4:20 a.m. on Thursday 8 August 1918, approximately 2000 guns attached to the Fourth Army, made up of British, Australian, and Canadian forces, commenced a barrage on German positions along a front of between 19,000 and 22,000 yards (17.4–20.1 km) (RAM MD/1186; Livesay, 1919: 34; Montgomery, n.d. [1920]: 12–13, 21–22; Bean, 1942: 499, 529; Kriegsgeschichtlichen Forschungsanstalt des Heeres, 1944: 555; Edmonds, 1947: 22–23). This bombardment started as the infantry advance commenced and together they were part of a large offensive that also included the French First Army to the south (Figure 2). The father of one of us (GC) was a gunner in the Royal Garrison Artillery and remembered this bombardment for the rest of his long life. Another gunner who was present later recorded that never before had such a barrage been fired in the Amiens sector. It was colossal. North and south of the line was aflame with gun-fire (Wade, 1936: 124). There are many similar accounts (e.g. AWM4 23/76/31 Part 2, August 1918, Appendices 10–29; AWM Private Records

FIGURE 1 Gun 135 in storage at the Australian War Memorial's Treloar Technology Centre, Canberra. Scale of 25 cm on the cradle. Figure in right background also gives scale. *Photograph by Peter Bannigan, June 2012*

2DRL/0457; 2DRL/1350; Downing, n.d. [1920]: 144–45). A total of between 448,918 and 448,953 rounds were fired by the Fourth Army on this occasion (TNA WO 95/437; RAM MD/1186). Shortly before the bombardment commenced, a thick fog settled over the battlefield and the attacking infantry of the Fourth Army were able to advance undetected by the Germans until close to their objectives. Plans for the bombardment and attack had been kept a closely guarded secret by the Allied forces, unlike most earlier offensive operations, and as a result almost total surprise was attained. In addition, active enemy battery positions had been carefully identified and plotted by sound-ranging, flash-spotting, and aerial reconnaissance (Monash, 1920: 111–13; Innes, 1935: 14–18, 25, 30, 158–59; Chasseaud, 1999: 444–52; Smith, 2011: 127–30). These methods had 'located almost every [German] gun which [had] fired' and consequently 'nearly the whole of the enemy's artillery in the line [had] been captured' (AWM26 494/2). For the attack south of the Somme River there was little German counter-bombardment, and the German line was overrun under pressure from the advancing infantry supported by tanks, and a creeping barrage during the first phase (AWM4 23/5/38 Part 1, August 1918, Appendices 1–45a; AWM4 23/7/36, August 1918; AWM4 23/10/22 Part 1, August 1918, Appendices; RAM MD/1186; Montgomery, n.d. [1920]: 32; Bean, 1942: 543–44). General Ludendorff, Chief of Staff of the German Army, later wrote that:

> August 8th was the black day of the German Army in the history of this war . . . put the decline of that fighting power beyond all doubt. . .The war must be ended. (Ludendorff, 1919: 679; 684)

By the end of the day, after attacking with four Divisions, the Australian part of the line, which at the start of the battle had a frontage of 7000–7500 yards (6401–6858 m) and extended from the Somme River south to the Amiens-Chaulnes railway,

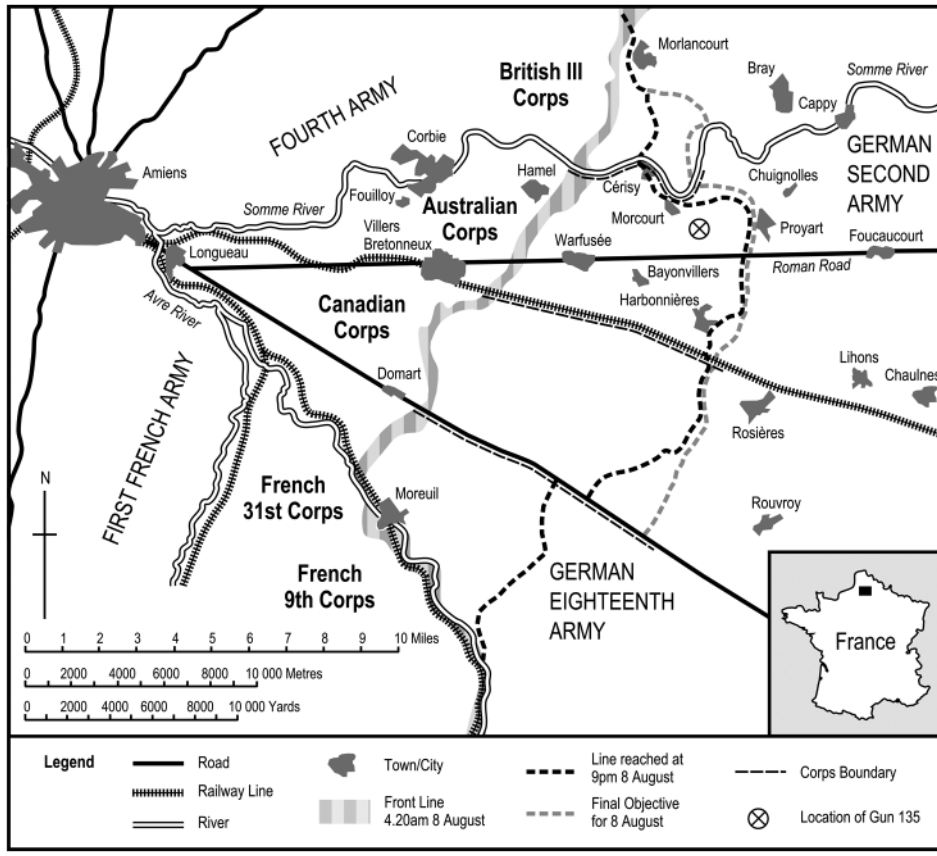

FIGURE 2 Map of the Battle of Amiens, showing the location of Gun 135 and of places mentioned in the text. Also shown are the frontline at the start of the battle and the positions reached on 8 August by the Fourth Army. Drawn by David Pearson and Gerard Clifton after Livesay (1919: map 1); Edmonds (1947: map 1); and Nicholson (1962: 392).

had penetrated to a depth of 8000–10,000 yards (7315–9144 m) (RAM MD/1186; Monash, 1920: 73, 81, 84; Montgomery, n.d. [1920]: 22; Bean, 1942: 490; Edmonds, 1947: 61). The success of the Australian Corps in their sector resulted in the capture of 183 German officers, 7742 other ranks, and '173 guns capable of being hauled away, not counting those which had been blown to pieces' (Monash, 1920: 129). Collectively, the Fourth Army had taken between 374 and 450 guns (RAM MD/1186; Montgomery, n.d. [1920]: 39, 43, 49, 68; von Bose, 1930: 196; Edmonds, 1947: 58, 73, 89). Amongst those that fell into Australian hands was the 150 mm long-range Gun Number 135 that is the subject of this paper. This was seized by the 45th Battalion of the 12th Brigade, 4th Division, south-east of Morcourt, and subsequently acquired as a war trophy. It was one of five similar guns listed in a claim of 47 guns by the Australian 4th Division. They were located at grid square Q22.d (Gun 1038) and Q23. b (Guns 4, 135, 403, 505) on map sheet 62D S.E. 1:20,000 France, Edition 3C (Local) (AWM4 1/48/29 Part 3, August 1918; AWM16 4386/1/26). The gun was one of 24–29

taken on that day by the 45th Battalion (AWM4 23/12/30, August 1918; AWM4 23/62/30, August 1918; AWM16 4386/1/26; Lee, 1927: 70–71; Bean, 1942: 556–57; Lee, 1962: 9). Unfortunately, the Australian War Memorial has no 'History Sheet of War Trophy' for this gun (AWM262) and no further information about the circumstances of its capture (AWM Catalogue Accession Number RELAWM05044, 2011; AWM333 2/3/4; and other records in this series). Such guns were marked by the 45th Battalion; in one instance:

> A private of the 45th with a pot of white paint and a brush was following on the heels of the attacking troops marking 'Captured by the 45th Bn., A.I.F.' on each gun that he passed. At some gun-pits near 'Hamilton Wood' several Germans surrendered to him. (Bean, 1942: 557 [footnote])

Guns captured by Australian forces were subsequently removed from the battlefield to various salvage dumps in France, before being shipped to the British Ordnance Depot at Croydon, near London, and later to Australia.

The typology of Gun 135

The gun discussed here is described in the 1917 official manual as 'Die 15 cm Kanone 16 Kp', meaning that the internal diameter of the barrel is nominally 150 mm (actually 149.3 mm), that it is a 1916 model, and that it was manufactured by the Krupp armaments firm (Kriegsministerium, 1917). Krupp made 214 of these guns during World War I and Rheinmetall made 32 guns of a similar type (Muther and Schirmer, 1937: 321; Jäger, 2001: 118). Gun 135 is marked '1917' on a few minor parts, but '1918' on its main components, and is assumed to have been assembled in the latter year. This gun rates as a large weapon: its nominal weight including the carriage being 10,140 kg, although it has been weighed at 10,240 kg by the Australian War Memorial (AWM Catalogue Accession Number RELAWM05044, 2011). Its rifled barrel measures 6410 mm internally and weighs 4100 kg with its cradle; they could be demounted and transported separately from the gun carriage on a special four-wheeled wagon. The gun was also provided with a two-wheeled limber that could be fitted under the rear of the carriage during transport. Essentially, this was a long-range, high-velocity weapon, with a maximum range of 13,900–22,800 m and a velocity of 550–749 m/s, varying with the charge and projectile type. It could fire three rounds a minute, the projectiles weighing 50.47–52.82 kg, depending on their filling. Elevation was from –3° to +42° and traverse 4° either side of centre (Kriegsministerium, 1917; Kaiser, 1934: table after p. 410; Muther and Schirmer, 1937: 22–23, 258–60; Gander and Chamberlain, 1978: 201).

The performance of this type of gun necessitated a construction that, although conventional, resulted in a weapon that was at the time one of the most modern in the German Army (Figure 3). It was also one of the heaviest guns transportable by road in use by the Germans during World War I, although presumably to reduce weight many of its components were of forged and riveted steel construction rather than of thicker cast steel. The barrel sat above the cradle containing the recoil mechanism, which consisted of an oil-filled recoil buffer and a compressed-air recuperator. The length of recoil varied according to elevation: 2050 mm at 0° and 1200 mm at 42°. Elevation and traverse were controlled by a manually operated crank-handle on

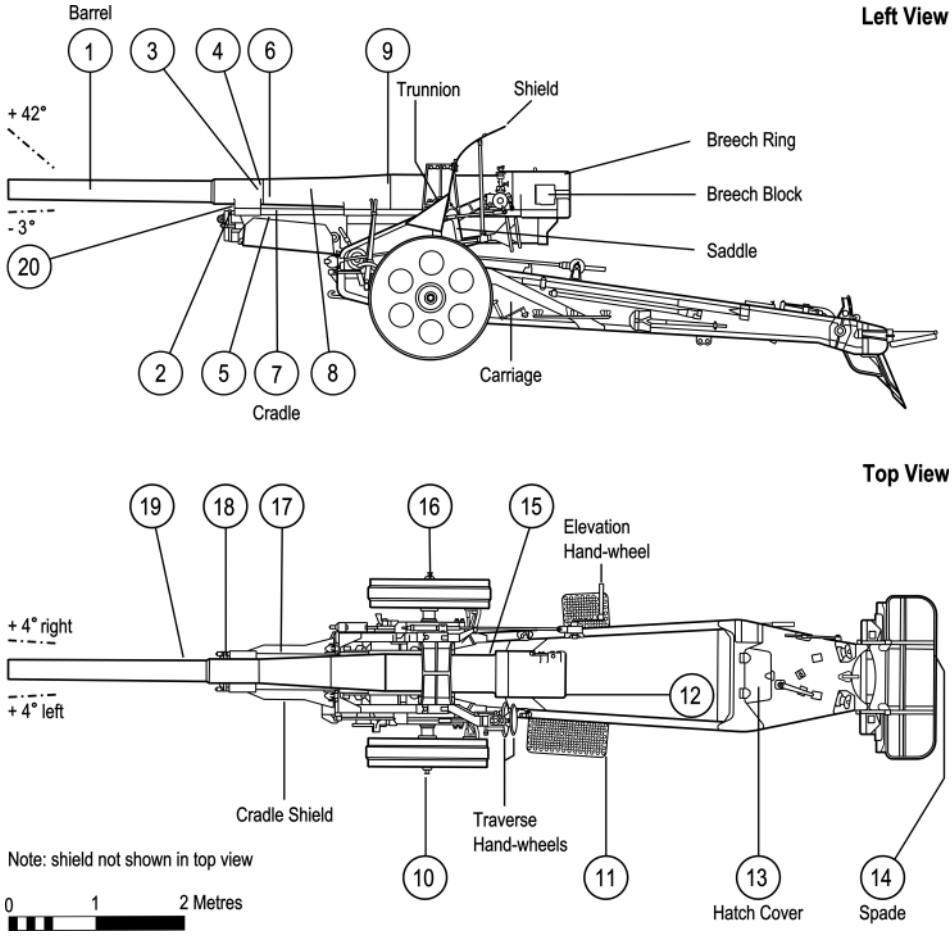

FIGURE 3 Major components of a typical 15 cm Kanone 16 Kp gun. Above, view of left side; below, view from top. Numbers 1–20 indicate locations of damage (see Table 2). Drawn by David Pearson after Kriegsministerium (1917: Blatt 3) but note that Gun 135 differs in minor details.

the right side of the carriage and a hand-wheel on the left. The weight and length of the barrel and its maximum elevation required rearward trunnions, supported on a saddle that was fitted with a spring equilibrator forward of the trunnions. A large adjustable shield provided some protection for the gun detachment. The breech consisted of a tied-jaw breech-ring, containing a horizontal sliding breech-block fitted with a percussion-firing mechanism. The gun carriage and shield weighed 5900 kg, was supported by two large steel wheels, and fitted with a brake for use during transportation. At the rear, the carriage terminated in a large removable spade (AWM27 381/66; Kriegsministerium, 1917). In an unusually fluid situation like the Battle of Amiens, the weight and size of this gun would have prevented its rapid deployment, and together with its long range would have made it difficult to use for close engagement of an infantry and tank attack such as that of 8 August 1918. Nevertheless, for

the purpose for which it was intended it was the most modern gun of its type in the German Army until 1938; limited numbers remaining in service until 1945 (Gander and Chamberlain, 1978: 201–02; Hogg, 1997: 82–83).

Physical evidence from Gun 135 at the Australian War Memorial

The cultural biography of this mass-produced artefact commenced with the assembly of numerous interchangeable components, potentially manufactured in different places and at different dates. Many of these were stamped with numbers or symbols during production, of which most common was the number '135' that identified this particular weapon but only within its own type. This serial number was not unique; amongst World War I German guns preserved in Australia, for instance, there was another numbered 135 but it is recorded as a 150 mm howitzer of only 30 hundredweight (1524 kg) (AWM93 27/1/153; AWM262 135 Bendigo; NAA SP1008/1 484/1/706A). Many components of the gun studied here were also individually numbered, such as the carriage that was marked '230'. Most informative are markings on the breech-ring and breech-block that are similar, the former being: 'Nr. 135. Kp. [Krupp symbol of three intersecting rings] FRIED. KRUPP A. G. ESSEN [Krupp symbol repeated] 1918. GG33' (Table 1). From the Table, it will be observed that the majority of dated components are marked 1918, but those on the sighting mechanism 1917, although still stamped 135. There are also minor markings such as patterns of dots or numerals on screw heads that are matched to screw locations, presumably to aid reassembly following transportation, or to help with maintenance. In addition, operating instructions are stamped on some of the gun's controls. The frequency and apparent consistency of markings suggest that most components are original and that there has been little replacement; indeed, it would appear that the gun had been deployed for less than eight months at the time of the Battle of Amiens. Such a conclusion is supported by the little use-wear that is observable on the lands and grooves of the barrel rifling, the extractors and other components. In short, the gun was relatively new at the time of its capture.

Once in service with the German Army, the gun was given painted tactical markings, such as a battery number, but these are no longer visible because of subsequent repainting since arrival in Australia. The same applies to the painted camouflage that would most probably have been employed. However, there is also unique physical evidence in the form of battle damage sustained either on 8 August 1918 or shortly before or after. As was observed of trophy guns after they had reached Melbourne: 'Many of the guns bear the marks of shrapnel and high explosives from our artillery; others were destroyed by the enemy before he retreated' (AWM93 12/5/263; Anon., 1919: 110) and such damage was noted on many guns in a list of trophy guns that were located in the Melbourne Domain after June 1919 (AWM93 27/1/107). In the case of Gun 135, this damage consists of twenty locations where high-explosive shell splinters or shrapnel bullets have gouged, sliced or glanced off the steel components of the gun (Figure 3 and Table 2). Most of this damage is superficial, but Damage Points 6 and 7 on the left side of the weapon (looking forward) might have impaired the recoil mechanism, thus putting the gun out of action. If so, then it is most likely that this happened during the bombardment of 8 August. Judging by the damage pattern, it is probable that most high-explosive shells impacting on the gun fell short

TABLE 1

GUN 135: SUMMARY OF CLEAR MARKINGS ONLY

Markings	Location	Frequency	Remarks
1.1	Barrel muzzle	1	Unknown
135	Multiple or single, e.g. on left and right drawing plug, rear trail spade, detachable barrel travelling lock, breech brackets, right recoil saddle-frame, front and right of cradle	16	Serial number
Numbers 1–20 over 135 on screw heads, matching numbers 1–20 next to screw locations	Screw heads and corresponding locations on recoil slide, even numbers on side, odd ones on top	20 on screw heads, 20 on locations	Locations and serial numbers
Krupp symbol over 1918	Two on left rear cradle, one on rear saddle-frame	3	Manufacturer and date
Kp. 7514	Left side of breech block	1	Manufacturer and serial number
L. 135. [Krupp symbol] 1917. in row	Sight bracket-holder, lever arm, trunnion	3	Serial number, manufacturer, date
Groups of one, two, three and four dots	Screw heads and corresponding locations on left trunnion	4 on screw heads, 4 on locations	Locations
60 40 20 0 20 40 60 [and gradation marks between]	Traverse indicator plate left side	1	Gradation indicator
Seitenrichtung. [traverse] [arrow left] [arrow right] *links*. [left] *rechts*. [right]	Plate on traverse hand-wheel	1	Instruction
1736	Cradle rear, recoil cylinder bolts (two on front and one on rear)	4	Serial number
0. - 42. - (slopes up)	Front cradle	1	Unknown
Nr. 135. Kp. [Krupp symbol] FRIED. KRUPP A. G. ESSEN [Krupp symbol] 1918. GG33	Breech ring rear	1	Serial number, manufacturer, date. GG33 is unknown but is on the other K16 in Melbourne (Gun 103)
Abschlussdeckel [cover plate] 4	Firing pin cover in back of breech block	1	Instruction
S.2513. B.212.	Breech ring right	1	Manufacturing details?

TABLE 1

CONTINUED

Markings	Location	Frequency	Remarks
212	Breech ring rear	1	Manufacturing details?
Sicher [secure/safe]	Breech block right	1	Instruction
135 [Krupp symbol] FRIED. KRUPP. Krupp symbol A.G.	Breech block right	1	Serial number, manufacturer
Schubkurbel [operating lever] 135	Breech mechanism lever	1	Instruction, serial number
16 and W[?] 29	Shield stay lock right	1	Unknown
36	Shield stay lock left	2	Unknown
K22 . [corresponding .]	Trunnion lock right front	1	Location
K22 .. [corresponding ..]	Trunnion lock left front	1	Location
K22 [indistinct .]	Trunnion lock left rear	1	Location
K22 .... [corresponding ....]	Trunnion lock right rear	1	Location
K22	Left saddle	2	Unknown
K29	Two on left saddle, one on right	3	Unknown
10	Two brackets on left and right carriage, bolt on front undercarriage	3	Unknown
µ [in circle] 10	Two bolts on front undercarriage, one on right carriage, one on bracket on left rear carriage	4	Unknown
0 10 20 30 40 [and gradation marks between]	Elevation plate on right trunnion	1	Gradation indicator
GERMAN 150-MM M.1916 (KRUPP) GUN CAPTURED BY THE 45TH BATTALION AIF IN FRANCE ON 8 AUGUST 1918	Plaque right side of saddle	1	Museum brass label attached during the late 1970s

TABLE 1

CONTINUED

Markings	Location	Frequency	Remarks
230 [large]	Rear carriage	1	Serial number
254	Rear of spade	1	Serial number
256	Right front carriage	1	Serial number
270	Right front carriage	1	Serial number
340	Right saddle	2	Serial number
455	Left saddle	2	Serial number
E	Left and right of rear carriage	2	Unknown
K	Left and right of inside hinge of cradle shield	2	Unknown
AJAX	Two bolt heads on cradle shield hinge (also evidence of welding)	2	Replacement component?
Los [loose] *Fest* [tight]	Rear carriage handle for locking on limber	1	Instruction
[arrow right] *Mündung* [muzzle] *höher.* [higher]	Plate on top of elevation mechanism gearbox	1	Instruction
26R	Right axle	2	Serial number
5141	Right and left axle	2	Serial number
9074	Front of undercarriage	1	Serial number
26L	Left axle	2	Serial number

TABLE 2

DAMAGE ON GUN 135

Point	Location	Description	Possible cause
1	Left side of barrel, 950 mm from muzzle	Penetration, gouge 40 × 33 mm	Shrapnel bullet?
2	Left side/top of cradle, 45 mm from front edge	Penetration, gouge 20 × 15 mm	Shrapnel bullet?
3	Left side of barrel sleeve, 270 mm from front edge	Penetration, gouge 40 × 18 mm	Shrapnel bullet?
4	Left side of barrel sleeve, 330 mm from front edge	Penetration, gouge 18 × 8 mm	Shrapnel bullet?
5	Left side of barrel sleeve, 350 mm from front edge	Penetration, gouge 10 × 7 mm	Unknown
6	Left side of barrel sleeve, 390 mm from front edge	Penetration, deep gouge 88 × 50 mm	Shrapnel bullet? Ricocheted to Point 7
7	Top left side of cradle, 470 mm from front edge	Deformation of plate 130 × 120 mm	Shrapnel bullet? Ricochet from Point 6
8	Left side of barrel sleeve, 870 mm from front edge	Penetration, gouge 10 × 3 mm	Shrapnel bullet?
9	Left side of barrel sleeve, 1760 mm from front edge	Penetration, deep gouge 95 × 50 mm	Shrapnel bullet?
10	Hub, left side wheel	Perforation, piece missing from edge 65 × 18 mm	Unknown
11	Hinged foot plate (back left edge), left side	Deformation	After capture, absent in Historical Photographs 1 and 2
12	Back of breech ring, 90 mm from straight edge of jaw	Penetration, gouge 13 × 6 mm	Unknown
13	Trail hatch cover, extends from top edge	Perforation, slicing of metal 240 × 65 mm	High explosive shell splinter?
14	Top edge of trail spade	Deformation	After capture, absent in Historical Photograph 1
15	Right side of barrel sleeve, 620 mm from front of breech ring	Penetration, gouge 40 × 8 mm	Unknown
16	Hub, right side wheel	Penetration, gouge 30 × 26 mm	Unknown
17	Right side of cradle, 535 mm from front edge	Perforation, slicing of metal 50 × 30 mm: does not seem to have damaged recoil mechanism underneath	High explosive shell splinter?
18	Top of cradle, 40 mm from front edge	Perforation, gouge 60 × 16 mm	Unknown, possibly related to Point 2
19	Right side of barrel, 240 mm from front edge of sleeve	Penetration, deep gouge 90 × 34 mm	Unknown
20	Front edge of front guide claw, above top of recoil slide	Deformation	Unknown

Note: 'Penetration may be defined as the entrance of a missile into a target without completing its passage through it; perforation usually implies the complete piercing of the target by the projectile' (Moss et al., 1995: 149).

of it, because with a direct hit damage would have been more severe. As noted in a Fourth Army artillery report after the battle, 'The destructive effect of Artillery fire, unless the enemy is manning his guns or replenishing ammunition, is always likely to be small' (RAM MD/1186). The damage pattern also suggests the direction from which projectiles were fired. At least one damaged the left side of the gun (Damage Points 1–10 and perhaps 18 and 20), another its right side (Damage Points 15–17 and 19) and one burst overhead (Damage Point 13). Resulting damage was caused by shrapnel bullets on the left, some of that on the right by shell splinters from high-explosive rounds, and that from above also by shell splinters. In the latter case, the petalling of holes torn in a steel hatch cover on top of the carriage indicates that it was closed when hit. From the lack of damage to the gun's shield, it would appear that the sources of the relevant gunfire were oblique to the weapon.

The capture of the gun by Australian forces also resulted in physical evidence, of which little now survives. This would probably have included markings in paint or chalk to identify the unit claiming to have captured the gun, as well as to indicate the date and or place where it was captured. These details were as required by Australian Corps routine orders (AWM16 4386/1/26; AWM25 981/7; AWM38 3DRL 6673/66). However, such markings were already being questioned in 1919, whilst captured guns were in England, because they were being obliterated by exposure to the weather (AWM22 739/6/3; AWM93 27/1/103). Furthermore, in the case of Gun 135 there is the absence of some smaller components that were subsequently removed, either officially or by souvenir hunters, before or after transport to Australia. This was a frequent occurrence with other guns (AWM38 3DRL 6673/750; AWM93 2/2/3; AWM93 27/1/161). Importantly, the breech and firing pin of Gun 135 are still present, which means that the detachment did not, or could not, take them to prevent the gun being used by the Allies. Nor is there evidence of sabotage by the retreating Germans to render the gun inoperable. In addition, it is interesting that neither the wagon for transporting the barrel and cradle nor the limber for the carriage seem to have been collected as trophies; presumably they were not considered important or had previously been removed by the Germans from the location. Finally, there is evidence of curation in Australia since the acquisition of the gun. At least two coats of paint have been applied, some of which is on components that would have been left unpainted during the gun's operation. During the late 1970s, a small metal plate was attached to the right side of the gun (P. Burness, pers. comm.), reading: 'German 150-mm M.1916 (Krupp) gun captured by the 45th Battalion AIF in France on 8 August 1918'. This was at the time of the most recent painting, made necessary for its display outside for some years.

Historical photographs of the 150 mm gun

Important for identifying the circumstances of capture of this gun are seven, possibly eight, surviving historical photographs (Table 3). Four of these were taken on the battlefield (Historical Photographs 1–4) but two were taken about 1921 (Historical Photographs 5 and 6), one in 1937 (Historical Photograph 7), and another about 1941 (Historical Photograph 8), in the latter cases in Australia. By comparing the damage on the gun with damage that is visible on six of these photographs (Historical Photographs 1–6), it can be demonstrated that the photographs are actually of this

TABLE 3

DETAILS OF HISTORICAL PHOTOGRAPHS

Number	Précis and explanation of caption	Damage point/s	Paint	Source
1	15 cm K16 gun (Gun 135) in situ, captured by the Australians near Morcourt during the offensive of 8 August 1918. Photograph claimed as 8 August 1918	10, 12, 13	Dappled camouflage	AWM Negative No. E02888
2	15 cm K16 gun (Gun 135) in situ, captured by the 45th Battalion near Morcourt during the offensive of 8 August 1918. Photographed 16 August 1918	2?, 3, 6, 7, 10, 12	Dappled camouflage	AWM Negative No. E02890
3	15-cm K16 gun (Gun 135) in situ, captured by the Australians during the offensive of 8 August 1918. Photographed 14 August 1918	17, 19	Dappled camouflage	AWM Negative No. E02898
4	15 cm K16 gun (Gun 135) in situ, captured by the Australians near Morcourt. Muzzle cover is off	17, 19	Dappled camouflage	AWM Negative No. C04884
5	Two 15 cm K16 guns (from left: Gun 135 and Gun 4) and one 15 cm S.K.L/40 i.R gun (Gun 505) in the Melbourne Domain *c.* 1920–21. These guns were captured by the 45th Battalion on 8 August 1918 south of Morcourt. All three were recorded as recovered from around Q23.b	17 on Gun 135	Dappled camouflage; weathered	AWM Negative No. P02729.040
6	15 cm K16 gun (Gun 135) in the background of other trophies in the Melbourne Domain *c.* 1920–21	9	Unknown	AWM Negative No. P02729.048
7	Collection of guns (possibly including Gun 135) in gun park outside incomplete AWM building sometime before 2 December 1937	Undiscernible	Unknown	*The Adelaide Chronicle*, 2 December 1937: 36
8	15 cm K16 gun (Gun 135), lower ground floor of AWM building *c.* 1941 after opening of museum	Undiscernible	Multi-tone camouflage	McKernan, 1991: 207

weapon; from this it is possible to reconstruct the biography of the gun subsequent to its capture. The two remaining photographs (Historical Photographs 7 and 8) were taken after its accession into the Australian War Memorial collection; Photograph 8 is indisputably of this particular gun and Photograph 7 possibly so. Historical Photograph 1 shows Damage Points 10, 12 and 13 (Figure 4); Historical Photograph 2 shows Damage Points 3, 6, 7, 10, 12 and possibly 2 (Figure 5); Historical Photograph 3 shows Damage Points 17 and 19 (Figure 6); Historical Photograph 4 also shows Damage Points 17 and 19; Historical Photographs 5 shows Damage Point 17; and Historical Photograph 6 shows Damage Point 9.

These photographs are insufficiently clear to show impressed markings by the manufacturer, but they show other markings no longer visible that contribute to the gun's cultural biography. These include painted tactical markings, relevant to the gun's deployment, such as a distinctively shaped arrow on the rear of the right shield, visible on Historical Photographs 1 and 2 (Figures 4, 5 and 7). This appears in a German document (Chef des Kr. Verm. W., 1917: 15), indicating that it is the symbol

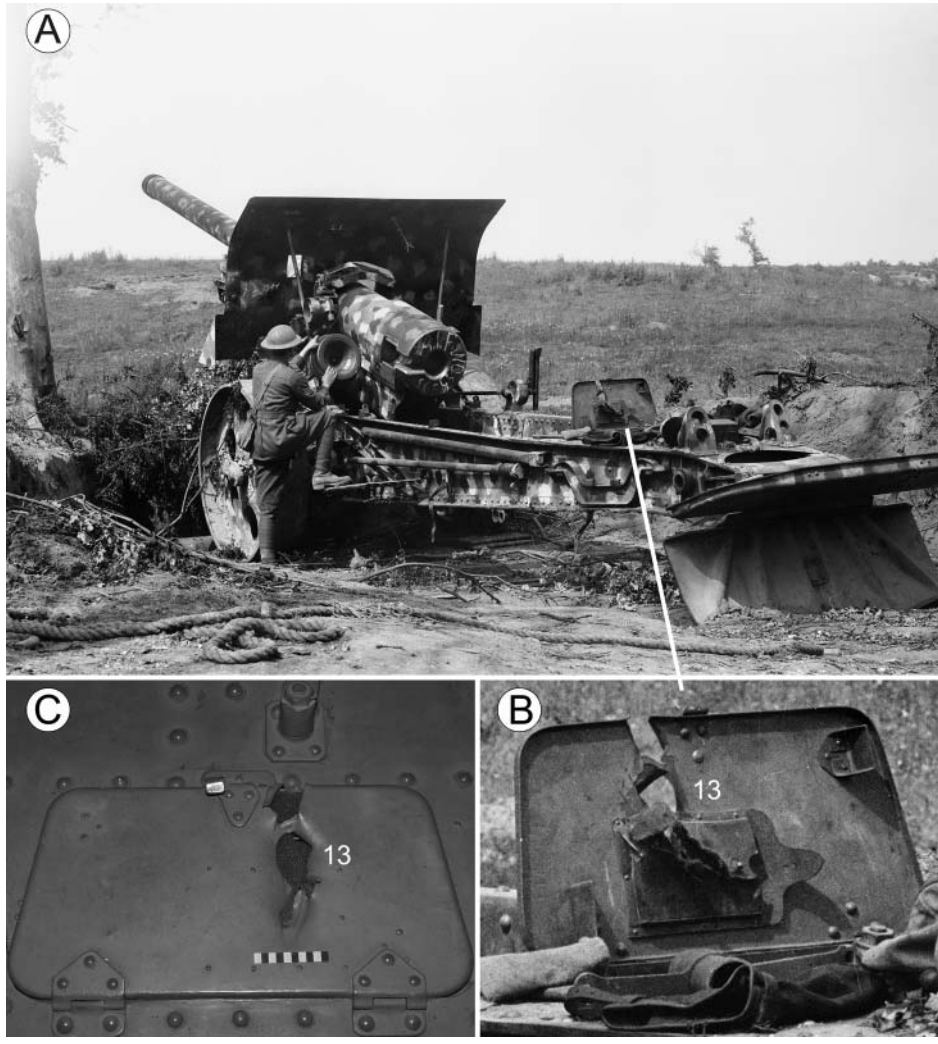

FIGURE 4 A. Historical Photograph 1, showing Gun 135 after its capture. This photograph, probably taken about 16 August 1918, shows the gun as positioned by its German crew, near Morcourt. Present is an Australian soldier (AWM Negative Number E02888). Figure 5 gives details of indistinct markings. B. Close-up of Damage Point 13 on Historical Photograph 1, as viewed from beneath the open hatch cover. C. Close-up of the same damage point on Gun 135 in 2011, as viewed from above (it had been wired shut for display purposes). Scale in cm.
Photograph by Peter Bannigan, April 2011

for a '15 cm K. 16'. It also appears in the approximate position of the gun's capture on a German map of the Amiens battlefield (von Bose, 1930: map 2). On the map this symbol is presumed to identify a battery of guns rather than a single weapon, and the map also identifies the German Army unit providing the gun detachments as '3./146'. Other painted tactical markings are of uncertain relevance and comprise 'L.1.' and

FIGURE 5 A. Historical Photograph 2, showing Gun 135 after its capture. This photograph was taken on 16 August 1918, in the same location as Figures 4 and 6. Present is an Australian soldier (AWM Negative Number E02890). Indistinct paint and chalk markings include the arrow symbol (located on the rear of the right shield), a '45 Btn A.I.F.' marking (located on the left wheel) and an 'A.I.F. No.3' marking (located on the breech ring). B. Close-up of Damage Points 3, 6, and 7 on Historical Photograph 2. C. Close-up of Damage Points 3, 4, 6, and 7 on Gun 135 in 2011. Scale in cm.
Photograph by Peter Bannigan, April 2011

the word 'Spalte:' on the inside left shield. Importantly, these markings are recorded in the earliest-known list of Australian Commonwealth guns (November 1920–July 1921); under the entry for Gun 135 is mentioned an 'Arrow with two strokes across the centre on gun shield, also L1. on other shield' (AWM333 2/4/3). This documentary evidence corroborates the damage identifications on the historical photographs.

FIGURE 6 A. Historical Photograph 3, showing Gun 135 after its capture. This photograph was taken on 14 August 1918 in the same location as Figures 4 and 5. There are four Allied soldiers in this photograph (AWM Negative Number E02898). B. Close-up of Damage Points 17 and 19 on Historical Photograph 3. C. Close-up of the same damage points on Gun 135 in 2010. Scale in cm.
Photograph by Peter Bannigan, November 2010

Historical Photographs 1–4 of the gun on the battlefield, after its capture, show it painted in a dappled camouflage (Figures 4–6), but subsequent to its arrival in Australia it was painted in a different camouflage (Historical Photograph 8) and later repainted in a single colour. Photograph 2 also reveals markings associated with the capture of the gun: '45th Btn A.I.F.' apparently in chalk on the left wheel (Figure 5); and Photographs 1 and 2 show other chalk marks on the rear left of the

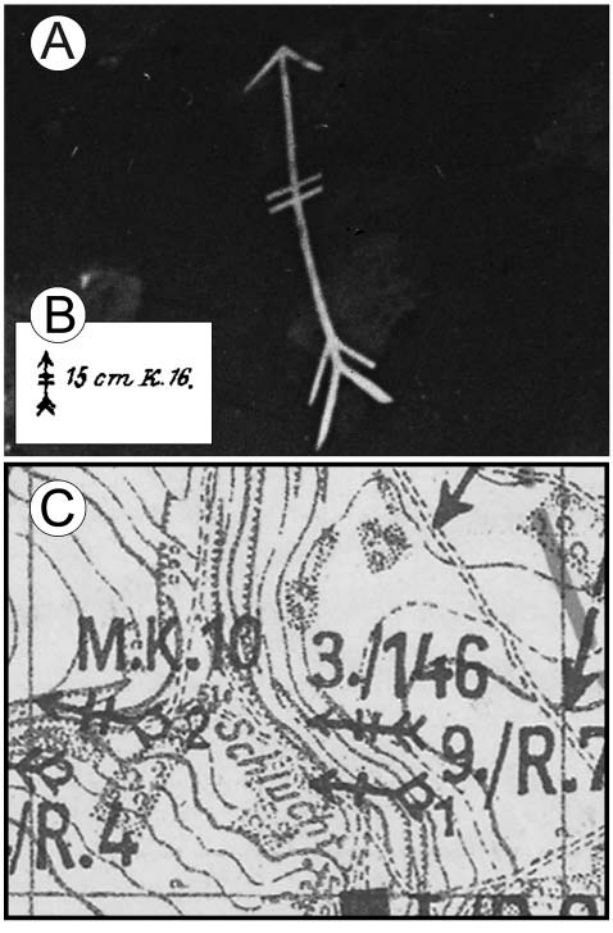

FIGURE 7 A. Close-up of the arrow symbol from Historical Photograph 2, located on the rear of the right shield. B. The same symbol in a German document (Chef des Kr. Verm. W. 1917: 15) indicating a 15 cm Kanone 16 gun. C. The same symbol in the approximate position of the gun's capture, on a German map of the Amiens battlefield, with the unit '3./146' indicated above (von Bose 1930: map 2).

shield that are indecipherable. In addition, these same photographs show 'A.I.F. No.3' painted on the back of the breech-ring (Figures 4 and 5). This probably refers to the Australian Corps recovery unit that removed the gun from the battlefield. Possibly this was one of four groups from a 'special gun salvage party' of 32 (or 35) men led by Lieutenant Gullett of the Australian War Records Section (AWM4 19/1/7, August 1918; AWM25 383/23; AWM38 3DRL 6673/66). More probably it refers to Section 3 of the 4th Australian Division Ammunition Column that, along with Section 2, was tasked with the recovery of guns from grid squares that included Q23, the location of Gun 135 (Figure 8). The relevant guns included five that were described as 6-inch long-range guns, one of which must have been Gun 135, and most of these guns had been removed by 18 August (AWM4 13/77/27, August 1918; AWM25 383/23).

Some of the components of Gun 135 that are now missing were present at the time that several of the historical photographs were taken. Tools and cleaning equipment are visible in Historical Photographs 1–2 of August 1918 (Figures 4 and 5), as are the elevation crank-handle and part of the breech-mechanism lever that also appear in Historical Photograph 5 of about 1921 but are now absent. In contrast, a cradle-shield

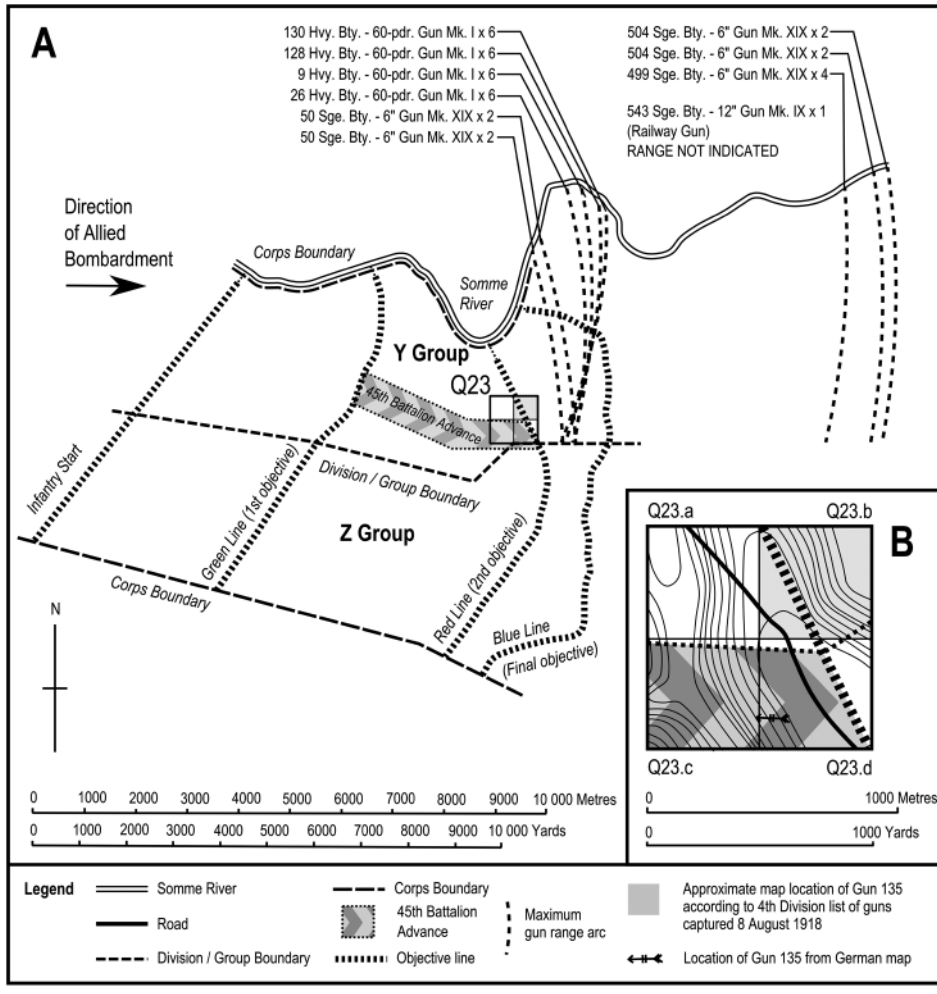

FIGURE 8 A. Map showing the location of Gun 135 at Q23.b according to the Australian 4th Division list of guns captured on 8 August (AWM16 4386/1/26). Also shown are the maximum ranges of 37 Allied guns belonging to Y Group that had the range to hit Gun 135. In addition, the line of advance of the Australian 45th Battalion is indicated. B. The close up of grid square Q23 has Q23.b shaded to indicate the general location of Gun 135 according to the 4th Division. In contrast, at Q23.d, the location of the symbol for the 15cm K16 gun on the German map in von Bose (1929: map 2) is shown overlaid on the British topography as closely as possible. Located further south of Q23.b, its position also corresponds to the 45th Battalion line of advance. Drawn by David Pearson and Gerard Clifton after AWM4 23/62/30, August 1918; AWM16 4386/1/26; AWM26 494/2; AWM326 3; map sheet 62D 1:40,000 France, Edition 1 (Revised); Heavy Artillery Bombardment Map, map sheet 62D S.E. 1:20,000 France, Edition 3B (Local) [Australian] Corps Topographic Section, 5 August 1918; map sheet 62D S.E. 1:20,000 France, Edition 3C (Local); von Bose 1929: map 2; Hogg and Thurston 1972: 235–37; Hogg 1998: 212, 216–17.

now on the gun was not present when Historical Photographs 3 and 4 were taken, but it can be seen in Historical Photograph 5 with a different camouflage pattern from the rest of the gun. Possibly this should be seen in the context of a suggestion in November 1920 that the gun be reassembled using a different barrel, but serial numbers and the damage pattern indicate that this major change never happened (AWM93 27/1/174). Nevertheless, it is possible that some minor components are not original, as suggested by the presence of the cradle-shield and its attachment with non-original bolts, but again serial numbers make this doubtful (although lacking on the cradle-shield). However, from a comparison of Historical Photographs 1 and 2 (Figures 4 and 5) with damage now observable on the gun, it is apparent that Damage Points 11 and 14 date from after its capture, probably during transportation.

Reconstructing the gun's battlefield context

Historical Photographs 1–3 (Figures 4–6) and Historical Photograph 4 permit a reconstruction of the probable role of the gun during the Battle of Amiens. Although it had been placed in a prepared position, it had not been completely dug in and was still exposed, nor had it been provided with camouflage netting. In addition, there was no sign of ammunition, either live or expended, nor of other associated equipment. This contrasts with the situation in a battlefield photograph of an identical 150 mm gun (Gun 4) that was probably in the same battery (Figure 9). This was also transported to Australia as a war trophy, although scrapped in 1942 during World War II after some years displayed at Bexley, in Sydney, New South Wales (AWM194 Sydney 10; AWM262 4 Bexley; *St George Call & Cronulla & Sutherland Argus*, 1 December 1922: 3; *Daily Telegraph*, 13 February 1942: 1; Rathbone, n.d. [1980]: n.p. [20, 31]; Rathbone, n.d. [2006]: 64–65; AWM Negative Numbers D00518 and 520; Rockdale City Library, Photographic file collection [Rathbone]). Furthermore, the spade of Gun 135 had not dug into the ground as it might have done during firing. In addition, no sights were fitted to the gun, suggesting either that the weapon had not been in action or that they were removed before or after capture for reuse or as a souvenir. More positive evidence of the gun's context in the battle is provided by ropes left lying on the ground by the gun in Historical Photograph 1 (Figure 4) or still attached to the gun in Historical Photograph 3 (Figure 6) and by the presence of a muzzle-cover still in position on the barrel in Historical Photographs 1–3 (Figures 4–6).

In short, it seems most likely that the gun was never in action during the battle and, indeed, was still in the process of deployment. Significantly, in spite of flash-spotting and sound-ranging efforts before the battle, the battery in which the gun was located was not recorded in a Counter Battery — Australian Corps H.A. (Heavy Artillery) — Weekly Intelligence Summary 31/7/18–7/8/18 and Appendix 7/8/18 (AWM4 13/7/29 Part 2, August 1918; AWM26 494/2; TNA WO 95/995). This same document also indicated that a redeployment of some German batteries was taking place, which might be relevant to Gun 135. However, of 68 German guns in the Cérisy area established as being 'active' or suspected of being deployed, the closest to the position of Gun 135 were two heavy guns recorded at Q23.c.4.5. The battle-damage sustained by Gun 135, which possibly put the recoil mechanism out of order, could indicate that it was knocked out by the Allied bombardment before it could be

FIGURE 9 Photograph of Gun 4, later displayed at Bexley, in Sydney, and scrapped in 1942. Seen on the Amiens battlefield a short time after the gun's capture by A Company of the Australian 45th Battalion (AWM Negative Number E02892). Allied soldiers inspect the gun. The position of this gun and the existence of surrounding clutter suggests that its preparation for action was more advanced than that of Gun 135 that was probably in the same battery. Comparison of battle damage on the gun in this photograph with that on photographs taken of the gun at Bexley make its identification certain (AWM Negative Numbers D00518 and 520; Rockdale City Library, Photographic file collection [Rathbone]).

brought into action. An Allied after-battle report stated that 'nearly all the positions showed signs of having been under fire, and a good many guns had been hit' (AWM26 494/2). In addition, some of its detachment might have been killed or injured by that bombardment or even have abandoned their gun. Soon after the battle, it was observed by Major-General Budworth, senior artillery adviser to the Fourth Army, that:

> In the majority of cases, the [German] detachments had evidently either been driven from their guns or had failed to man them. Some guns were captured with camouflage material over them, and muzzle and breech covers still on. (RAM MD/1186; for similar observations see Bridger, 1919: 129–30; Brooke, 1926–27: 333–34)

Alternatively, there is a possibility that the battle-damage on the gun had been sustained in a previous engagement, but this is perhaps unlikely given the newness of the weapon and the time that had probably elapsed between manufacture and deployment on the front line.

Seeking the source of gunfire that damaged Gun 135

An Allied map of the battlefield shows the location of grid square Q23.b, in which Gun 135 was later recorded (map sheet 62D S.E. 1:20,000 France, Edition 3C (Local); AWM16 4386/1/26). Historical Photographs 1 and 2 (Figures 4 and 5) show the gun positioned in a level area, probably indicated on the map as high ground between two valleys. In the pre-battle plan, this area was allocated to the Australian Corps for the infantry attack. However, if the relevant 'arrow' symbol and terrain depicted on the German official map is superimposed on the British map mentioned above, it shows that Gun 135 might have been positioned further south along the edge of the valley around Q23.d (Figures 7 and 8), rather than in Q.23.b (von Bose, 1930: map 2). If so, this position corresponds with the 45th Battalion's line of advance as annotated on a number of contemporary battle maps, and not with that of the 13th Battalion who moved through Q23.b to the north of the 45th Battalion (AWM4 1/48/29 Part 3, August 1918; AWM4 23/12/30, August 1918; AWM4 23/30/46 Part 2, August 1918, Appendices; AWM4 23/62/30, August 1918). According to the plan drawn up before the battle, the infantry were to be supported by British and Australian artillery consisting of 'eighteen field artillery brigades, nine heavy brigades, four batteries of 6-inch guns and one 12-inch howitzer battery' (Edmonds, 1947: 62). The field artillery was to provide the initial creeping barrage and the heavy artillery was allocated bombardment of tactical targets and counter-battery fire on enemy artillery positions. However, many positions were incidentally targeted by the artillery in general (AWM4 13/4/16, August 1918; AWM4 13/7/29 Part 1, August 1918; AWM26 494/2; RAM MD/1186; Monash, 1920: 110–11). The bombardment sector was divided into two lanes, 'Y Group' consisting of 102 heavy guns to the north, and 'Z Group' consisting of 122 heavy guns to the south. There was also a separate long-range brigade of 19 guns that covered both lanes (AWM26 494/2; AWM326 3). Grid squares Q23.b and Q23.d were located in the lane assigned to Y Group.

We cannot be sure that the damage observed on the gun occurred during this specific battle. However, when the battery locations of Y Group and the locations of the long-range guns on 7 August are plotted on the map (Figure 8), their position, arcs of fire within their lanes, and their maximum ranges suggest that the area of Gun 135 could have been targeted by no less than 37 guns. These consisted of 24 60-pounder guns of Y group, 12 6-inch Mk.XIX guns and one railway-mounted 12-inch Mk.IX gun, the latter 13 guns from the long-range brigade. Although none of the available documentation mentions targeting grid squares Q23.b and Q23.d, the Morcourt Valley directly in front of them was targeted from a number of different sources (Bean, 1942: 569). Firstly, the valley from Q23.c to Q23.a and Q17.c was to be targeted as part of the heavy artillery bombardment (Heavy Artillery Bombardment Map, map sheet 62D S.E. 1:20,000 France, Edition 3B (Local) [Australian] Corps Topographic Section, 5 August 1918). Secondly, the 6-inch guns of the long-range brigade were assigned 'special targets of opportunity', including the Morcourt Valley from Q22.d.11 to Q29.a.89 and Q23.a.00 (AWM4 13/7/29 Part 1, August 1918; AWM26 494/2). Finally, according to the 'Targets and Times' list attached to the Counter Battery — Australian Corps H.A. (Heavy Artillery) — Operational Order No.12 (5 August), many guns were assigned to counter-battery fire on known targets, including two of the 24 60-pounder guns already mentioned. These two were from

the 130 Heavy Battery Royal Garrison Artillery and were assigned targets in Q23.c (AWM26 494/2).

Although Q23.b or d does not seem to have been directly targeted, it was adjacent to grid squares targeted by these three artillery sources. Given the uncertainty about Gun 135's exact position, the distances involved, variables in gun laying and ammunition, as well as the average number of rounds fired (Australian Corps: 230 rounds per 60-pounder and 170 rounds per 6-inch gun), Gun 135 might have been hit by the dispersal of rounds into the Morcourt Valley (RAM MD/1186). Moreover, before the battle it was noted that both the 60-pounder and 6-inch guns were to use 50 per cent high explosive and 50 per cent shrapnel ammunition, which is consistent with the damage pattern on Gun 135 (AWM4 13/7/29 Part 1, August 1918; AWM26 494/2). However, a report after the battle stated that the 60-pounders had used almost exclusively high explosive ammunition, which leaves the 6-inch guns as the most likely sources of damage (RAM MD/1186). Irrespective of the source, the damage to Gun 135 probably happened hours before the 45th Battalion overran the gun's position, as shortly afterwards at 10:19 a.m. they crossed the second objective 'Red line' which intersected Q23.b and d (Figure 8) (AWM4 23/12/30, August 1918; AWM4 23/62/30, August 1918; Bean, 1942: 560). Nevertheless, in attempting to identify the source of the shellfire that damaged Gun 135, it should be stressed that the relevant sources of information mostly come from battle plans detailing intentions, not from subsequent reports of what actually happened. The gun might have been targeted opportunistically after observation during the course of the battle. Furthermore, an alternative but less likely source of the damage could have been German batteries that shelled grid square Q23 in the days after its capture by the Allies (AWM4 13/7/29 Part 2, August 1918; AWM4 23/4/35 Part 1, August 1918, Appendices 1–36; AWM26 494/2).

Identifying the detachment of Gun 135

Physical evidence from Gun 135 throws some light on the identity of the German Second Army unit that manned it. The arrow symbol shown in Historical Photographs 1 and 2 (Figures 4, 5, and 7) also appears on the German map of the Amiens battlefield (von Bose, 1930: map 2) and is listed in a German document (Chef des Kr. Verm. W., 1917: 15) as the symbol for a '15 cm K. 16.' gun (Figures 7 and 8). On the map '3./146' appears above this symbol, probably indicating the unit that manned the battery of which this gun was a part. Because of the large size of guns of this type, such a battery would most likely have consisted of only two guns and would have had a nominal manning of 5 officers and 131 other ranks ([British] General Staff, November 1918: 91). A German source suggests that '3./146' referred to the 3rd Battery of the 146th *Fußartillerie-Bataillon* (Foot Artillery Battalion) which was recorded in 1918 (Cron, 1937: 376), although a casualty list suggests that the unit might have already been in existence in 1914 (von Berendt, 1928: n.p.). In addition, a British intelligence source mentions that it existed in 1917 ([British] General Staff, February 1918: 262). This battalion was formed from the *Garde-Fußartillerie-Regiment* (von Berendt, 1928: Annex 2; Voigt, 1987: 483). Although the German *Bundesarchiv* has no surviving records of this Prussian unit, von Bose (1930: 94) mentioned the 3rd Battery of

this unit as consisting of two guns that were only deployed the night before the Battle of Amiens and had not been fired in the battle. Also the casualty record for the unit on 8 August lists only three gunners, two in the Morcourt area (von Berendt, 1928: n.p.). Collectively, this evidence suggests that the gun might not have been manned during the battle. This is consistent with Gun 135 not being recorded in the British Counter Battery summary, and evidence from Historical Photographs 1 and 2 that Gun 135 had not been in action at the time of its capture.

The mixed fortunes of retirement

The cultural biography of Gun 135 does not end with its capture but continues to the time of writing. Presently it is cared for in a controlled environment at an Australian War Memorial store (The Treloar Technology Centre), at Mitchell in Canberra (Figure 1). However, since its capture its treatment and location have varied greatly. Historical Photographs 2 and 3 were taken on 14–16 August 1918 and Historical Photograph 1 probably at the same time. By 18 August 'most of the guns' had been removed from grid square Q23 (AWM25 383/23) and were presumably transported to either the 'gun receiving depot' at Fouilloy or the '4th Army Captured Gun Park' at Longueau, but there is no specific record of Gun 135 (AWM4 2/7/14, August 1918; AWM4 13/77/27, August 1918; AWM25 383/23; AWM38 3DRL 6673/66). Subsequently it must have been transported to the War Office East Croydon Ordnance Depot, near London, to which two other guns from grid square Q23 were taken and where hundreds of other guns captured by Australian units were stored (AWM16 4386/1/84; AWM16 4386/2/3; AWM93 7/1/44; AWM93 27/1/153; AWM Negative Numbers D00517–520). The two guns from grid square Q23 were the Bexley gun (Gun 4) that was identical to Gun 135, and an earlier model 150 mm gun with a Naval barrel (15 cm S.K.L/40 i.R.), Gun 505, later kept at Woollahra, in Sydney. Like Gun 135, Gun 505 was apparently captured around 9 a.m. in the valley near Caroline Wood (Q23.c), its battery having just been brought into position (AWM 194 Sydney 63; AWM262 505 Woollahra; AWM Negative Numbers D00519, P02729.040–041; *The Argus*, 18 June 1919: 9; *Sydney Morning Herald*, 15 February 1921: 6; *Sydney Morning Herald*, 30 May 1921: 10). Large numbers of guns were stored at Croydon until shipment to various destinations, including Australia, but there is no record of a Gun 135, of the type discussed in this paper, from grid square Q23. Similarly, it is not known on which of numerous vessels carrying captured guns to Australia it was transported.

However, Gun 135 is included in a list of 39 'Commonwealth Guns' dated November 1920–July 1921 that were presumably in Melbourne, the location of the Australian Commonwealth Government until 1927 (AWM333 2/4/3). Furthermore, Historical Photographs 5 and 6 show it in the trophy gun park in the Melbourne Domain sometime in 1920–21. It seems then to have been amongst 41 guns removed to the Melbourne Exhibition Building, which became the temporary home of the future Australian War Memorial collection. This was sometime after 8 August 1921, but it is uncertain whether it was kept under cover or outside (AWM93 7/1/174). It next appears to be shown in Historical Photograph 7 sometime before 2 December 1937, located in Canberra in a gun park outside the unfinished Australian War Memorial

building (*The Adelaide Chronicle*, 2 December 1937: 36). Historical Photograph 8, taken around the time of the opening of this building in 1941, shows it on display within the galleries on the Lower Ground Floor. The display of which it was a part seems to have remained virtually unaltered until the gun was moved outside during the late 1970s (McKernan, 1991: 207; P. Burness, pers. comm.) and by January 1986 the gun was still in the outdoor exhibition area. Subsequently, by April 1992 it was at the Australian War Memorial Mitchell B storage facility and by April 1994 it was in storage at the Treloar Technology Centre nearby. However, by February 2001 it was again on display, this time within the newly built ANZAC Hall, an extension of the War Memorial Building (AWM Catalogue Accession Number RELAWM05044, 2011). Since then it has once again been put back into storage at Mitchell.

It is apparent that Gun 135 has had varied treatment since its arrival in Australia some ninety years ago: at times left outside in all weathers, at times displayed under cover, at times stored indoors with controlled temperature, humidity, and light. Nevertheless, Gun 135 has been more fortunate than the identical Bexley Gun (Gun 4) that was cut up for scrap during World War II. The treatment of Gun 135 was also much superior to that of the only other surviving gun of this type in Australia (Gun 103) which is now in a deteriorated condition. This was initially presented to the municipality of St Kilda, in Melbourne, but some time after July 1968 it was disposed of by the council and was rescued by a private purchaser whilst on its way to the scrap yard (AWM194 Melbourne 29; AWM262 103 St Kilda; City of Port Phillip Archives, St Kilda trophy gun 06/012/0011; *The Argus*, 25 June 1923: 12; *Prahran Telegraph*, 29 June 1923: 6; St Kilda Municipal Council Minutes, 15 and 29 July 1968; Billet, 1999: 56, 58–59, 85; Caribbean Gardens, 2011). It is now at the Caribbean Gardens and Market at Scoresby, in Melbourne. Gun 135 not only survived its years in Australia but did so virtually intact, unlike the giant 'Amiens Gun' (Gun 77), a 280 mm naval gun (28 cm S.K.L/40) on a railway carriage that was the largest trophy gun collected from the Western Front at the end of World War I. Captured by the Australian Corps on 8 August near Harbonnières, this monster weighed 185 tons (187,969 kg), including the barrel which weighed 45,248 kg and is 441.04 inches (11,202 mm) long (Krupp, 1917; AWM4 14/27/36, August 1918; AWM4 23/48/37, August 1918; AWM27 381/69; AWM93 7/1/44; Anon., 1920: 351–54; Anon., 1934: 6–7). During World War II, in November 1943, its massive carriage was removed and transported from the Canberra Railway Station to the Proof and Experimental Establishment, Port Wakefield, in South Australia, where it was used as a carriage for testing 8 inch naval gun barrels. After the war, the cost of returning it to Canberra was thought to be too great and it was cut up for scrap in 1963 (Brook, 1978: 15, 21–22; Buckland, 1978:140–41). This left its barrel and some smaller parts at the Australian War Memorial, where the barrel still lies like a toppled factory chimney, too large to display other than outside the building and too incomplete to be meaningful to many visitors. Elsewhere in Australia, many World War I trophy guns lay exposed to the weather in public parks or elsewhere, where over the years they deteriorated, suffered vandalism, received little or no appropriate care, and in some cases were eventually scrapped or even buried to get rid of them. Gun 135 is, therefore, a fortunate survivor, particularly of the larger guns brought to Australia at the end of World War I.

Conclusion: The changing relationship of guns and society

The survival of an artefact like Gun 135 needs to be understood in the context of changes in the way that people interacted with such objects, changes that represent episodes in their cultural biography. There were major differences in social attitudes to such guns even at the time of their acquisition, attitudes that also changed over the years. To those on the receiving end of German shelling during World War I they were grim killing machines, as recorded by British poet Wilfred Owen in *Anthem for Doomed Youth*:

> What passing-bells for these who die as cattle?
> Only the monstrous anger of the guns.
> . . .
> No mockeries now for them; no prayers nor bells;
> Nor any voice of mourning save the choirs, —
> The shrill, demented choirs of wailing shells.
> (Hibberd, 1986: 96)

Owen was one of the millions killed during this war, and after the capture of many of the weapons that had inflicted so much of the carnage on the Allied forces, and their transport in this case to Australia, to some people they became 'memorials to the gallant dead' (*The Brisbane Courier*, 27 June 1922: 7). In this role they were widely distributed to towns and cities throughout the country for public display and admiration. Those who thought this way lamented that many guns, nevertheless, were allowed 'to rust and rot' (*The Argus*, 2 June 1920: 11). To others, however, they were merely 'A Gruesome Scrap Heap' (*The Labor Call*, 21 January 1926: 12). Thus, even soon after the end of World War I, the captured guns had different meanings for different people. As time passed, the way they were thought of continued to change, and by 1940 one letter to the Press described them as 'ugly, neglected, out-of-date junk [that] disfigures our parks and gardens, and they are only valuable as scrap' (*The Argus*, 19 February 1940: 6). Indeed, during World War II some of the guns were officially sought for melting down as scrap for the war effort or for potential reuse (NAA SP1008/1 484/1/706A; *Daily Telegraph*, 13 February 1942: 1; *Sydney Morning Herald*, 18 April 1942: 10). As another letter to the Press remarked at that time concerning the public display of the guns: 'After a very short time the novelty wore off. The guns were not picturesque in any way: in fact, they were decidedly unsightly' (*Sydney Morning Herald*, 26 June 1941: 3). By 1957, attitudes were changing again: the Woollahra Municipal Council (in Sydney) was asking for the return of a gun (Gun 505) that it had sent to the Army in 1935 as a technical exhibit, in order to display it in a park 'as a relic of a famous battle in which the Australian troops participated'. In addition, indicating its changing significance, the Council thought that 'it would be a wonderful plaything for small children' (Woollahra Municipal Council Minutes, 25 February 1935: 93, 23 September 1957: 526). Indeed, the ways in which such guns are thought of will continue to change; even the present paper might contribute to this by encouraging a new direction in their investigation. Significantly, after the end of World War II far fewer captured guns were brought to Australia and guns placed on war memorials were usually decommissioned Australian ordnance (Clayton, 1995: 21; Inglis, 2008: 343).

Meanwhile, Gun 135, like some other World War I guns, has been preserved in a museum, where its meaning has been determined by its display role as an historical stage prop frozen in time, in a context divorced from society as a whole. In contrast, as has been shown, to the Australian public the meaning of such weapons has varied and has changed through time, reflecting the attitudes of different social groups and of different generations. To retrieve the resulting complex cultural biography requires the use of all available documentary, photographic, cartographic, and oral evidence. To these sources must be added the physical evidence obtainable from the gun itself by archaeological analysis, a source of information that has often been overlooked. Considered in isolation, the documentary and other sources are often incomplete or ambiguous and museum accession records frequently reflect their complex taphonomy. The gun is reduced to providing part of the scenery of a former war, an adjunct to history rather than a source of it; its story is incomplete. Furthermore, the passage of time makes it now impossible in the case of World War I to augment that story from oral testimony, because men whose memories could have filled in some of the gaps are dead. However, a physical examination to extract information from the gun itself: to, as it were, let the object speak for itself, can be beneficial. The object can become central to its investigation, not merely an adjunct to the historical record.

This approach, combined with a critical analysis of the surviving documents, photographs and other sources, can inform us about the manufacture of Gun 135, its deployment, role in the Battle of Amiens, capture, arrival in Australia, and subsequent inclusion in a museum collection, each a different aspect of its life story. In particular, an examination of the gun can throw light on the circumstances of its capture by the Australian Corps at the Battle of Amiens, after apparently being damaged and abandoned during the Allied bombardment. One of a staggering total of 173 German guns captured by the Australians during that day, it is a physical reminder of a major defeat for the German Army, a defeat that was surely a factor in bringing about the Armistice three months later. Physical examination of the gun can also establish its unique identity, and provide details of its treatment since removal to Australia, its conservation contrasting with the neglect of some other trophy weapons. Thus, archaeological study of the gun is informative about its own taphonomy, in multiple and contrasting contexts. Specifically manufactured for use in war, it survived to become an icon of victory, the relevance and character of which varied as time went by. As such, it is a reminder of the impact of cultural recursivity. Designed by people for the purpose of killing other people and destroying their infrastructure, its continued existence resulted from survivors of those against whom it was used preserving it for future generations; one of only five guns of this type presently known to exist in the world and the only one curated in a controlled indoor environment at the time of writing. It is an example of how human behaviour shapes material culture and how, in turn, material culture shapes that behaviour. This becomes starkly apparent in conflict situations such as that of World War I.

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