Piracy on the high sands: covert military mobilities in the Libyan Desert, 1940-1943

Abstract:

This paper explores the history of the Long Range Desert Group (LRDG) who gained notoriety in the Second World War by conducting a new form of covert warfare deep behind enemy lines. The LRDG waged a psychological war; continuously appearing and disappearing, they succeeded in creating a sense that the British were everywhere and yet nowhere. In order to effectively execute these covert operations LRDG soldiers became closely acquainted with the desert, their senses attuned to a battlefield of sand, wind and stars. This paper is a study of military bodies and technologies adapting to perform a novel form of deceptive warfare. Examined from the British military's perspective it explores how the desert-modified car mingled biology, technology and environment to produce a new form of military mobility which shaped the character and legitimised the use of covert desert warfare. It also reveals how covert warfare was naturalised through a heroic narrative of piracy which inspired the group's inception, justified its establishment and methods, and framed the soldiers' own performance and understanding of their actions. Overall, the paper uses mobilities research to expose the processes which legitimise warfare strategies. It also argues that it is only by examining these mobilities that such narratives can be held accountable.

In the North African desert in the Second World War a new form of warfare was beginning to be experimented with by the British military. Operating deep behind enemy lines, a raiding group caused havoc by capturing communications and prisoners, destroying supplies and transport and undertaking reconnaissance.¹ This was the Long Range Desert Group (LRDG) who waged war by subterfuge, trickery and concealment. By the mid twentieth century developments in motor car technology (with some technical adaptations designed for the demands of the desert environment and terrain) alongside more detailed, yet still unreliable, maps of the interior of Libya and Egypt created the potential for new forms of covert operations to take place on the edges of conventional warfare.² The establishment of the LRDG and the adoption of covert warfare in the Second World War was thus an outcome of entangling landscape, geographical knowledge and technology for military purposes. When the presence of the group was revealed to the British public in 1941 media depictions conjured heroic visions of covert warfare waged by:

¹ D. Lloyd Owen, *The Long Range Desert Group, 1940-1945: Providence Their Guide*, London, 2000.

² I. Forsyth, Desert journeys: from exploration to covert operations, *Geographical Journal* 182 (2016) 228-235.

Sand sailors who venture hundreds of miles into shifting dunes in the interior of Libya, navigating by the sun, moon and stars ... stripped to the waist, bare legged in khaki shorts, with a Bedouin head cloth ... these warriors of the wide and open spaces travel weeks at a time far from their desert bases, scouting the unknown wildernesses of rock and sand.... Men, mounted on light trucks bearing outsize desert tyres, strike boldly forth into wastes.... Tractor marks and the virgin desert surface, enable them to tell with almost the accuracy of a Sherlock Holmes how many enemy vehicles have passed this way, their size, type and probably destination and purpose.³

This imagery of the group as courageous and subversive had been carefully crafted by their founder, Ralph Bagnold, an experienced soldier, renowned desert explorer and esteemed geomorphologist. It was a vision and narrative that the soldiers of the LRDG themselves were eager to embrace. This paper employs a mobilities framing to narrate the British military's perspective on, and the LRDG soldiers' experiences of, covert warfare. It demonstrates that an engagement with mobility studies can reveal the processes – such as the cultural construction of heroism and technological innovations – which serve to legitimise shifts in strategy and in what can be considered 'just warfare'.⁴ First, the paper will explain what an engagement between mobility studies and critical military geographies can offer historical geographies of warfare, before examining the roots and routes of covert desert warfare through a study of Bagnold's days of inter-war desert exploration, explaining how this shaped the implementation of a novel form of warfare. Thereafter, the experience of operating deep behind enemy lines will be explored in order to narrate the mobile and embodied experience of conducting covert operations. Overall, the paper examines how mobilities research allows a productive lens of analysis for making sense of warfare, showing how such an approach can reveal the intertwining of the corporeal and technological that would otherwise remain concealed.

However, this paper also highlights the challenges and limitations of a mobilities approach. A focus on the experiential aspects of military mobilities can reveal the processes by which military tactics are legitimised, but it can also reentrench and naturalise heroic narratives of conflict unless the lasting consequences for the nature of warfare are commented upon. Stuart Elden has stated that the discourse of the 'War on Terror' provides an apparently new language to justify what is a continuous practice. This paper proposes that the mechanisms and discourses which

³ G. Anderson, *Sailors of the desert: with the Long Range Desert Patrol*, *Egyptian Mail*, 22nd August 1941, Churchill Archives Centre, Churchill College Bagnold archive [hereafter CA], NCUACS 35/3/92 C11/7.

⁴ T. Cresswell, 'Towards a politics of mobility', *Environment and Planning D* 28 (2010) 17-31 identifies six elements through which the politics of mobility can be explored: representation, velocity, roots, rhythm, friction and experience.

facilitated and naturalised the LRDG's covert method of warfare are part of the continuous process that has worked to frame the Middle East as a violent landscape.⁵ Therefore, through a history of the LRDG this paper both suggests that an engagement with military mobilities can reveal the processes which legitimise and naturalise strategies of warfare and it traces their implications in order to disrupt heroic narratives of conflict and make the consequences of military mobilities accountable.

Critical military mobilities

Of late there has been a growing area of work that teases out the taken for granted histories and politics of mobility.⁶ Mobilities research focuses on processes, patterns and relations in which movement and mobility are embodied, creating spaces, stories and experiences.⁷ It attends to the entanglement of economic, political, material, social and cultural networks and constraints, therefore offering military geographers the means to explore experiences of being in the military and processes of militarism as well as the intentions of military strategies and operations. Warfare in the twenty-first century is ever more diffuse and pervasive, and geographers have drawn attention to the ways in which technologies, spaces and discourses have led to the spatial and temporal transgression of the 'traditional' boundaries of the battlefield, leading to an 'everywhere war' of battlespaces with no definable borders or vision of an end point.⁸

That military violence is executed in heterogeneous spaces, rather than predominately in militarised sites, and by mundane as well as spectacular technologies is the result of contemporary geopolitics and long histories of ever evolving and transforming military tactics and technologies. The LRDG provides an example of one such history. The group operated on the edges of the conventional Second World War battlefield, disrupting notions of war as taking place within fixed and bounded geographical areas, and has thus contributed to expanding and blurring notions of which spaces encompass the 'active' battlefield.⁹ Expanding the scope of what should be considered as military activities, process and consequences is what Rachel Woodward has termed 'critical military geography'. She has drawn attention to the need to explore and account for the wide-ranging practices of the military, highlighting that armed

⁵ S. Elden, *Terror and Territory: The Spatial Extent of Sovereignty*, Minnesota, 2009, 172.

⁶ T. Cresswell, Mobilities II: still, *Progress in Human Geography* 36 (2012) 645-653.

⁷ T. Cresswell and P. Merriman, Introduction: geographies of mobilities – practices, spaces, subjects, in T. Cresswell and P. Merriman (Eds), *Geographies of Mobilities: Practices, Spaces, Subjects*, Surrey, 2011, 1-18.

⁸ See D. Gregory, The everywhere war, *Geographical Journal* 117 (2011) 238-250 and S. Graham, Cities as battlespace: the new military urbanism, *City* 13 (2009) 383-402.

⁹ Another Second World War example of the expanding battlefield, and thus the legitimisation of where and how war could take place, is the aerial bombing of cities and civilians, see K. Hewitt, Place annihilation: area bombing and the fate of urban spaces, *Annals of the Association of American Geographers* 73 (1983) 257-284.

conflict is the end point of diverse and entangled cultural, material, economic and political processes.¹⁰ By tracing the roots of the LRDG to Bagnold's days of inter-war desert exploration, this paper demonstrates how modes and methods of military violence were born through an interweaving of personal experience, landscape ecology, cultural imaginary, technological innovations and geopolitics. The resulting narrative is complex, shifting between scales, spaces and times, including a variety of experiences and voices. Yet, such a diffuse approach offered by a mobilities framing does not disperse politics, rather it extends military history to include the more-than-human (technological and environmental), and enables the far reaching effects of warfare to be traced and held to account. With regards to the LRDG, it is the technology of the car in relation with the desert environment that becomes the pivot through which to study the histories and geographies of covert warfare.

In mobilities studies a focus on the car has been figured as an important means to highlight the culturally and socially embedded experiences of driving and the historical geographies of movement.¹¹ The car, as Mike Featherstone explains, is a symbol of modernity with 'a high visibility in the social landscape and cultural imaginary over the last century'.¹² The car thus simultaneously liberates and coerces, individualises and integrates.¹³ Bagnold's motor car explorations in the desert and the LRDG covert operations took place, as Sean O'Connell explains, during Britain's first era of mass motoring. From the inter-war period to the 1940s technological changes and greater rationalisation of the production process led to reductions in car prices enabling ownership to filter down from the upper classes through Britain's professional and commercial middle classes.¹⁴ Yet, if to some the car was emblematic of a new dawn of democratising technology, promising a smooth high-speed future, to others it signified the end of intrepid, heroic individuality and dogged demanding expeditions. For example, in the early twentieth century William Harding King lamented that in regards to exploration the motor car would lead the desert to lose its mystique and become known through mechanical rather than human endeavour.¹⁵ In war, however, the promise of swifter mechanised technologies did not raise concerns, but was accompanied with the potential for enabling greater power and control.

¹⁰ R. Woodward, From military geography to militarism's geographies: disciplinary engagements with the geographies of militarism and military activities, *Progress in Human Geography* 29 (2005) 718-740.

¹¹ See special issue of *Theory, Culture and Society* 21 (2004) and P Merriman, *Driving Spaces: A Cultural-Historical Geography of England's M1 Motorway*, London, 2007.

¹² M. Featherstone, Automobilities: an introduction, *Theory, Culture and Society* 21 (2004) 1.

¹³ J. Beckmann, Mobility and safety, *Theory, Culture and Society* 21 (2004) 81-100.

¹⁴ S. O'Connell, *The Car in British Society: Class, Gender and Motoring, 1896-1939*, Manchester, 1998.

¹⁵ N. Thomas and J. Hill, Explorations in the Libyan Desert: William J. Harding King, in: S Naylor and J Ryan (Eds), *New Spaces of Exploration: Geographies of Discovery in the Twentieth Century*, London, 2010, 104.

Caren Kaplan has demonstrated how technologies that expand the scope and speed of aerial mobilities create advantages for those who seek to control the battlefield.¹⁶ Since the early twentieth century, aerial technologies of the plane, and more recently the drone, have been emblematic of military command of and over space. They are technologies which reveal power, establish visible military presences and conduct overt surveillance with the persistent threat of potential attack.¹⁷ The car, as employed by the LRDG – through the use of camouflage, specific patrol formations and technological adaptations – expanded the scope and speed of military mobility. The car in the desert was a technology that obscured power, concealed military presences and conducted covert surveillance. Therefore, the technologies which shaped this new form of military mobility in the desert deserve attention. Mobility technologies are produced in and for particular places, which in turn shape experiences, knowledge and spatial imaginings. They become customised so that they ‘fit’ practically and aesthetically into understandings of, ways of moving through, and dwelling in place.¹⁸ Bagnold realised this during his inter-war expeditions and devised various innovations so that the motor car was adapted to the desert and explorers became attuned to desert driving. Further, these desert experiences led him to recognise the potential of such adaptations for the military. Therefore, military mobilities of the LRDG in the Desert War reveal how physical and imaginative geographies contributed to shaping and innovating military technologies, thus helping to naturalise the use of covert tactics. Yet, the British military in the Middle East did not initially recognise the use of small motorised patrols, so Bagnold doggedly persuaded them that such an organisation was not just beneficial but necessary in the Desert War.

The roots and routes of desert driving

Ralph Alger Bagnold joined the Royal Engineers in 1915 at nineteen years old and was sent to France as a member of the British Expeditionary Force. During the First World War he rose to the rank of captain and served in some of the bloodiest battlefields: Ypres, the Somme and Passchendaele.¹⁹ In 1919, after returning to England, Bagnold entered Gonville and Caius College, Cambridge to study engineering. During his time at Cambridge Bagnold was frustrated,

¹⁶ C. Kaplan, Mobility and war: the cosmic view of US ‘air power’, *Environment and Planning A* 38 (2006) 395-407.

¹⁷ Although the plane and drone can be seen as emblematic of visible military power and control, aerial technologies are also designed to go undetected, such as the stealth bomber.

¹⁸ T. Edensor, Automobility and national identity: representation, geography and driving practice, *Theory, Culture and Society* 21 (2004) 101-120.

¹⁹ A. Goudie, Ralph Alger, Bagnold, *The Oxford Dictionary of National Biography* (2004) and Outline of the Career of R.A. Bagnold, CA NCUACS 35/3/92.

finding the degree too theoretical for his liking.²⁰ After graduating in 1921 he returned to the signals company, and, in 1926, was sent to Egypt. Therefore, when Bagnold arrived in Egypt he did so as an experienced soldier and as part of a generation devastated by total war. On arrival the desert captured his imagination, its atmosphere evoking memories of childhood holidays in Dartmoor. He recalled:

Egypt fascinated me from the start, just as Dartmoor had done when I was a boy. Both had the strange aura induced by the physical presence of the remote past and also great, bare, trackless expanses where the careless might get lost.²¹

It was this sense of the mysterious and ancient which galvanised Bagnold's desire to explore. Perhaps the desert also appealed as an environment that was the antithesis to the squelching, sucking, saturated landscape of the First World War's European battlefields.²²

Soon after arriving in Egypt with a Morris two-seater car and his Alsatian Cubby, Bagnold realised his car was not a suitable model for desert driving. This, he explained, 'started my curiosity about the Model-T Fords as a means of getting cross-country or along old camel tracks where no car had ever been'.²³ An article in *The Times* reviewing Bagnold's 1935 book *Libyan Sands* examines his fascination with desert driving:

Mr Bagnold was one of a group of British Officers who, being quartered in Egypt a few years after the war, looked about for a playground and found it in the Libyan Desert.... It was the motor-car that made the playground accessible.... Mr Bagnold and his friends had to a large extent devised their own technique.²⁴

Even though there had been a long history of exploration in the deserts of the Middle East before the 1920s, there was as yet no record of them being crossed from east to west. This was due to the lack of available water for camels, which were the most reliable form of transport in the desert. In particular, it was two journeys made by Prince Kamal el Dine Hussein to the southern latitude of the Sudan border that captured Bagnold's imagination because, as he recalled in his memoir:

²⁰ R. Bagnold, *Sand, Wind and War*, Tuscon, 1991, 38.

²¹ Bagnold *Sand, Wind and War*, 51.

²² Bagnold, *Sand, Wind and War*.

²³ Bagnold, *Sand, Wind and War*, 199.

²⁴ *The Times* 28 Feb 1935, in a red hardback 'Newspaper Cuttings' book used by Bagnold 1935-1936 for reviews of *Libyan Sands*, CA NCUACS 35/3/92 C13.

He told me emphatically that one thing he had learned on those long journeys was that mechanical transport could never cross the ranges of sand dunes that lay as barriers across the desert floor. He had tried, as had others before him ... but the huge dune ranges of the 'Great Sand Sea', of unknown extent, formed in his opinion an insuperable obstacle.²⁵

These previous attempts to cross the 'Great Sand Sea' presented an irresistible challenge. Bagnold proposed that by innovating technologies specifically adapted for the terrain and elements of the desert he could prevail over the dunes. Thus, he spent his spare time in Egypt sourcing the most suitable vehicles, adapting and inventing technologies for desert driving and assembling a group of willing and intrepid British soldiers to accompany him, including William Boyd Kennedy Shaw (recipient of the Royal Geographical Society medal in 1935) and Major Guy Prendergast, both of whom later assumed key roles in the LRDG. The journeys were meticulously planned and prepared for because there were no roads in the interior of the desert, so there would be no help in case of breakdown. In addition, neither the Egyptian Frontier Administration or the Palestine police would allow 'casual desert trippers to wander about at will because of the unnecessary bother of having to rescue them in case they broke down or got lost or stranded'. Therefore, Bagnold and his group needed to be as self contained and self reliant as possible in order to demonstrate to the authorities their capabilities.²⁶ After experimentation, Bagnold concluded that the vehicles to use were Ford cars and lorries. Three vehicles were taken on all the longer journeys, which were between two to three thousand miles each.

On shorter journeys only two vehicles were taken and in every case the crews consisted of two men per vehicle. Most often the journeys were round tours of about a thousand miles where no supplies other than water could be collected en route, and on several occasions water had to be carried on the cars for journeys of between four to twelve days.²⁷ Between 1926 and 1932 Bagnold undertook cross-country motor expeditions in Egypt, the Libyan desert, Palestine, Sinai and Transjordan. In all, some twenty thousand miles were covered and car mileage amounted to about forty-five thousand miles, of which the greater proportion was either trackless or comprised of very rough patrol tracks.²⁸ During these trips Bagnold adapted the motor vehicles

²⁵ Bagnold, *Sand, Wind and War*, 62.

²⁶ Bagnold, *Sand, Wind and War*, 54.

²⁷ R. Bagnold, Some notes on mechanical transport in arid countries, *Overseas Mechanical Transport Bulletin* (October 1931), CA NCUACS 35/3/92 B38.

²⁸ Bagnold, *Sand, Wind and War*, 55.

to make them as efficient and effective as possible for desert driving. He also devised innovations such as sand channels to extract vehicles when they became bogged down in sinking sands, an expansion tank for the conservation of radiator water, a composite ration pack and his most ingenious invention, the sun compass for navigating across the interior of the desert.²⁹ These inventions would later be applied by the LRDG and adopted by the British military's Middle Eastern forces more generally. The mobile technologies of warfare were thus being crafted to deal with the mobile landscape of sand

Desert driving – an assemblage of machines, bodies, activities, cultures, infrastructures and materials – attempted to negotiate dunes over three hundred feet high thus producing a particular experience of the landscape through the body/car hybrid.³¹ For Bagnold the experience was exhilarating. He recalled, 'The sand is coarse-grained on the surface, but beneath there are perfectly graded particles packed into an aggregate.... Gliding over this sand with a sensation rather like flying over a cloud-bank we were encouraged to push farther west'.³² However, at other times it was agonising: 'It was a painful crossing. The cars creaked and groaned as each wheel climbed independently and fell over the cracked waves of upthrust salt. For nearly an hour we crawled across at walking pace, past here and there the bones of camels who had fallen broken legged by the way'.³³

Here the different phenomenologies and sensations of driving across sand are emotively narrated because, as Peter Merriman describes, driving is highly embodied, requiring skills, knowledge and forms of spatial awareness.³⁴ The thrill of exploration and the challenge of technological innovation drove Bagnold's engagement with the desert. These interwar desert journeys, undertaken as a diversion from a peacetime military posting, and the expertise that Bagnold derived from them led directly to the establishment of the LRDG. However, this sort of close reading of mobilities must be pulled back from in order to assess and trace the histories and geographies of these as specifically military mobilities. As John Urry has explained, '[c]ars extend where people can go to and hence what they are literally able to do'.³⁵ The inter-war activities of

²⁹ R. Bagnold, Some notes on mechanical transport in arid countries.

³⁰ Further, Bagnold made important scientific contributions to knowledge of the desert, including mapping and studying the physics of dunes, see R. Bagnold, *The Physics of Wind Blown Sand and Desert Dunes*, London, 1941.

³¹ See P. Merriman, *Mobility, Space and Culture*, London, 2012; N. Thrift, *Spatial Formations*, London, 1996.

³² R. Bagnold, Journeys in the Libyan desert 1929 and 1930, *The Geographical Journal* 38 (1931) 13-39 and 524-533.

³³ R. Bagnold, The Western Desert 13pp typescript of journey submitted for publication in *The Times* with account as published 3 July 1928, CA NCUACS 35/3/92 B6/3.

³⁴ P. Merriman, Automobility and the geographies of the car, *Geography Compass* 3/2 (2009) 586-599.

³⁵ J. Urry, The 'system' of automobility, *Theory, Culture and Society* 21 (2004) 26.

Bagnold and his fellow explorers showed how the car could extend the potential for desert mobilities, and this helped to develop a specific form of covert desert warfare. While it should be noted that even though Bagnold had never initially intended to apply his desert driving expertise to the battlefield, there was one moment during his desert journeys when he witnessed the potential of such a use and the unsettling realisation that others had too: ‘The second day we struck a well-worn track of Italian armed convoys. It was hard to believe that in all this emptiness that a war was going on, and that a sufficient force could rise from nowhere to attack Italian columns of sixty cars and more, that carry food and water to the outposts’.³⁶ This chance encounter was one that Bagnold would later recall and dwell upon. In retelling the history of the LRDG it is also a moment that reveals the ways in which a mobilities framework can look beyond the ‘benign’ histories of military technologies to show where innovations and exploration can have unintended applications and consequences.

WWII and the LRDG

At the outbreak of the Second World War Bagnold recognised that the ability to cross the ‘Great Sand Sea’ afforded by the motor car made it possible for small patrols to wreak havoc behind enemy lines while also addressing the lacuna of detailed topographical knowledge of the region. Bagnold also feared that the Italians had also recognised the potential of this and he approached the British military in order to suggest the use of such a patrol group in desert warfare. This set about a twofold legitimisation process: first, on a more immediate level, Bagnold had to legitimise the practicality of such a group to his superiors in the British military; and second, and more widely, the group and their covert practise had to be made ethically legitimate to the British public.

Bagnold initially wrote a short report suggesting that a small assortment of desert-worthy vehicles be acquired and a nucleus of men trained in the art of long-range, self-contained, cross-country driving.³⁷ Twice this report was sent and each time high command in Cairo did not act on his suggestions. However, on the third attempt, after Italy declared war in alliance with Germany, General Archibald Wavell, commander-in-chief in the Middle East, called upon Bagnold to explain his idea in greater depth. Wavell – having served in the Second Boer War and in Palestine in 1937, a period of unrest – believed that the British military had much to learn

³⁶ Bagnold, *The Western Desert*. In this expedition report Bagnold is referring to the Italian colonisation of Libya. See D. Atkinson, Geographical knowledge and scientific survey in the construction of Italian Libya, *Modern Italy* 8 (2003) 9-29.

³⁷ M. Kenn, Ralph Alger Bagnold, 3 April 1896 – 28 May 1990, *Biographical Memoirs of Fellows of the Royal Society* 37 (1991) 56-68.

from the guerrilla warfare he had witnessed in those conflicts. He was certain that aggression deployed through tactics of cunning, deception and mobility were, at times, the most effective form of warfare.³⁸ Yet, in the main the British military did not deem guerrilla methods necessary for such a sophisticated army, leading to what Wavell saw as its unimaginative tactics and resistance to using deception and covert warfare.³⁹ At their meeting, Bagnold, aware of Wavell's receptiveness to guerrilla tactics employed the rhetoric of piratical combat to pique the general's interest. Bagnold recalled in his memoir:

I told him briefly of the great range of action possible by small self-contained parties that had been especially trained and equipped. Such parties could operate anywhere in the uninhabited interior of Libya and could read tracks to find out if any offensive action against southern Egypt was in preparation. He seemed a bit sceptical and asked, 'What would you do if you found no such preparation?' I said, 'How about some piracy on the high desert?' At the word "piracy" his rather grim face suddenly broke into a broad grin.... It would be enough if we were to create the impression of British ubiquity throughout the interior of Libya.⁴⁰

After this interview Wavell gave Bagnold the freedom to design, create and train a small, self-contained unit capable of operating anywhere in the uninhabited interior of Libya. Bagnold gathered some of his fellow explorers to help set up and command the LRDG. He sourced and adapted the cars, trucks and lorries and enrolled soldiers who were deemed able to withstand the harsh demands of the desert climate. Seeking seemingly naturally acclimatised soldiers, Bagnold first approached the Australian forces. When this was not granted, the 2nd New Zealand Division provided the first recruits and within six weeks established patrols consisting of five unarmoured vehicles and twenty men had been established.⁴¹ Each patrol was commanded by an officer and contained an expert navigator, a Royal Signals wireless operator, a Royal Engineers fitter and a medical orderly. The patrol carried enough food, water and petrol to allow a trip of 1,500 miles which was to last a month.⁴²

³⁸ N. Rankin, *Churchill's Wizards: The British Genius for Deception, 1914-1945*, London, 2008, 345 and 446-447.

³⁹ D.J.C. Wiseman, *The Second World War, 1939-1945: Army Special Weapons and Types of Warfare*, London, 1953, 38.

⁴⁰ Bagnold, *Sand, Wind and War*, 124

⁴¹ Letter from Bagnold to Lord Wavell, 28th January 1945, CA NCUACS 35/3/92 C25, History of the LRDG, The National Archives, Kew [hereafter TNA] CAB 44/151/10 and Bagnold, *Sand, Wind and War*, 126.

⁴² Details of K. Smith, Royal Corps of Signals posthumously award of the George Cross, Imperial War Museum Archives [hereafter IWM] 09/70/1 GC 09/70/0/16.

The first operation was conducted on 4th September 1940 with the intention of not only acquiring vital training and geographical information, but also to form dumps of petrol and rations along the Libyan frontier and to raid and destroy enemy camps.⁴³ The success of this operation led to the increased strength of the LRDG by swelling the numbers of recruits from the South Rhodesian units and Highland regiments. The LRDG operated in small independent columns and penetrated into nearly every part of the Libyan desert, an area comparable in size to India. The patrols relayed information on enemy positions and activities and attacked forts, captured prisoners, transport and grounded aircraft at times as far as eight hundred miles inside hostile territory.⁴⁴

Bagnold's meeting with Wavell encourages a consideration of how and why the figure of the pirate and the imagery of the sea were mobilised in order to find a place for the LRDG in the modern military. William Hasty, writing on the seventeenth-century seafarer William Dampier, has explained how pirates – those non-state actors who employ violence to take property or persons at sea – were 'well placed' to serve the political, economic and scientific interests of early modern imperial states.⁴⁵ The LRDG similarly employed violence to disrupt and disturb the enemy while also conducting topographical research in order to produce accurate maps, all in order to give the British military an advantage. As Hasty explains, there is a fluidity to the figure of the pirate, as different and specific renderings are mobilised and circulated to serve particular interests. For the LRDG the figure of the pirate, a morally ambiguous yet daring character, served to naturalise a novel and morally ambiguous way of conducting warfare on the edges of the conventional battlefield. The LRDG as pirates, sand sailors and buccaneers pervaded British newspaper articles which introduced the group and their actions to the public.⁴⁶ In this way the well-crafted narrative of heroic and daring violence which Bagnold had employed to advocate the potential of the LRDG to Wavell was then used to produce a polished narrative to the British public of a novel form of warfare in an exotic theatre of battle. Whereas the desert atmosphere produces mirages that dupe desperate travellers, the atmosphere conjured in official press reports of the LRDG shaped a compelling image for the public of fearless soldiers and exhilarating, effective combat. The heroic narratives of the LRDG served to ethically legitimise the adoption of covert tactics, including raids and ambushes, capturing and abandoning

⁴³ H. Wynter, *The History of the Long Range Desert Group: June 1940 to March 1941*, Kew, 2001.

⁴⁴ History of the LRDG, TNA CAB 44/151/10.

⁴⁵ W. Hasty, Piracy and the production of knowledge in the travels of William Dampier, c.1679-1688, *Journal of Historical Geography* 37 (2011) 50.

⁴⁶ Anderson, Sailors of the desert and Sand and blood, *The Daily Telegraph* 8th October and 22nd August 1941, CA NCUACS 35/3/92 C26/8, The World of the Long Range Desert Group, Appendix 9, CA NCUACS C13/4/9.

prisoners in the desert. The scale of violence of modern warfare requires heroic narratives to legitimise it. So when novel tactics or technologies are employed they are accompanied with narratives that render their violence digestible.

In addition, the LRDG was also legitimised by the language used to describe the group and their battlefield. The analogy between sand and sea employed was a reference to the area known as the 'Great Sand Sea' which the LRDG regularly crossed during their operations, and it was also a reflection of how the British, with a long-standing sense of themselves as a seafaring nation, understood this seemingly shifting and treacherous landscape and their navigation of it by conjuring a more familiar, fluid space. Whereas the ship was the technology that enabled exploration and looting at sea, it was the technology of the motor car that gave rise to covert desert raiding groups in the Second World War. Consequently, the technologies of the car and navigation expanded the scope and scale of desert exploration and warfare. The desert shaped the rhythm and character of military mobilities, and these in turn combined to shape the character and methods of covert warfare.

It is important to note that the LRDG were not the only group carrying out covert warfare in the North African desert in the Second World War. The Special Operations Executive (SOE) and Special Air Service (SAS) were also conducting operations in which the LRDG often assisted, either by providing intelligence and maps or by the provision of transport, supplies or patrol support.⁴⁷ Further, this had been a space in which the British military had previously employed, or turned a blind eye to, unorthodox methods of warfare. In particular, T.E. Lawrence had employed guerrilla tactics to weave the Arab Revolt into the actions of the First World War.⁴⁸ However, the LRDG was the first group to be developed specifically in response to the particular environmental demands, constraints and possibilities offered by the desert terrain and motor car technologies. Further, it was the first group developed because of the possibilities (and impossibilities) afforded by particular mobilities. This is perhaps suggestive of why the romanticised and theatrical figure of the pirate was drawn upon to align the group and their actions to recognisable heroic mythologies of violence. As Joanna Bourke has commented, in warfare 'the most virile fighters are slotted into mythical stories' such as cowboys and Indians.⁴⁹ The spirit of the high sands became engrained into the identity and character of the LRDG. It

⁴⁷ See Wynter, *The History of the Long Range Desert Group*, 128-139.

⁴⁸ S. Anderson, *Lawrence in Arabia: War, Deceit, Imperial Folly and the Making of the Modern Middle East*, London, 2013.

⁴⁹ J. Bourke, *An Intimate History of Killing: Face-to-Face Killing in Twentieth-Century Warfare*, London, 1999, 25.

was used by Bagnold to convince the British military of the benefits of a new strategy in desert warfare, employed by the press to present the LRDG to the British public as a roving band of desert warriors, and seeped into the soldiers' own accounts of adventurous, bloody hand to hand combat, as an extract from Operation 6 in the LRDG war diary reveals:

Our little act had to [be] put on very hurriedly and I feel lost some of its virtue as a result. Of my crew of four two bent over the engine the gunner hid under a tarpaulin and I held up my hand. The leading lorry stopped so I walked up to it and opened the cab door. Although suspicious the Italians were still in doubt to our respectability. My tommy gun I had been attempting to hold behind my back coming across. The time to produce my gun had come and this I did very clumsily, standing too close to the driver and he with some guts fell down from the cab on to me and with this sudden move grabbed it, we had a short hand to hand tussle after this but he got away and ran off, I had a fairly lucky shot with a grenade.⁵⁰

This process of making the desert landscape and the actions of the LRDG knowable and relatable through images of the sea and piracy reveals that representations and the performance of warfare cannot be disentangled. The figure of the pirate offered a romanticised view of covert warfare as conducted by 'warriors' in the age of industrialised warfare. Furthermore, the evocation of the adventurous and heroic in warfare through the individualised image of the pirate has produced a narrative that has led the methods and consequences of the LRDG to evade critical scrutiny as a state-sanctioned form of violence. Daring in ambition, theatrical in execution, covert mobilities in the Second World War revived notions of chivalry and heroism, all the while masking how the LRDG actions were pushing the boundaries of what could be considered as the active battlefield and naturalising guerrilla tactics, including abandoning prisoners in the desert with limited provisions and hundreds of miles from safety.⁵¹ Heroism thus functions to enable violence and bloodletting and helps to frame and legitimise particular methods of warfare.⁵² In the case of the LRDG it was a mix of both heroic narrative produced through a geographical imaginary and the geography of the battlefield itself which served to legitimise the adoption of covert warfare in the British military.

⁵⁰ LRDG Diary, 19th October 1941, Operation reports "A" Squadron, CA NCUACS 35/3/92 C1/1/5/7.

⁵¹ Lloyd Owen, *The Long Range Desert Group*.

⁵² Bourke, *An Intimate History of Killing*, 40.

The LRDG therefore instigated a new form of military mobility and enrolled an older rhetoric of heroism in order to naturalise its violence. The mechanisms and discourses which facilitated and naturalised the LRDG's covert method of warfare are also part of the long-term process that has worked to frame the Middle East as a violent landscape.⁵³ The figure of the pirate – of daring, physical violence enacted by a rogue – romanticised the LRDG soldier and freed him from the constraints of conventional soldiering to enact a new form of covert warfare. The confluence of the battlefield's geography, the British geographical imaginary of the desert and the heroism of military violence was what legitimised the LRDG's covert methods in the desert and other battlefield environments during the rest of the war. What the prevailing narrative of the LRDG as piratical heroes misses, however, are the technological innovations that enabled this form of covert warfare. Here a mobilities perspective can be used to examine in more detail the specificities of Bagnold's desert expeditions and the adaptations of machines to the desert that enabled this new form of covert warfare. As will be shown, these processes of adaption extended beyond the technological. Covert military mobilities in the desert also required adaptations of men to the desert and men to machines.

Desert Driving

Drawing on archival material pertaining to soldiers' own perspectives of the LRDG allows closer insight not only into the actions and operations of the LRDG but the very embodied experience of its military mobilities as well. Modern warfare, although highly technological, is ultimately waged by and on bodies and therefore the experiences of military violence deserve attention. The LRDG soldiers' experiences of war were shaped by the demands of their posting and, perhaps more than other soldiers they depended upon an intimate relationship with their environment and with technology to undertake operations and remain concealed from enemy observation. Unlike Bagnold and his fellow explorers, the spatialities and temporalities that informed LRDG desert mobilities were informed by military necessity rather than when leave and climate permitted. This meant that the LRDG could be a particularly gruelling posting, especially during the searing heat of the summer. One soldier attached to the group recorded that behind enemy lines soldiers survived on a diet of bully beef and biscuits with only two pints of water per day

⁵³ P. Satia, *Spies in Arabia: The Great War and the Cultural Foundations of Britain's Covert Empire in the Middle East*, Oxford, 2008, 23-58.

per person, with the sun and flies as continual sources of irritation. The patrols were entirely self contained, with each column equipped with spades, sand channels, maps and compasses. The LRDG navigated by the sun during the day and the stars at night, moving in convoy and dispersing if spotted or attacked by enemy planes. Once behind enemy lines much of the action took place at night under the cover of darkness, when camps and airbases would be attacked or convoys ambushed. During the day, when it was unsafe to travel, the trucks were hidden in wadis or among scrub, camouflaged by their scrimmed nets. Operations lasted for as long as supplies, prisoners and the wounded permitted.⁵⁴

Therefore, covert military mobilities were shaped by the desert terrain and environment, and informed by enemy activities, which produced the rhythms, patterns and processes of the LRDG. Featherstone has explained how drivers learn to switch between communicative modes, 'human to human via body gestures and a range of car to human signalling via the car's formal signal devices'.⁵⁵ In the LRDG soldiers similarly had to develop ways of communicating using human and nonhuman signals from their vehicles, while also being required to mediate continually between technologies of navigation and mobility, deciphering the landscape for signs of previous drivers, devising means to confuse those who might follow and sensing from the elements any indications of impending sand storms. This form of driving as a 'hybrid mobile subject' was a highly complex negotiation between man and machine, terrain and technology.⁵⁶ One soldier recalled the labours of desert driving:

I have no desire to remember that day. We bogged down continuously; we dug in the sand with our hands and with spades; we laid mats and ran before the moving vehicles carrying heavy steel sand channels to lay in the path of wheels, like slaves laying gifts at the feet of an insatiable monster.... 'She's away!' Someone would cry and away would sail the 3-tonner over beautiful hard sand like a dignified swan, and after her would run two cursing men each bearing sand channels on his shoulder, lifting it in the back and jumping in after themselves. As soon as they were settled there would be a shudder and an abrupt stop and the process would have to begin all over again.⁵⁷

⁵⁴ C. Mather, Notes on the LRDG and Raids on Enemy Airfields in the Western Desert, 1942, Richardson, IWM MC/11/28/1.WHY DOES IWM APPEAR TWICE HERE?

⁵⁵ Featherstone, *Automobilities: an introduction*, 12.

⁵⁶ T. Cresswell, Mobilities III: moving on, *Progress in Human Geography* 38 (2014) 714.

⁵⁷ Mather, Notes on the LRDG and Raids on Enemy Airfields, IWM MC/11/28/1.

Driving on the desert's shifting surface could be slow and gruelling, characterised by stop-start mobilities. It was also demanding and dangerous: 'One Jeep racing up the side of a razor-backed dune turned a somersault at the top and the driver broke his back. He was evacuated by air while the patrols pushed on'.⁵⁸ It was not just the terrain that was an obstacle. Other, nonhuman inhabitants of the desert made life for the soldiers hard. As Cyril Richardson recorded in his journal, 'I would like to spend four or five pages describing the tortures we endured from the flies in the day-time and the mosquitoes at night but we are always at the mercy of those pests'.⁵⁹ Thus, for the LRDG soldiers the terrain produced particular experiences of driving and the environment became an other adversary which was to be conquered and controlled.

Tim Edensor has described how driving can be considered as a performance 'constituted by an array of techniques and technologies, practical, embodied codes which guide actions'.⁶⁰ Performing covert warfare required bodies to adapt, to find new modes of embodiment. The LRDG were enacting a new form of military mobility which tested the potential of motor car technology and necessitated from the soldiers new ways of inhabiting the desert and new engagements with technology in order to complete and survive operations. This process involved training in technology but also a deeply sensual and embodied performance of warfare designed to go unnoticed behind enemy lines. Figure 1 reveals this triangulation of vehicle, soldiers' bodies and environment with each adapting to the other and becoming militarised in the process.

Figure 1. LRDG soldiers enjoying a midday break in the shade of their truck. Courtesy of the Imperial War Museum.

Desert driving was both physically demanding and induced other more ephemeral affects. PJ Hurman in his war memoir recalled that:

Motoring north after a long time in the Sahara had an emotional effect like suddenly coming upon green plants after so long seeing only sand. The flowers at certain seasons after rain were like a miraculous coloured carpet which suddenly appeared overnight.⁶¹

⁵⁸ E. Bigio, *Against Impossible Odds: This is the story of a victory won against odds that made it seem impossible of the Long Range Desert Group*, IWM 02(41).345 [Long Range Desert Group]/5 K.75448. IS THIS GRAMMATICALLY ODD TITLE CORRECT??

⁵⁹ Diary of Cyril Richardson, IWM 85/6/1 /6.

⁶⁰ T. Edensor, *Automobility and national identity: representing, geography and driving practice*, *Theory, Culture and Society* 21 (2004) 112.

⁶¹ *Memories of World War II* by P J Hurman, IWM 99/85/1.

And another British soldier's account of their experiences of desert driving also describes it as an experience that was shaped by a sensory engagement with their environment. Carol Mather – a member of 'L Detachment', the nucleus of the SAS – travelled through the Libyan Desert with the LRDG and recorded the otherworldliness of the interior of the North African desert:

The night sky was an incredible blue/black and without trees and buildings you can see such an enormous expanse. The stars and the silence are marvellous. The different shapes of the mountains and jebels on the way to Kufra from Wadi Halfa were often weird, exciting the imagination and creating the urge to explore.... Rocks assume immense shapes, casting grotesque shadows, distances appear twice as long or twice as short.⁶²

Thus, in adjusting to covert military mobilities the soldiers engaged sensually and emotionally with the desert environment, and some of the LRDG grew to enjoy the demands of their particular posting. As Mather recalled, 'When I was first posted to the desert I thought it was awful: heat, flies, dust and discomfort but, surprisingly, I grew to enjoy it, particularly away from the coast road where most of the fighting took place. I liked learning the skills of navigation and of balancing a vehicle whilst driving across soft sand'. The task of driving could at times even serve to quell fear: 'All the usual uneasy feelings began to creep into the back of my mind. Supposing we are lost, and our petrol goes out – which it would after a few more miles; and then the wounded man – he won't be able to walk. But then fatigue came to the rescue. To concentrate on driving and watching the stars was enough, there was no room for hopes and fears'.⁶³ Diaries kept by LRDG soldiers certainly help narrate the embodied experience of covert warfare. However, this material and the experiences it records reveals how such narratives are unable to critique the ethics of military mobilities. They cannot be disentangled from or serve to disrupt the discourses of heroism through which they were produced. Such archival material reiterates the heroism of the LRDG, and thus does little to disrupt the narratives of covert military mobilities. Even in the direst of situations such narratives of heroism are recuperated as a battle against the desert environment.

Covert military mobilities

⁶² C. Mather, IWM MC/11/28/1.

⁶³ C. Mather, IWM MC/11/28/1.

It is indicative, then, that only one aspect of their LRDG's purpose, the raids behind enemy lines, or 'scraps', dominates the narratives of the LRDG, from the official war diary to the soldiers' personal journals. For example, when the existence of the LRDG was reported in the press to the British public it included an extract from an interview with one of the group's patrol commanders depicting an attack on an enemy airfield:

There were 30 odd German and Italian fighters and bombers and we set to work to destroy them methodically. We went round the 'drome in our vehicles in single file, each one of us pouring a hail of machine-gun bullets.... I wish you could have seen the scene. The whole airport was lit up by the blazing German and Italian aircraft.... Don't think the enemy remained idle while we were at work.... Some Italians climbed out of the tanks and for three minutes there was a glorious all-in scrap.⁶⁴

Bourke has commented that the LRDG took pride in their murderous affect and the group's war diary records – with an uncharacteristic tone of excitement for an official military record – detailed accounts of the combat undertaken by patrols.⁶⁵ However, the reality of covert mobilities was tinged with the fear of being captured, stranded, lost or injured behind enemy lines. Cresswell has highlighted the importance of considering the frictions that rub against smooth mobilities, and for the LRDG their journeys continually encountered such friction – from the sand choking and halting cars to their concealed mobilities being revealed by aerial reconnaissance or ground patrols.⁶⁶ Yet, instances of friction encountered by the LRDG do not undermine or challenge the heroism of these covert mobilities. Indeed, often such narratives only reinforce and reentrench heroism and naturalise certain landscapes as being spaces of violence and militarism.

For example, in Operation 2, from December 1940 to February 1941, the LRDG intended to 'extend the "nuisance value" of their action to areas further west' into Libya, and to enable the Free French in Chad to cooperate on raids against Libya, spreading propaganda about British successes and obtaining more geographical information on the area.⁶⁷ During the operation the LRDG patrols were attacked at Jebel Sherif in Libya by Italian air and ground forces. Most of them managed to retreat to safety, although two soldiers were killed, four were missing believed dead, three had been taken prisoner and four cars had been destroyed. In addition, four men,

⁶⁴ Bigio, *Against Impossible Odds*, IWM 02(41).345 [Long Range Desert Group]/5 K.75448.

⁶⁵ Bourke, *An Intimate History of Killing*, 210.

⁶⁶ Cresswell, *The politics of mobility*, 26.

⁶⁷ Wynter, *History of the LRDG*, 37.

Trooper R.J. Moore, Trooper Easton, Fitter A. Tighe and Guardsman Winchester, did not escape with the rest of the patrols. Their car was destroyed and they were stranded in enemy territory, hundreds of miles from their own lines and with limited supplies. Trekking to safety or being captured were their only options. As the LRDG War Diary recorded:

At about 1600 hours on 31 January these four men took refuge in the rocks above the spot on which Corporal Beech's and Trooper Moore's trucks had been destroyed. Enemy aircraft were about during daylight and after dark the men started to walk in the direction of Bishara....

Next day, 1 February they returned to Jebel Sherif to look for food and water. They found a one-gallon tin of water in the wreck of Corporal Beech's lorry, but not food, so they again started south.⁶⁸

The war diary then records in detail how, over eleven days, the men attempted to trek to safety, with severe injuries, encountering sandstorms, battling exhaustion with no food and only contaminated water. Eventually, on the 10th February, they were picked up by a French search party. Easton died soon after he had been rescued. The report of the event, recorded as 'Moore's March', stressed:

the fact that Moore was unquestionably the leader of the party and was game enough to be so in spite of a wounded foot with a splinter still in the flesh. Easton had a bullet wound in the throat and had suffered terribly from it. Before he died his body was so withered up the Doctor who did all he could with the means available, could hardly extract a drop of blood from his body. Winchester had become almost insane. Tighe thought he had been alone and without water for nearly four days and was a nervous wreck.⁶⁹

This was an horrific ordeal, but one that is recorded in the LRDG war diary as an act of heroism. The individuals are praised and their story became emblematic of the courage of the LRDG.

Such narratives as that of the trek the group named 'Moore's March' leave no space for the methods of military violence that led to the experience to be questioned or critiqued. While a mobilities research approach certainly allows for the embodied experiences of covert military warfare to be narrated, the scope of inquiries need to be extended to examine the processes of

⁶⁸ History of the LRDG, NA CAB 44/151/10.

⁶⁹ History of the LRDG, NA CAB 44/151/10.

adaptation of bodies to technologies and to the environment, in this case the adaption of the motor car to the desert and the LRDG soldiers to their desert-worthy vehicles and their battlefield. It is by exploring covert military mobilities as a more-than-human assemblage of technologies, geographies and experiences that prevailing discourses of heroism in conflict and just methods of warfare can be disrupted and their consequences can begin to be traced. Historical geographies that attend to military mobilities need to contextualise and historicise military technology and violence, but, more importantly, they also need to scrutinise the processes that legitimise and naturalise specific modes of warfare.

Conclusion

The consequences of the LRDG operations in the deserts of the Middle East during the Second World War deserve attention. By the end of the North African campaign in 1943, the LRDG had received praise from Wavell, Field Marshall Montgomery and Prime Minister Winston Churchill. Wavell wrote:

They have protected Egypt and the Sudan from any possibility of raids, and have caused the enemy, in lively apprehension of the activities, to tie up considerable forces in the defence of distant outposts. Their journeys across vast regions of unexplored desert have entailed the crossing of physical obstacles and the endurance of extreme summer temperatures, both of which would, a year ago, have been deemed impossible. Their exploits have been achieved only by careful organization, and a very high standard of enterprise, discipline, mechanical maintenance and desert navigation.⁷⁰

The group were then transferred to the eastern Mediterranean, carrying out operations in Italy, the Greek Islands and the Balkans before being disbanded in 1945.⁷¹ Their history and contribution to the Second World War is displayed in the Imperial War Museum's permanent exhibition *Secret War* alongside the British military's use of espionage, deception and special forces, contributing to a thrilling narrative of action that takes place on the edges of conventional warfare in liminal spaces of conflict.

⁷⁰ General Wavell's official despatch of October 1941, cited in Kenn, Ralph Alger Bagnold, 63.

⁷¹ Lloyd Owen, *The Long Range Desert Group*.

From the moment of inception to the point at which the existence of the LRDG became publically known their history has been carefully crafted and edited. One account of their actions produced during the Second World War described how '[c]omplete secrecy has shrouded their activities for many months and until today Middle East Headquarters had maintained strict silence upon them. Even now I cannot tell the full story of their exploits'.⁷² To this day, the history of the LRDG remains somewhat obscured and concealed. They are remembered as rogue voyagers and gallant warriors, yet this does not tell the whole story. Adey has explained that 'while things are occurring, as the world is always changing and continually made anew, we and things become embedded within these processes and are subjected to them'.⁷³ The prevailing narrative of the LRDG focuses on the ingenuity of Bagnold and the capacity for endurance and bravery of the LRDG soldiers. But, by focusing on the motor car, the processes of adaption and innovation, and the experiences of desert driving which facilitated covert military mobilities in the Second World War, a richer narrative is explored. This is one that disrupts narratives of heroism and reveals how and why they were constructed as a process of practical and ethical legitimisation for the adoption of covert warfare in the desert. It is worth, therefore, considering the character and nature of the processes of covert military mobilities in order to begin to trace their consequences.

LRDG patrols and attacks were often coordinated to take place at the same time behind enemy lines hundreds of miles apart, thus creating the sense that the British military were everywhere and yet nowhere, and producing an atmosphere of fear and terror. This use of covert mobilities in the Second World War to undertake operations in the liminal spaces of conflict has been one of the processes that has expanded the boundaries of the battlefield and blurred the ethics of warfare. What the historical geography of the LRDG reveals is that novel military mobilities were innovated through the entangling of technology and geography, which, in turn, helped to naturalise the processes through which covert warfare was introduced, implemented and legitimised in the desert during the Second World War. Images of heroism in warfare – which seemed distant in the industrialised conflict of the twentieth century – were marshalled through the figure of the pirate and situated in an established British geographical imaginary of the Middle Eastern desert as a violent landscape, which further served to shape the character of the LRDG and justify its presence and actions in the Desert War. There are parallels and continuities here with today's conflicts. The War on Terror is understood as being at once everywhere and

⁷² Bigio, *Against Impossible Odds*, IWM 02(41).345 K.75448 no date.

⁷³ P. Adey, *If mobility is everything this it's nothing: towards a relations politics of (im)mobilities*, *Mobilities* 1 (2006) 85.

nowhere due to the use of military and political technologies of drones, black spots, ghost flights and extraordinary rendition. However, this spatiality of conflict did not just appear fully formed and solely in response to a post 9/11 world. Its processes and methods have longer histories and geographies of which the LRDG is but one part.⁷⁴

Further, the history of covert military mobilities and the LRDG also serves to highlight how the shift from the conventional battlefield to a more fluid and ambiguous battlespace is always highly situated and the consequences inherently geographical. The LRDG was formed in response to the demands of the North African battlefield and the soldiers adapted to the demands of covert desert mobilities. They in turn further contributed to a longer cultural imaginary in the West of the Middle Eastern desert as a topography of deception, making it an ever more unsettling battlefield as the Italian and German forces realised that they were required to stay alert even in seemingly safe areas. Thus, the historical geography of the LRDG reveals how military violence becomes naturalised through processes that legitimise innovations and adaptations justified by the geography of the battlefield. Further, it also reveals how nature becomes militarised as particular landscapes, such as the Middle Eastern desert, are repeatedly presented through histories of military interventions as being spaces and environments that are violent and require violence to be controlled.

Overall, this paper has traced the mobilities that informed the character of the LRDG, examining how covert activities help us think about the mobilisation of specific imageries of war, and the ways in which specific environments and their materialities lead to the transformation of technologies and embodied practices of warfare. The LRDG's history is a spatial story of the motor car in the making and remaking, exposing the ways in which the desert environment altered and justified covert methods of violence, and soldiers adapted to technologies and terrains in order to survive and thrive in their posting. Employing a mobilities focus has provided a route into exposing the processes that legitimised covert methods of warfare. However, it has also highlighted that attending to these narratives can work to conceal and obscure the unsettling consequences of covert violence on the ethics of warfare.

The paper has, therefore, uncovered how technologies, geographies and discourses informed one another in producing a new form of covert warfare in the Second World War where the lines of battle increasingly blurred, merged and bled. This has had lasting consequences on the desert and warfare. Mobilities are an array of entangled elements, from physical terrain, technology, political

⁷⁴ S. Reid-Henry, Exceptional sovereignty? Guantánamo Bay and the re-colonial Present, *Antipode* 39 (2007) 627-648.

imperatives and cultural imaginaries, and these ‘entanglements have broadly traceable histories and geographies’.⁷⁵ In regards to military mobilities their histories and geographies in particular require scrutiny because these entanglements are constructed, maintained and fought for in an effort to execute more effective warfare and greater expressions of power. By focusing on the LRDG and the emergence of covert desert warfare this paper has highlighted that to naturalise military mobilities is to deny their histories and geographies and to accept the ‘inevitability’ of their consequences. This, in turn, denies that warfare is continually ongoing and transforming, and, therefore, it avoids our own accountability for the various acts of military violence which are carried out in the name of safety and security through military mobilities that are being constructed and legitimised today.

⁷⁵ Cresswell, *The politics of mobility*, 18.