On the Wire:

The Strategic and Tactical Role of Cable and Wireless during the Second World War

Submitted by Benjamin David Oldcorn, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Geography, September 2013.

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

……

Terror the Human Form Divine

And Secrecy, the Human Dress

(William Blake, A Divine Image, Songs of Innocence)

Abstract

This thesis engages with the intersection between the British state and corporations, governmentality, conflict and corporate power and historical geographies of networked communications during the Second World War

From its formation in 1928 to nationalisation in 1946, Cable and Wireless were the overseas communications service for the British Government. Throughout the 1930s, intersecting sociopolitical networks were fostered between senior members of Head Office staff and representatives of various government departments – from the Cabinet, the Foreign Office and the intelligence services. Through these networks, an ostensibly private communications company was drawn into a close relationship with the British state that blurred the boundary between government and business. By utilizing the archival holdings of the Company, held at the Porthcurno Telegraph Museum, Cornwall, Cable and Wireless' war work will be detailed by examining three discrete but interrelated aspects. Theses are: first, overseas mobilization; second, domestic mobilization; and, finally, the mobilization of the body – of individual members of staff.

In this thesis Cable and Wireless is configured as an institution in the Foucauldian sense and an examination of the exercise of governmental power follows. The physical network of Cable and Wireless is then configured as the conduit through which this power was exercised and disseminated.

The central methodological contribution that this thesis makes is to discourses surrounding the notion of secrecy: how this is created and maintained, and how it shatters space into regions of knowledge and ignorance. Secrecy in this context also serves to empower some and dominate others.

The final aspect of the research is to define and explore an alternative narrative to the Second World War: the central role that a private communications company played in furnishing the British Government with intelligence – of both a strategic and tactical nature – that was gleaned from the overseas network.

Table of Figures

Dramatis Personae

In the Company

Sir John Pender	(1816-1898) Founder of the parent companies *Falmouth, Malta, Gibraltar* and the *British Indian Submarine Telegraph Company* in the 1860s.
John Denison-Pender	(1882-1949) Son of John Pender; in 1925 he was appointed Vice-Chairman and Joint Managing Director of Cable and Wireless Ltd and Governor of Cable and Wireless Holdings 1925-1940.
Sir Edward Wilshaw	(1879-1968) General Manager and Secretary of Cable and Wireless in 1929, appointed Chief General Manager in 1933, a Director and Joint Managing Director in 1935, and Chairman and sole Managing Director in 1936.

In the British Government

Intelligence Services

Sir Hugh Sinclair	(1873-1939) Nicknamed "Quex", a British Intelligence Officer. Between 1919 and 1921 he was Director of British Naval Intelligence and helped to set up the Secret Intelligence Service (SIS/MI6).
Sir Stewart Menzies	(1890-1968) Appointed Chief of SIS in 1939. He expanded intelligence and counterintelligence departments and supervised code-breaking efforts at Bletchley Park.
[redacted]	(Name has been redacted). Liaison between SIS, Bletchley Park and Cable and Wireless; arranged for bulk copies of telegraph slip to be drawn off from key stations in the network to be forwarded to London for scrutiny.

Glossary of Terms and Abbreviations

AFHQ	Allied Force Head Quarters
Blue Train	The RAF name for the mobile wireless station used to direct front line activities – air strikes on enemy positions etc.
GC&CS	See GCHQ.
GCHQ	Government Communications Head Quarters, formerly known as the Government Code and Cipher School (GC&CS). Responsible for providing signals intelligence to the British Government and Armed force; formed in 1919 and known as GC&CS until 1946.
HUMINT	Human Intelligence
MI5	Military Intelligence, Section 5: also known as the Security Service: United Kingdom's internal counter-intelligence and security agency, founded in 1909.
MI6/SIS	Military Intelligence, Section 6: supplies the British Government with foreign intelligence. Formalized in 1914.
SIGINT	Signals Intelligence
TELCOM	Abbreviation of the word Telecommunications: the mobile wireless outfit of Cable and Wireless deployed to the front lines.
Slip	The raw output of telegraph equipment via a direct printer; prints onto a slip of paper one character in height and in Latin script, not Morse.

Anatomy of a Telegram

Within this thesis, telegraph messages, and the Cable and Wireless Service Code that was used to send the telegraphic messages is presented. On each occasion that the Cable and Wireless Service Coded telegram appears, a translation is included in the text.

This is an example of a telegraphic message that has been turned into Cable and Wireless Service Code by the telegraph operative to be sent across the cable network to the receiving station:

HO763 RIO ORD 1 A BUNKER/AO MD 15 URGENT = Z/IC 25062 STOP 31012 25062 16558 TM/H B/FED 1938 04815 05833 12646/S 15063/S+

The elements of this raw telegram are as follows:

HO763 RIO ORD 1 This element of the telegram details the destination (Head Office HO) and the circuit along which it was transmitted: in this case Rio 1.

A BUNKER/AO MD 15 Describes the sender of the message (Mr. Bunker) and the addressee (Managing Director).

URGENT = Z/IC The priority of the message and its reference number. Cable and Wireless utilized a shorthand to describe dates and times: letters correspond to the day of the month separated by the time of day by a /.

25062 STOP 31012 25062 16558 TM/H B/FED 1938 04815 05833 12646/S 15063/S

The body of the telegram is transmitted in Cable and Wireless Service Code

+ Indicates the end of the message.

This translates into the plain text of:

> HEAD OFFICE SECRET RIO 1 BUNKER ASCENSION OFFICE TO MANAGING DIRECTOR HEAD OFFICE URGENT Z/IC SECRET STOP YOUR SECRET LETTER EM/H B/FEB 1938 CENSORSHIP COMMENCED GOVENOR'S INSTRUCTIONS +

1. Introduction

In times of crisis, they were invaluable tools of diplomacy. And in times of war, communications were security itself.[1]

Victory in warfare is dependent on the scale of resources that can be mobilised.[2] Ollerenshaw notes that, in the analysis of the war in Europe between 1939 and 1945, the question of industrial mobilization is fundamental, but remains imperfectly understood.[3] In analyzing wartime industrial mobilization it is necessary to consider large firms, atypical but not always the most visible to governments and historians.[4] This thesis examines the mobilization of the communications industry in the United Kingdom before and during the Second World War.

The British submarine cable network is configured as a strategic technology that conferred a distinct advantage to the Allied forces. Theoretically the archival material is framed in terms of space, distance and the network in an examination of power and the relationship between government and private commercial enterprise. The central methodological contribution that this research makes is to historical geographies of secrecy: how secrecy is created, enforced and maintained, generating spaces of knowledge and ignorance, empowering some and dominating others.

I engage with military geographies and the material and discursive systems that they created during the Second World War between the British Government and a fundamentally private communications company. Woodward defines military geographies as the geographies that are both constituted and expressed by military activities and militarism.[5] Paul Virilio maintained that all geography is military geography – his point being one about the pervasiveness of militarism and

---

[1] Yang, D Telecommunication and the Japanese Empire: a Preliminary Analysis of Telegraphic Traffic *Historical Social Research* Vol. 35 No. 1 (2010) pp.66-89: 66

[2] Broadberry, S Howlett, P Blood, Sweat and Tears: British Mobilisation for World War II in Chickering, R (eds.), *A World at Total War: Global Conflict and the Politics of Destruction, 1939-1945,* (2010) Cambridge University Press: 2

[3] Ollerenshaw, P War, Industrial Mobilisation and Society in Northern Ireland, 1939-1945 *Contemporary European History* Volume 16 Issue (2007) pp.169-197

[4] Ollerenshaw, P War, Industrial Mobilisation and Society: 182

[5] Woodward, R From Military Geography to militarism's geographies: disciplinary engagements with the geographies of militarism and military activities *Progress in Human Geography* Vol. 29 No. 6 (2005) pp. 718-740: 720

military activities in shaping all geographies.[6] According to Woodward, a critical military geography should not just describe the outcomes of military power and control, but needs also to explain the origins of that control and the mechanisms by which it operates.[7] She suggests one avenue for research is that which takes the small, the unremarkable, the commonplace things that military activities make and do, and traces the networks and connections between them; it is often in the seemingly prosaic things, the things that lurk at the edge of the big picture, which can tell us much about how systems (be they material or discursive or both) operate. Things that seem mundane are often protected by their ordinariness from critical gaze: the most interesting stories lie in the connections between many seemingly small things that build a bigger picture, revealing networks.[8]

This thesis therefore examines a hitherto unexplored aspect to the historical military geographies of the Second World War: the role of communications. To date, there has been limited sustained scholarly attention afforded to the way in which the British Government conducted the war through the lines of communications, which were maintained by a private company. This thesis, therefore informs our understanding of the Second World War, and in particular the strategic and tactical roles that communications played in the way that the British Government orchestrated its wartime operations – from directing forces, communicating with foreign governments and utilising the network to gather and disseminate intelligence.

An emerging trend in historical geography is the study of the twentieth century from a geographical perspective.[9] Theoretically, this thesis draws from archival studies, business history and geopolitics working within an interdisciplinary manner.[10] In reviewing the literature for this thesis a number of gaps emerged within not only the geographic corpus, but also within the broader academic debates; primarily this gap is comprised of the role of communications during

---

[6] See Virilio, P *Bunker Archaeology*; *Speed and Politics*; *The Information Bomb* Verso Books (2009, 2006, 2005)
[7] Woodward, R From Military Geography: 731
[8] Woodward, R From Military Geography: 731
[9] Recent examples include Wilson, RJ 'Tommifying' the Western Front, 1914-1918 and Toogood, M Modern Observations: new ornithology and the science of ourselves, 1920-40 in *Journal of Historical Geography* Vol. 36, No. 3 (2010) pp.243-366
[10] This is an approach used within histories of communication, For example see Downey, G Telegraph Messenger Boys: 137

wartime. Historical geographers are beginning to engage with the Second World War as a context and object of study, however this is an emerging area of work. Indeed, it is pertinent to draw on Farish's observation of the omission of geographical research around 1st World War, given that the war was fundamentally a conflict over space;[11] this is equally true of the Second World War. However, as I show in this thesis, along with space, time could also bestow a critical strategic advantage, through the development of faster communications.

Considering the trends and elisions in the extant literature, this thesis is formed around the following research questions:

1. What was the wartime role of Cable and Wireless in the UK and overseas?
2. How were distant cable stations mobilized in the war effort?
3. What was the Company's participation in secret activities, code breaking and intelligence?
4. How does the Company's wartime activity in censorship, cable scrutiny and radio interception help us to understand the relationship between private commercial enterprise and operations of government?
5. What can we learn about the place of global telecommunications in the strategic and tactical issues that emerged in wartime using the case study of Cable and Wireless?

These research questions are targeted to answer the specificities of the role of Cable and Wireless during the Second World War. Also addressed is the broader question of the mobilization of industry in total war. Where there has been some geographical enquiry on this subject[12], no sustained attention has been afforded to the mobilization of the communications industry. This will be explored through the wartime work of Cable and Wireless, and the relationship between the Company and British State.

[11] Farish, M Modern Witness: Foreign Correspondents, Geopolitical Vision and the First World War *Transactions of the Institute of British Geographers* Vol. 26, No. 3 (2001) pp.273-278: 274

[12] Reimer, S and Pinch, P Geographies of the British government's wartime Utility furniture scheme, 1940-45 *Journal of Historical Geography* Vol. 39 (2013) pp.99-112 and Harvey, D and Riley, M 'Fighting from the fields': developing the British 'National Farm' in the Second World War *Journal of Historical Geography* Vol. 35 (2009) pp.495-516

Two central themes can be found in the title of this thesis: *strategic* and *tactical*. The former is defined as being in relation to the identification of long-term or overall aims and interests and the means of achieving them; and the latter as in, or relation to tactics; relating to military operations or more local than strategic operations. In other words, the strategic role(s) of the Company refer to the broader, long-term work undertaken by Cable and Wireless in the years preceding and during the Second World War, whereas the tactical role(s) refer to the short term, local work undertaken. For example, strategically the whole overseas network of the Company was mobilized in the pursuance of the war in the interception of communications for the intelligence services, whereas tactically, individuals, or specific places were mobilized for particular, short-term tasks.

Structure and Themes

The thesis contains three introductory chapters that contextualize debates, approaches and the context of Cable and Wireless, followed by six empirical chapters, each examining a different, but related, aspect to the strategic and tactical roles of Cable and Wireless during the Second World War. The central themes of the empirical chapters are overseas and domestic mobilization, and the mobilization of the individual; these will be outlined in the following section, before a review of the literature and the methodological approaches utilized in the research.

Chapter two provides the theoretical and contextual foundations to this research. This is primarily composed of a discussion of the historical geographies of communications, which paves the way to examine how the notions of space, distance and the network are used to provide theoretical leverage over the archival material. There then follows a review of the current literature that covers the historic relationships between the British State and private business, focusing on the East India and Royal Niger Companies. Geopolitics is discussed because it is within the geopolitical framework of the Second World War that this thesis is centered: geopolitical discourses can be seen to drive events in the archive. Finally, this chapter examines the Foucauldian notion of power, and how governmental power was exercised through the networks – both physical and sociopolitical – of Cable and Wireless.

Chapter three provides the methodological framework to the empirical research that follows. This is achieved through introducing the archival holdings utilized in the research, and discussing the *methodologies* of archival practices. Developing this theme further, this chapter also examines the archives of the intelligence services and documents pertaining to them. Owing to the 'secret' nature of much of Cable and Wireless' war work, and the documents created from it, a discussion of the methodology and practices of secrecy follows. This chapter is concluded by an examination of oral histories, particularly the use of third party oral history transcripts that were utilized in this research.

The final introductory chapter, four, is wholly contextual, providing an account drawn from archival material that examines the origins of Cable and Wireless. It is intended that this chapter provide the reader with the context within which the following empirical material can be framed. The main purpose of this chapter is to begin to reveal the sociopolitical relationships that existed between the parent companies of Cable and Wireless and the British Government in the years before the merger, and how the relationship between state and company was effectively enshrined in the formation of the Company.

Chapters five and six address two key points. First, they examine the ways in which overseas cable stations were mobilized in the broader war effort, by focusing on four overseas branches that exhibit qualities of the mobilization of the network as a whole; this includes the potential scrutiny and censorship of every message that passed across the network, the arrangement of local defence forces at the station, and the utilization of Cable and Wireless personnel and equipment to intercept enemy and neutral communications. The following stations were selected for these chapters because they represent microcosms of this wartime activity - Aden, Ascension Island, Malta and Mombasa. In these chapters the notion of secrecy issues first emerge; I also explore the historical relationship between the Company and the Intelligence Services.

Chapter seven details how the status of Cable and Wireless overseas staff on the front line changed during the war; from being civilian noncombatants with no status in the theatre of war, to a uniformed organization where operators were given military ranks relative to their seniority in the Company. This dramatic shift in status took place for a range of practical and military reasons. Initially, Cable

and Wireless employees operating in theatres of war were not subject to the control of the Commander-in-Chief of the theatre in which they were serving, nor did they have the benefit of any Service organization: in other words, no authority was responsible to providing them with accommodation, rations, clothing or transport. Of prime importance, however, was the fact that Company personnel could not be sent forward into areas where they would be liable to capture – the front lines – because if caught they would be treated by the enemy as spies as they were without uniform or rank, the punishment for which was the firing squad. To obviate these problems Cable and Wireless, in concert with the British Government, formed the Telcom Organisation in 1944, the charter for which addressed the above points and, perhaps most vitally, afforded Cable and Wireless employees on the front line the protection of the Hague and Geneva Conventions. This chapter details the origins, formation and deployment of Telcom units, through the archival material of the company and oral histories of the men and women who served in uniform for Cable and Wireless.

Chapter eight explores the role Cable and Wireless played in diplomacy during the Second World War, in particular their involvement with the 'Portuguese Islands Expedition', the proposed seizure of the Azores and Cape Verde Islands from Portugal by the British Government, utilizing company employees in Royal Marine uniforms to seize and run the island communications. This chapter uses the most explicitly secret of all the archival material including confidential, hand-written documents and filed correspondence kept throughout the planning and execution phases of the expedition. Chapter eight also examines the way in which current and former Cable and Wireless employees were seconded to the Secret Intelligence Service and provided with cover by the Company to travel to the islands with the intention of surveying beaches for landings and reporting on the general conditions. By examining Cable and Wireless' involvement in the Portuguese Islands Expedition, it is possible to demonstrate the way in which, throughout the Second World War, the status of the Company shifted from that of a communications company, to extension of the security apparatus of the state.

Chapters nine and ten examine the mobilization of Cable and Wireless domestically, as a counterpoint to the preceding chapters that examine the work of the company overseas. To do this, two facets of Cable and Wireless in the United

Kingdom are examined. First, the mobilization and defence of a domestic station – in this instance the Porthcurno Branch – charting the inactivity at the outbreak of war to the construction of the hardened underground tunnels. Second, the internal and external narratives of war created and disseminated by the Company throughout the war. The external narratives will be drawn from the national press and will be subjected to Jones' analysis of wartime adverts, defining them by class and the purpose that they served.[13] The internal narratives of war will be drawn from the Company's in-house journal – the *Zodiac* – and are utilized to examine the ways in which the staff of the company were informed of the wartime roles of Cable and Wireless as the conflict progressed.

Taken collectively, it is intended that these six empirical chapters explore the strategic and tactical roles of the company during the Second World War. It will be demonstrated that Cable and Wireless acted as not only a communications business, but also as an extension of the government during the war. These chapters will also contribute to the emerging field, identified by Headrick,[14] concerning the telegraph during the Second World War, and examine Cable and Wireless as a business and its relationship with the state and the military. Centrally, however, these chapters will also begin to explore the broader research interests – to examine the mobilization of the communications industry in a total war.

[13] Jones, JB *All-Out for Victory! Magazine advertising and the World War II Home Front* (2009) Brandeis University Press

[14] Headrick, D Submarine Telegraph Cables: Business and Politics 1838-1939 *The Business History Review* Vol. 75 No. 3 (2001) pp.543-578

2. Literature Review

There is an Ariadne's thread that would allow us to pass with continuity from the local to the global…[15]

The Ariadne's thread that runs throughout this thesis is the telegraph line. Following Latour, Cable and Wireless' literal and metaphorical networks allow us to pass from government to private business and from communications industry to the intelligence services. Geographically, the Cable and Wireless networks allow us to travel from London to Ascension, Mombasa, Aden and Fayal over the years leading up to and including the Second World War. The overall approach utilized is interdisciplinary, but located within the sub-discipline of historical geography. To this discipline it contributes in a number of emerging fields, in particular the Second World War and the role of communications – conceived as a strategic technology – in wartime. This chapter will provide the foundations onto which the empirical archival material can be built; a close reading and examination of the central theoretical considerations that have emerged during the research, and are persistent throughout the thesis follows. Broadly these are 1) space, distance and networks and 2) power and the relationship between government and private enterprise.

Lester charts the evolution of historical geography from being a relatively discrete sub-discipline, with its own contested epistemology and methodology, to an interdisciplinary enterprise over the last two decades.[16] He notes that historical geography has merged to a great extent with other branches of geography, as well as intersecting in various ways with work being conducted under the remit of other disciplines in the social sciences and humanities. Lester identifies a distinct shift towards the dissolution of traditional sub-disciplinary and disciplinary boundaries; this is not simply the result of historical geographers increasingly engaging with epistemologies and methodologies of other disciplinary fields. It is also partly the result of the spatial turn in the social sciences and humanities as a whole, which has seen scholars who claim different disciplinary affiliations moving

[15] Latour, B *We have never been modern* Harvard University Press (1993): 121
[16] Lester, A Introduction: Historical Geographies of Southern Africa *Journal of Southern African Studies* Vol. 29 No. 3 (2003) pp.595-613: 595

into the traditional 'terrain' of historical geography.[17] Given the nature of historical geography and its location at multiple interfaces, any attempt to render a simple or concise definition of the discipline would be difficult; a more practical approach would be to identify a number of related forms of enquiry, which could be considered both historical and geographical in their orientation. Lester provides a summary of these related forms of enquiry:

> …Investigating the associations among and between space, place, landscape, territory, identity and memory; examining the ways that places and their histories have been constituted through their real and imagined connections with other places; identifying and critiquing historic discourses of particular landscapes; interrogating the representations and meanings of nature and environment; analysing the construction and effects of certain geographical imaginations; investigating the practices and consequences of mobility at a variety of scales; analysing the symbolic and material effects of cartography, and finally, and perhaps most conventionally for historical geographers, explaining and assessing the implications of the distribution of natural, material, cultural and political resources across space.[18]

Central to historical geography and to this research is the notion of space and the way in which people, resources and information flow and interact within space. Another central concept is that of place and places: wherever they are located on a map, they are not so much singular points as constellations – the product of all sorts of relations, which cut across particular locations in a multiplicity of ways. Through examining both people and places from a geographical and a historical perspective we can begin to understand the bundle of interconnections that connect people to place.[19]

Historical geography is a hybrid discipline that has only recently begun engaging with the twentieth century, the Second World War and historical geopolitics. Recent examples include Reimer and Pinch's 2013 examination of the geographies of the British government's wartime Utility Furniture Scheme, which focused on the relationship between the British government and the furniture industry of the United Kingdom, and the control various offices of state exerted over the whole manufacturing process – from the sourcing of raw materials to the fixing of the

[17] Lester, A Introduction: 595
[18] Lester, A Introduction: 596
[19] Lester, A Introduction: 605

prices at point of sale.[20] This paper is of relevance because it demonstrates the role of the state in industry during wartime, and state intervention into areas of everyday life that became of strategic significance to the war effort. Harvey and Riley have examined a similar theme – the creation of the British 'National Farm' during the War – through the use of archival material and oral histories,[21] an approach that will be utilized in this research. This is also not simply a British phenomena; Mitchell has written on the agriculture of the United States and imported Mexican labour,[22] while Barnes has examined the work of geographers in the Office of Strategic Services in the years 1941-1945.[23]

While writing about the First World War, Heffernan notes that the war revealed, more clearly than ever before, the awesome destructive capacity of modern technology.[24] This was the dark side of the machine age; an era of feverish industrial production devoted almost exclusively to devastation and death: from the crisis of 1914 was forged a new and more intimate relationship between science, the state and the military.[25] This thesis continues the work of Heffernan by examining the relationships between the communications industry and the state in the pursuance of war in the machine age. Heffernan has continued examining the engagement with geography, the First World War and modernity, covering intelligence[26] and, along with O'Hara, geo-strategy and imperialism.[27]

---

[20] The Utility Furniture Scheme was the government response to prioritizing imports in favour of food; as a result foreign furniture was unavailable and domestic manufacture had to be increased. The result was a new school in furniture design that was functional and designed, manufactured etc. in the United Kingdom using British timber. Reimer, S and Pinch, P Geographies of the British government's wartime Utility furniture scheme, 1940-45 *Journal of Historical Geography* Vol. 39 (2013) pp.99-112

[21] Harvey, D and Riley, M 'Fighting from the fields': developing the British 'National Farm' in the Second World War *Journal of Historical Geography* Vol. 35 (2009) pp.495-516

[22] Mitchell, D Battle/fields: braceros, agribusiness, and the violent reproduction of the California agricultural landscape during World War II *Journal of Historical Geography* Vol. 36 (2010) pp.143-156

[23] Barnes, T Geographical intelligence: American geographers and research and analysis in the Office of Strategic Services 1941-1945 *Journal of Historical Geography* Vol. 32 (2006) pp.149-168

[24] Heffernan, M Geography, Cartography and Military Intelligence: the Royal Geographical Society and the First World *War Transactions of the Institute of British Geographers*, New Series, Vol. 21 No. 3 (1996) pp.504-533: 504-5

[25] Heffernan, M Geography, Cartography and Military Intelligence: 505

[26] Heffernan, M Professor Penck's Bluff: Geography, Espionage and Hysteria in World War I *Scottish Geographical Journal* Vol.116 No.4 (2000) pp.267-282

[27] O'Hara, S and Heffernan, M From Geo-Strategy to Geo-Economics: the 'Heartland' and British Imperialism Before and After MacKinder *Geopolitics* Vol. 11 (2006) pp.54-73

Lester's work on colonial networks and relations and has expanded into the twentieth century in his examination (with Hyson) of British military hospitals for Indian soldiers during the First World War.[28] As Lester notes, the concept of the network as a theoretical tool for deeper and more systematic considerations of the range and scope of connections that once bound the constituent parts of the British Empire has been widely deployed in recent literature.[29] O'Hara has joined Lester in his examination of the multifaceted connections that made and reinforced colonial links, by focusing on the development and dispersal of the British telegraph network.[30] What is worth noting at this point, however, is that the work on the development, effects and application of the telegraph has taken place outside the school of historical geography: this work has been undertaken by historians with a diverse range of interests, from business to technology and science.

Communication and Connections: space, distances and networks

When specifically considering the literature on submarine telegraphy, it is Headrick who highlights a key gap in the field when he notes that the work undertaken on telegraphy and international communications before the Second World War is surprisingly small and literature concerning communications *during* the Second World War is non-existent.[31] Further examples include Yang's work on telecommunication within the Japanese Empire[32], Calkin's work on the BBC as an intelligence agency between the years 1939-1948[33] and Aldrich's work on the interception of communications in Asia during the Second World War;[34] all begin to address the lacuna Headrick identified.

One notable exception is Peter Hugill's explicitly geographical examination of global communications since 1844, in which he argues that the ability to control the movement of information across space is one crucial aspect of geopolitical

---

[28] Hyson, S and Lester, A 'British India on trial': Brighton Military Hospitals and the politics of empire in World War I *Journal of Historical Geography* Vol. 38 (2012) pp.18-34
[29] Hyson, S and Lester, A 'British India on trial': 19
[30] O'Hara, G New Histories of British Imperial Communication and the Networked World of the 19th and Early 20th Centuries *History Compass* Vol. 8 No. 7 (2010) pp.609-625
[31] Headrick, D Submarine Telegraph Cables*:* 544
[32] Yang, D Telecommunication and the Japanese Empire
[33] Calkins, L Patrolling the Ether: US-UK Open Source Intelligence Cooperation and the BBC's Emergence as an Intelligence Agency, 1939-1948 *Intelligence and National Security* Vol. 26 No. 1 (2011) pp.1-22
[34] Aldrich, R Britain's Secret Intelligence Service in Asia during the Second World War *Modern Asian Studies,* Vol. 32 No. 1 (1998) pp. 179-217

dominance. [35] *Global* Communication examines the ties between various telecommunications technologies and global geopolitical relationships at different historical junctures, an approach pursued in this research, focusing submarine cable network at the defining twentieth century juncture of the Second World War. Steinberg observes that Hugill's story is a tale of one set of actors (governments), one scale (geopolitical competition) one context (intercore rivalry for hegemonic domination), and – to a large extent – one geographical sphere (the North Atlantic). Individual inventors and firms, and the competition among these inventors and firms are discussed, but only as actors in what is primarily a geopolitical drama.[36]

Global Communications covers a number of broad themes, including geopolitical theories, the British hegemony of communications, and electronic technologies. The empirical chapters broadly cover the specifics of the world communications hegemony, centered in the United Kingdom until 1945, particularly the nineteenth century British submarine cable monopoly. Emphasis is placed here on the commercial and strategic importance of the cable network. The empirical chapters are bracketed by an examination of theoretical analysis that seeks to explain the power of states. Perhaps the most persistent theme within Hugill's analysis is the axiom that if information is power, whoever rules the world's telecommunications systems commands the world.[37] This is a theme that is developed further in this thesis.

Headrick observes that Hugill's account of the Second World War suffers from extreme technological determinism.[38] In the longest, and, Headrick argues, the most important chapter in the book, Hugill attributes Germany's defeat in the war almost entirely to the superiority of British radar and British communication, command, and control systems in the air war, with little mention of events elsewhere. The following chapters will be informed by Hugill's work, and will develop the theme of British domination of the international communications network.

---

[35] Hugill, P *Global Communications Since 1844: Geopolitics and Technology* Johns Hopkins University Press (1999)
[36] Steinberg, PE Book Reviews *Annals of the Association of American Geographers* Vol. 91 No.1 (2001) pp. 203-244: 219
[37] Hugill, P *Global Communications Since 1844*: 2
[38] Headrick, D Global Communications *The International History Review* Vol.22 No.1 (2000) pp.171-172: 172

Both Warf and Steinberg note that the major weakness of *Global Communications* is the theoretical approach utilized by Hugill, who they claim relies primarily on either the Canadian economist Harold Innis, or traditional geopolitical theoreticians such as Alfred Mahan and Halford Mackinder. The conceptual deficit is unfortunate given that critical geopolitics has flourished in geography, combining insights and literature from several disciplines in subtle and sophisticated ways.[39] Warf succinctly concludes that Hugill's work is a detailed and very useful summary of telecommunications, but it is framed in light of classical, but not contemporary, political geography.[40]

This thesis is located within this closing, but still substantial, gap in our understanding of the role of communications during the Second World War. It is informed by a number of theoretical considerations that this chapter will both introduce and discuss, with a view to providing the foundations onto which the archival material can be overlaid and analyzed. The following section examines the notions of space, distance and the network, surveying the terrain of the academic debate and drawing out the key arguments of relevance to the research.

A critical examination of space has been occurring within geography over the last twenty years.[41] Doreen Massey, in particular, has drawn attention to the variety of meanings attached to notions of space and the spatial. Massey argued in 1994 that geographers needed to pay closer attention to conceptions of 'space' and what was meant by 'spatial relations' arguing that although there were variety of meanings, these were seldom made the object of direct discussion, concealing debates, which never surfaced because everyone assumed the terms of commonly shared knowledge.[42] Massey's work over the last twenty years has made a significant contribution to the discussion surrounding the notion of space because her own view of space and spatiality can be taken as representative of – and an important influence on – what is now the dominant view of space and spatiality within geography and many related disciplines as relational. [43] Within much contemporary literature – in geography and beyond – space appears as a swirl of

[39] Warf, B Global Communications *The Professional Geographer* Vol.52 No.3 (2000) pp.567-590: 579 and Steinberg, PE: 219
[40] Warf, B Global Communications: 580
[41] Malpas, J Putting space in its place: 227
[42] Massey, D Space, Place and Gender *Polity Press* (1994): 250
[43] Malpas, J Putting space in its place: 228

flows, networks, and trajectories, as a chaotic ordering that locates and dislocates, and as an effect of social process that is itself spatially dispersed and distributed.[44] As Darling notes, the relational sense of space, which has come to dominate human geography over recent years, is predicated upon a political demand to move away from geography focused upon seeing space as a surface of dominant social inscription.[45]

Merriman notes that earlier traditions of geographical and philosophical thought have sought to prioritize either space or time and denigrate the opposing term, whereas Massey and Thrift have asserted the importance of holding them together, thinking instead of space-time.[46] Thrift has approached time and space as both locational and experiential, and thus multidimensional, he maintains that the essential unit of geography is not spatial, it lies in regions of time-space and in the relation of such units to the larger spatio-temporal configurations.[47] By Thrift's theorization, geography is the study of these configurations.[48]

According to Abrahamsson, geographical thought has historically seen space as something to be crossed, passed over, space as the land and the sea, a line of thought that understands the spatial as the surface of the earth; the notion of place, more often than not imagined as local place, has, he argues, come to have a totemic resonance in contemporary discourses.[49] Massey posits three propositions as to how space could be imagined differently; first, the recognition of space as the product of interrelations, as constituted through interactions. Second, an understanding of space as the sphere of the possibility of existence of multiplicity: the sphere in which distinct trajectories coexist. Finally, space needs to be recognized as always under construction, because space is a product of relations, from this it follows that space is never finished and never closed.[50]

---

[44] Malpas, J Putting space in its place: 228
[45] Darling, J Thinking Beyond Place: the Responsibilities of a Relational Spatial Politics *Geography Compass* Vol. 3 No. 5 (2009) pp.1938-1954: 1939
[46] Merriman, P Human Geography without time-space *Transactions of the Institute of British Geographers* Vol. 37 No. 1 (2011) pp.13-27: 13
[47] Thrift, N Time and theory in human geography part II *Progress in Human Geography* Vol. 1 (1977) pp.413-457: 447
[48] Thrift, N Time and theory: 447
[49] Abrahamsson, C cited in *For Space by Doreen Massey*: 83
[50] Massey, D *For Space* Sage (2005): 10-12

According to Foucault, the present epoch will perhaps be above all the epoch of space.[51] He goes on to state that we are in the epoch of simultaneity: the epoch of juxtaposition, of near and far, of the side-by-side, of the dispersed. Foucault argues we are at a moment when our experience of the world is less that of long life developing through time, than that of a network that connects points and intersects with its own skein.[52] In this rendering, we do not live in a kind of void that could be coloured with diverse shades of light: we live inside a set of relations that delineates sites, which are irreducible to one another and absolutely not superimposable on one another.[53]

Ettlinger defines the Foucauldian view of space as topological and non-Euclidean.[54] In this perspective space is understood not as a container of activity but rather in relational terms with reference to the connection of actors in any one place to dynamics across space:

> Contrary to the Euclidean understanding that a straight line connects any two points, space is understood as folded and relational.[55]

This view of space, according to Ettlinger, is integral to governmentaility and allows for governance at a distance.[56] Henrikson develops this theme further in his discussion of distance and foreign policy, stating that the broad horizons and far targets of governmental decision and action are usually not directly known by policy makers: distant places can only be, in a sense, constructed.[57] As a result, this has led to what Wark has called telesthesia – geographical perception at a distance.[58] This capacity for government and knowledge at a distance – and thus the exercise of power – will be examined in this thesis through the medium of the telegraph line. It is argued that Cable and Wireless enabled the British Government to govern and to exercise its power across space before and during the Second World War, and thus altered the very conduct of the state.

---

[51] Foucault, M Of Other Spaces *Diacritics* Vol. 16 No. 1 (1986) pp.22-27: 22
[52] Foucault, M Of Other Spaces: 22
[53] Foucault, M Of Other Spaces: 23
[54] Ettlinger, N Governmentality as Epistemology *Annals of the Association of American Geographers* Vol.101 No.3 (2011) pp.537-560: 574
[55] Ettlinger, N Governmentality as Epistemology: 574
[56] Ettlinger, N Governmentality as Epistemology: 574
[57] Henrikson, A Distance and Foreign Policy: a Political Geography Approach *International Political Science Review* Vol.23 No.4 (2002) pp.437-466: 438
[58] Wark, M *Virtual Geography: living with global media events* Bloomington (1994)

In his essay *Of Other Spaces*, Foucault introduces the notion of the heterotopia, which can be characterized as counter-sites that simultaneously represent, contest and invert all other places within society – by acting as a mirror to society.[59] In order to define the term more clearly, and to identify its value to the research, a closer examination of this notion of Foucauldian space is in order.

Foucault considered space as a form of relations among sites, in which imagination of space is the form of our imaginations, and thus not neutral or free.[60] Indeed:

> The space in which we live, in which the erosion of our lives, our time and our history occurs, the space that claws and gnaws at us, is also, in itself, a heterogeneous space. In other words, we do not live in a kind of void, inside of which we could place individuals and things…[61]

There are two types of space identified by Foucault; these are homogenous and heterogeneous. The first represents the relational world in which we live, interact and communicate, while the second is the space in which time and history occur. The latter space is always subjected to power that redefines and renegotiates this space.[62] To examine heterotopias, Foucault suggests that a sort of systemic description would, in a given society, take as its object the study, description and reading of these different spaces.[63]

Foucault proposes the heterotopia as a site that undoes the usual order of space: its meaning turns on the contrast with the idea of a utopia – an ideal place which has no actual location, which remains unrealized, imaginary.[64] Tonkiss states that, like a utopia, the heterotopia runs counter to a conventional spatial order, it puts in place countersites in which existing social and spatial arrangements are represented, contested and inverted.[65] Unlike the utopia, however, the figure of the heterotopia refers to real spaces: Heterotopias exist, but Foucault suggests that utopias (by definition) do not. If a utopia is in lexical terms a non-place, a heterotopia is an actual place of difference: literally an 'other place'.[66]

---

[59] Boedeltje F The Other Spaces of Europe: Seeing European Geopolitics Through the Disturbing Eye of Foucault's Heterotopias *Geopolitics* Vol. 17 No. 1 (2012) pp.1-24: 6
[60] Boedeltje F The Other Spaces of Europe: 6
[61] Foucault, M Of Other Spaces: 23
[62] Boedeltje F The Other Spaces of Europe: 6
[63] Foucault, M Of Other Spaces: 24
[64] Tonkiss, F Space, the City and Social Theory *Polity Press* (2005): 132
[65] Tonkiss, F Space and the City: 132
[66] Tonkiss, F Space and the City: 132

Boedeltje has taken the notion of the heterotopia and applied it to the geopolitics of the European Union; in doing so he has provided a number of key points that further help to define the meaning and application of the term. His first definition is that of the crisis heterotopia, which is a separate space that has been designed to host those who are, in relation to society, in a state of crisis; these spaces generally take place out of sight of society. His example is that of military service for young men, which takes place outside the home and manifests a certain stage of coming of age.[67] According to Foucault, these places have almost disappeared.[68] Heterotopias of deviation are places where individuals are held whose behavior is outside the norm of society; these include mental institutions, prisons and refugees camps. Heterotopias of time, such as museums, enclose in one place objects from all times and modes; while heterotopias of ritual or purification always presuppose a system of opening and closing that both isolates them and makes them penetrable – to get in one must have permission or apply to certain protocols.[69]

A heterotopia is capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible. Boedeltje suggests that a cinema is a heterotopia because it is a real place where on a two-dimensional screen the three-dimensional world is projected.[70] Heterotopias have two functions in relation to all of the remaining spaces. These are: first, heterotopia of illusion creates a space of illusion that exposes every real space, and second, the heterotopia of compensation is to create a real space – a space that is other.[71]

Teyssot suggests that there are six characteristics that define heterotopias: 1) though they assume a wide variety of forms, heterotopias are a constant feature of all cultures. 2) Over the course of its history, a society may take an existing heterotopia and make it function in a different way. 3) The heterotopia has the power of juxtaposing in a single real place different spaces and locations that are incompatible with each other. 4) Heterotopias are linked to time, entering fully into function when traditional time is breached (as in, for example, the cemetery, where the loss of life and the perception of eternity coincide). 5) One does not usually enter a heterotopia by one's own will (think of a prison), and as a visitor by

[67] Boedeltje F The Other Spaces of Europe: 7
[68] Foucault, M Of Other Spaces: 24
[69] Boedeltje F The Other Spaces of Europe: 7
[70] Boedeltje F The Other Spaces of Europe: 7
[71] Boedeltje F The Other Spaces of Europe: 7

force or permission, one must perform certain gestures only to be still excluded from its true heart. 6) Heterotopia perform the contradictory functions of revealing the illusory quality of all space and compensating for the illusion with a perfect, meticulous, and well-arranged real space.[72]

In *Of Other Spaces* Foucault describes the commercial cruise ship as a heterotopia *par excellence*[73]; Harvey takes exception to this, along with the general notion of the heterotopia, concluding that Foucault celebrates the heterotopia for the sake of heterotopia:

> The commercialized cruise ship is indeed a heterotopic site if ever there was one; and what is the critical, liberatory, and emancipatory point of that? Foucault's heterotopic excursion ends up being every bit as banal as Kant's *Geography* (which was complete with racist stereotypes). I am not surprised that he left the essay unpublished…[74]

Saldanha responds that Harvey is correct in asserting the Foucault did not like the essay, but he is willfully hasty in questioning the concept's politics so that he can attack Foucault's influence.[75] He goes on to state that there are two distinct meanings of heterotopia that can be seen to emerge in *Of Other Spaces*. First, heterotopia is a discordant space, or, according to Foucault, a space capable of juxtaposing in a single real place several spaces, several sites that are themselves incompatible: thus any space in which the elements do not add up to a logical whole can be called heterotopic. Saldanha suggests that two clear examples of this would by Main Street in Disneyland and the architecture of Las Vegas.[76]

The second meaning, Saldanha believes, is the one that Foucault accords more systematic attention to: heterotopia circumscribes subversive, visionary of sacred space by virtue of its special qualities, its absolute otherness, to keep a social formation stable, or, more often, forces it to evolve.[77] In other words, a place is heterotopic not simply because of internal heterogeneity, but because of its external difference from all the rest of a society's spaces.

---

[72] Teyssot, G Heterotopias and the History of Spaces in eds. Hays, *KM Architecture Theory Since 1968* MIT Press (2000): 296
[73] Foucault, M Of Other Spaces: 24
[74] Harvey, D Cosmopolitanism and the Banality of Geographical Evils *Public Culture* Vol. 12 No. 2 (2000) pp.529-564: 538
[75] Saldanha, A Heterotopia and structuralism *Environment and Planning A* Vol. 40 (2008) pp.2080-2096: 2083
[76] Saldanha, A Heterotopia and structuralism: 2083
[77] Saldanha, A Heterotopia and structuralism: 2083

Massey, while aiming primarily to address theories of space and place, offers a conceptualization of the local and global that is highly pertinent to theories of scale. She has repeatedly insisted that just as the local is grounded, concrete and real, so too is the global.[78] Massey builds her argument around a reconceptualization of the local, dispersed in its sources and repercussions. The local's relationship to the global is premised on a politics of connectivity – power geometries – that recognizes and exploits webs of relations and practices that construct places, but also connect them to other sites.[79] While it is true to say that the communications networks did a lot to annihilate space by time, there was not uniform access to the service, and not everyone's notion of relative distance was subverted by faster communication. In order for networks to annihilate distance, one first had to have access. As Castells notes, not everything or everyone is globalized, but the global networks that structure the planet affect everything and everyone.[80]

With space, distance and their associated theoretical entanglements defined as central to geographical enquiry, and international communications central to this research, an examination of the effect that faster communications had on both space and distance follows. When considering distance, Falk suggests that there are two key divisions: relative and absolute. Absolute distances have been defined as those that are essentially invariant over time – such as the number of miles separating two places. Relative distances have been referred to as those distances that do vary over time, such as the number of minutes needed to move between two places. Elapsed time can be decreased by speedier communications or increased by growing congestion. Henrikson goes further, and suggests that when considering distance in terms of politics and states, there are three further 'distances' to consider; these are gravitational, the topological and the attributional.[81]

First, in the gravitational model, distance is based on an analogy with the physical universe. The power that a political body (such as a country, institution, company)

[78] Marston, S *et al*, Human Geography without Scale: 419
[79] Marston, S *et al*, Human Geography without Scale: 419

[80] Castells, M The New Public Sphere: Global Civil Society, Communication Networks, and Global Governance *Annals of the American Academy of Political and Social Science* (2008) Vol.616 pp.78-93: 81
[81] Falk, T Intercommunications: 61

exercises over another body weakens, or decays with distance. The distance-decay effect is somewhat counteracted by the size of the entities involved: larger entities exercise greater influence than smaller, and vice-versa. Second, in the topological model, it is the compartmentalization of space that has a distancing effect: for instance, two countries that are separated by many intervening countries thus seem geographically further apart than two countries that do not have so many countries situated in between them. Finally, the attributional model of distance thinking emphasizes the inherent qualities, and occasionally the regime characteristics that countries may have, the likeliness and unlikeliness being the key variables.[82]

The notion of space is returned to later in this chapter in an examination of space with regard to power. The Foucauldian view of space is topological and non-Euclidean,[83] and in this perspective space is understood not as a container of activity but rather in relational terms with reference to the connection of actors in any one place to dynamics across space. This will be developed further in the following paragraphs in which the notion of the network is introduced as a way of charting the interrelations between and through space.

Amin comments on the way the reimagined spatialities of human geography can give rise to new conceptions of place:

> Which are recast as nodes that gather flow and juxtapose diversity, as places of overlapping – but not necessarily locally connected – relational networks, as perforated entities with connections that stretch far back in time and space… as spatial formations of continuously changing composition, character and reach… they are made through the spatiality of flow, juxtaposition, porosity and relational connectivity… summoned up as temporary placements of ever moving material and immanent geographies, as hauntings of things that have moved on but left their mark… as situated moments in distanciated networks, as contoured products of the networks that cross a given place.[84]

These conceptualisations are useful because they highlight the interconnectivity and relational nature of space: it is not a skein to be crossed, but rather the product of interrelations. Space, as currently constituted is always under construction, it is constantly being made, remade and destroyed through relations. Space, therefore,

---

[82] Falk, T Intercommunications: 61

[83] Ettlinger, N Governmentality as Epistemology *Annals of the Association of American Geographers* Vol.101 No.3 (2011) pp.573-560: 574

[84] Amin, A Regions Unbound: towards a new politics of place *Geografiska Annaler: Series B, Human Geography* (2004) Vol. 86 No. 1 pp.33-44: 34

is never finished and never closed. In order to provide a contextual lens through which to explore these interrelations, I have engaged with network theory, which will be used to explore how notions of 'here' and 'there' can be disembedded with their traditional associations. If space is a relational construct, there is a need to engage with how these relationships are formed and developed.

Transnational Linkages: Business and State

The notion of the network is a recurring theme in the literature concerning recent conceptions of space and place. Nellis maintains that globe-spanning information and communications technologies and networks have wrought something akin to the death of distance in the modern world, making it possible to synchronize certain types of action in places that are far apart from one another.[85] The availability of instant/immediate knowledge about remote events then alters our perception of what 'now' means, disembedding its traditional association with 'here', enabling us to share a real time experience of now with someone who may be geographically distant.[86]

Brayshay examines the notion of the sociospatial network when considering the interlocking directorships and trans-national linkages of business within the British Empire in the early twentieth century.[87] These networks were made possible by a number of revolutions in the half-century preceding the 1914-18 war: physical transport links (railways and steamships), information flows (the telegraph) and the institutions supporting the trading economy (from banking to the stock exchange).[88] Brayshay states that the corporate community operates within complex sets of networks and contacts: while there is an important internal architecture of relationships amongst the mangers and employees within a particular company, there is also an external architecture of linkages connecting an enterprise to its customers, suppliers and other firms.[89] It is suggested in this thesis that another important linkage in the external architecture is that which connects an enterprise, in this instance Cable and Wireless, to the state. It is these sociopolitical networks that are consciously manipulated to maintain secrecy

[85] Nellis, M External Vigilance Inc.: The Satellite Tracking of Offenders in "Real Time" *Journal of Technology in Human Services* Vol. 28 (2010) pp.23-42: 25
[86] Nellis, M External Vigilance Inc.: 25
[87] Brayshay, M Interlocking Directorships and Trans-National Linkages within the British Empire 1900-1930 *Area* Vol. 37 No. 2 (2005), pp.209-222
[88] Brayshay, M Interlocking Directorships: 210
[89] Brayshay, M Interlocking Directorships: 210

around the Company's war work. The concept of the network has been the subject of intense geographical enquiry for last two decades; an in-depth engagement with this extensive literature for a relatively minor aspect of the research would be beyond the scope of this thesis. However, recent work on the dissection of colonial networks, and network theory more generally, will be examined in order to detail the connections between Cable and Wireless, the British Government and overseas territories on both the social and political levels.

Ward provides a useful starting point for considering both empires and networks. He contends that an empire is comprised of an intersecting set of networks that, when considered as a whole, constitute a sovereign totality or imperial web that can be studied in both its temporal and its spatial manifestations.[90] His case study is the Dutch East India Company. Ward also provides another essential concept for the study of the Cable and Wireless imperial network; this is the circuit, which is conceptualised as a partial segment of a network, without which the network would likely continue, though perhaps in an altered or diminished state.'[91]

It has also been observed that traditional histories of empire have been dominated by temporal and spatial binaries – of rise and fall, expansion and decline, and more recently, centre and periphery and metropole and colony.[92] Most of these analyses privilege the imperial centre as the driving force in the rise and expansion of empire, as a result, histories written from this perspective focus primarily on power as it flows from an imperial core to a colonial periphery at the level of the management and governance of its trading colonies and, conversely, on the products of extraction and trade as they flow back from colony to imperial centre.[93] Following the postcolonial critiques of the 1980s, analysis was reset to focus on the colonies and thereby to view colonized subjects as active participants in the colonial project.

The concept of networks has proven useful to explain the multiple dimensions, partialities and instabilities of empires that cannot be adequately defined with

[90] Ward, K Networks of Empire: 9
[91] Ward, K Networks of Empire: 11
[92] Ward, K *Networks of Empire: forced migration in the Dutch East India Company* Cambridge University Press (2009): 7
[93] Ward, K *Networks of Empire*: 7

reference to either to their metropolitan centres or their colonial peripheries.[94] Lester has employed this concept through his geographies of connection.[95] Colonial and metropolitan sites were connected most obviously through material flows of capital, commodities and labour. According to Lester, by the late eighteenth century, British material culture was already located within intensively developed circuits connecting Western Europe, Africa, Asia and South America. The nodal points holding this expanded imperial web and its extra-imperial trading partners together were ports and the means of transmission between them, ships.[96] With the advent of the electric telegraph, ships were replaced by electrical impulses extending the nodal points of the network.

In Lester's rendering of the imperial network, materials, people and information flow from place to place, often via the hub of Britain; in his case study he examines how this network defined or undermined notions of Britishness and the relationship between colonial and native.[97] The concept of the network is useful in considering the dissemination of knowledge and power; it is rendered particularly apt when the literal network of Cable and Wireless is conceived along the same lines as Lester's colonial networks. It is through the network of the company that the government was able to gain knowledge, govern and extend its power at a distance.

Ogborn notes that historical accounts of empire have been subject to retheorisation in recent years; rather than empire defined through a hierarchical geography of centre and periphery, attention is now being given to specific characteristics of imperial and colonial sites, territories, and networks.[98] Alternative models of networks or webs seek to explore a different geography that allows a range of competing and contradictory relationships to come into view, and these alternatives stress the unity of empire, as a single network or web, as well as the multiple differentiation of sites within it, the many forms of connectivity between them, and the ever-changing nature and shape of those

[94] Ward, K *Networks of Empire*: 8
[95] Lester, A *Imperial Networks: Creating Identities in Nineteenth-Century South Africa and Britain* Routledge (2001): 6
[96] Lester, A *Imperial Networks*: 6
[97] Lester, A British Settler Discourse and the Circuits of Empire *History Workshop Journal* No.54 (2002) pp.24-48
[98] Ogborn, M *Indian Ink: Script and Print in the Making of the English East India Company* University of Chicago Press (2007): 3

connections.[99] Lester reinforces this point when he states that the utility of a networked or webbed conceptualization enables us to think about the inherent relationality of nodal points or centres within an empire.[100] This conceptualization of the British Empire as a network is of value because of the *networked* nature of Cable and Wireless' business. By examining the physical network in terms of network analysis, it is possible to explore the associations between the nodal points within the network: the sociopolitical relationships and the relationships between nodes and centre – in this instance, the mobilization of an overseas station or employee and Head Office in London.

In network analysis, networks are defined as any set of ties between any set or sets of nodes.[101] Nodes can be individuals or corporate actors, such as organizations or states.[102] Dicks observes that network analysis addresses the associations among nodes rather than the attributes of particular nodes. It is grounded in three principles: nodes and their behaviours are mutually dependent, not autonomous; ties between nodes can be channels for transmission of both material (for example, weapons, money, or disease) and non-material products (for example, information, beliefs, and norms); and persistent patterns of association among nodes create structures that can define, enable, or restrict the behaviours of nodes.[103]

According to Bell and Zaheer, there is an increasing recognition within the academy that actor's access knowledge across boundaries and geographic space via their network of ties.[104] From a theoretical perspective, examining how knowledge flows across networks operating at multiple levels of analysis are affected by geography represents a crucial yet unexamined contingency.[105] Burton-Hafner *et al*, posit that the lens of network analysis offers a broad and contrasting view: networks are sets of relations that form structures, which in turn may

[99] Ogborn, M *Indian Ink*: 3
[100] Lester, A Imperial Circuits and Networks: Geographies of the British Empire *History Compass* Vol. 4 No. 1 (2006) pp.124-141: 134
[101] Dicks, TRB Network Analysis and Historical Geography *Area* Vol. 4 No. 1 (1972) pp.564-569: 564
[102] Dicks, TRB Network Analysis and Historical Geography: 564
[103] Dicks, TRB Network Analysis and Historical Geography: 564
[104] Bell, G & Zaheer, A Geography, Networks, and Knowledge Flow *Organizational Science* Vol. 18 No.6 (2007) pp.955-972: 955
[105] Bell, G & Zaheer, A Geography, Networks, and Knowledge Flow: 955

constrain or enable individuals or organisations.[106] Hassan asserts that the fact that we live in a networked society is now a given,[107] and for Castells, networks are beginning to define society and constitute the fabric of our lives.[108] The increasing speed of these networks simply increases their power to shape our lives even more and in ways that we control correspondingly less.[109]

The formation of this network society, according to Hassan, can be found in the late nineteenth and early twentieth century, and the spread of this modernity was never comprehensive. [110] The relative lack of close interlocking networks functioning on all registers of the social order meant that historically there were always spaces and times where the force and speed of modernity did not reach – or at least took some time to reach:

> In the early 20th century, new technologies, such as motorcars, or trains, could hurtle through the cities and countryside to the amazement of onlookers. Those who gazed at the spectacle could then go about their normal business once the machine (and with it modernity) flashed by them. However, those who moved rapidly in cars or trains were intimately affected in that they experienced a form of time-space compression that placed them in a different realm from those they sped past. For a time at least, their lives had become physically and physiologically accelerated, they could do more in their day than could those who remained relatively fixed in space and had a differing experience of time.[111]

Other communications technologies had the same effect, and for correspondingly more people. For instance, the telegraph and later the telephone rapidly compressed time and space for its users, as these technologies ripped through society.[112] The time-space compression that the rise of the network society and communications technologies facilitated is what Doreen Massey refers to as power geometry:

> For different social groups, and different individuals, are placed in very distinct ways in relation to flows and interconnections. This point concerns not merely the issue of who moves and who doesn't, although this is an important element of it; it is also about power in relation to the flows and the movement. Different social groups have distinct relationships to this

[106] Burton-Hafner, E; Kahler, M & Montgomery, A Network Analysis for International Relations *International Organization* Vol. 63 No 3 (2009) pp.559-592
[107] Hassan, R Empires of Speed: 7
[108] Castells, M *The Rise of the Network Society* Vol. 1 *The Information Age: Economy, Society and Culture* (1996) Oxford: 53
[109] Castells, M *The Rise of the Network Society*: 32
[110] Hassan, R Empires of Speed: 38
[111] Hassan, R Empires of Speed: 38
[112] Hassan, R Empires of Speed: 38

> differentiated mobility: some people are more in charge of it than others; some initiate flows and movement others don't; some are more on the receiving-end of it than others; some are effectively imprisoned by it.[113]

Where Massey is referring, generally speaking, to movement and the capacity to move, this research utilises the notion of power geometry to explore the telegraph and the ability to communicate.

Placing Telecommunications in a Geopolitical Context

With ever increasing communication speeds and the reduction in relative distance, Kellner, whilst discussing Virilio, states that there has been a shift from geopolitics to chronopolitics.[114] That is to say, a shift from a politics of space to a politics of time, in which whoever controls the means of instant information, communication and destruction, becomes a dominant socio-political force: space and time are thus overwhelmed by technologies that travel at ever faster speeds.[115] According to Hassan, speed (as a function of time) fills our lives and helps shape the kind of world we live in; this has been the case since the dawn of civilization, but today a new form of speed permeates society.[116] This, he claims, is the speed of the networks that drive commerce and underpin global processes.[117] Virilio equates geopolitics with the strategic value of territory whereas chronopolitics is associated with the emergent strategic value of telemetricality. The former's value, he argues, has been declining while the significance of technological systems has increased. Space, he suggests, is no longer in geography – its in electronics.[118] Virilio's claims regarding chronopolitics can be considered overstated, but according to Luke and Ó Tuathail should not be underestimated. They observe that:

> Virilio's opposition of geopolitics to chronopolitics is a crude and misleading one inasmuch as questions of technology, transportation and speed have always been central to geopolitical theorizing. The pivot of Halford Mackinder's famous 1904 geographical pivot of history paper is

---

[113] Massey, D *A Global Sense of Place* in Space, Place and Gender University of Minnesota Press (1994)
[114] Kellner, D *Virilio*, P *War and Technology*: 105
[115] Kellner, D *Virilio, War and Technology*: 105
[116] Hassan, R Empires of Speed: 7
[117] Kellner, D *Virilio, War and Technology*: 105
[118] Harris, C Power, Modernity, and Historical Geography *Annals of the Association of American Geographers* Vol. 81 No. 4
[118] Dodds, K *Geopolitical Traditions: a century of geopolitical thought* Routledge (2000): 2

> the relationship between physical geography and transportation technology or what he called the mobilities of power.[119]

While chronopolitics cannot be said, as Virilio claims, to replace geopolitics, it does however offer a point of analysis when considering the electric telegraph. It is mooted here that those with access to the fastest communications have a clear advantage over those that do not. Communication security also plays a key role – it is of no use to have the fastest means of communication if the enemy can read all of your messages. The notion and theory of geopolitics is of relevance to this research, as the geopolitical narrative provides the background and context to the archival material.

Geopolitical thought emerged at the close of the nineteenth century as geographers and other thinkers sought to analyse, explain and understand the transformations and finite spaces of the fin-de-siècle world. Ó Tuathail notes that the term *geopolitik* was originally coined in Sweden in 1899 in an article that discussed the boundaries of the country. From there it was introduced into Germany before the outbreak of the First World War.[120] By the 1930s, the word had become a popular one in German political language on international affairs; however as Ó Tuathail highlights there was still an ambiguity surrounding the word and one contemporary commentator noted that it had at least five different meanings.[121]

Traditional forms of geopolitics and international relations have both treated the nation-state as a coherent container of society on the inside, whilst remaining solid and impenetrable from the outside. Critical geopolitics on the other hand pays particular attention to the boundary-drawing practices and performances that characterize the every day life of a state.[122] In this regard, critical geopolitics seeks to break down both the conceptual borders that imagine nation states as discrete from each other and the imaginative distinction between foreign/domestic or inside/outside the nation state.

Taylor identifies three ways in which modern geopolitical thought has formed:

---

[119] Crang, M and Thrift, N *Thinking Space* Routledge (2000): 370
[120] Ó Tuathail, G Problematizing geopolitics: survey, statesmanship and strategy *Transactions of the Institute of British Geographers* Vol.19 No.3 (1994) pp.259-272: 259
[121] Ó Tuathail, G Problematizing geopolitics: 259
[122] Carter, S The Geopolitics of Diaspora *Area* Vol.37 No.1 (2005) pp.54-63: 61

1. Geopolitics has become a popular term for describing global rivalries in world politics.
2. The second is an academic one, a new more critical geopolitics. Critical historiographical studies of past geopolitics have been a necessary component of this 'geographers' geopolitics.
3. The third is associated with the neo-conservative pro-military lobby, which has added geopolitical arguments to their 'Cold War' rhetoric. Such studies talk of 'geopolitical imperatives' and treat geography as the permanent factor that all strategic thinking must revolve around.[123]

Within Taylor's three fields of geopolitics, it is clearly the second point that is of importance to this research; through the use of archival material this thesis will examine geopolitics of the past. The first point is also of value, as the global rivalries and world politics of the Second World War are central to understanding the way in which the war developed and nations interacted with each other.

Flint, however, provides perhaps the most concise definition, and the one that will be utilized in this research:

> Geopolitics, the struggle over the control of spaces and places, focuses on power. In nineteenth and early twentieth century geopolitical practices, power was seen simply as the relative power of countries in foreign affairs: geopolitics is a way of seeing the world.[124]

While this rendering of geopolitics may be rather simplistic, it does provide a touching off point to examine the field in greater depth. With geopolitics as a way of 'seeing the world', the following paragraphs will review the work of Ó Tuathail, with a view to establishing the notion of geopolitics as a methodological approach.

Primarily, geopolitics is discourse about world politics, with a particular emphasis on state competition and the geographical dimensions of power.[125] It is within this statement that they key aspect to the study of geopolitics and, consequentially this research can be found: power. Supplemental to this is the notion of discourse, which Ó Tuathail states is central to the study of geopolitics. He defines it as the representational practices by which cultures creatively constitute meaningful worlds:

---

[123] Taylor, P *Political Geography* Longman (1993): 43-44
[124] Flint, C *Introduction to Geopolitics* Routledge (2006): 28
[125] Ó Tuathail, G *The Geopolitics Reader* Routledge (2006): 1

> Most cultures do this by means of stories (or narratives) and images. Since geopolitics is a discourse with distinctive 'world' constitutive ambitions, we must be attentive to the ways in which global space is labeled, metaphors are deployed, and visual images are used in this process of making stories and constructing images of world politics.[126]

Geopolitical discourse deals with compelling questions of power and danger in world affairs and, according to Ó Tuathail, the critical point to grasp at the outset is that geopolitics is already involved in world politics: it is not separate neutral commentary on it.[127] The attraction of geopolitics lies in the fact that it purports to explain a great deal in simple terms: it provides a framework within which local events in one place can be related to a larger global picture.[128] It is for this reason that the study and use of geopolitics is of vital importance to this research: examining the archival material of Cable and Wireless and constructing the wartime narratives would be meaningless without the *context* to inform them. By looking beyond the local – at say, a specific provincial station – and examining the geopolitical narratives and discourses of the war in broader terms, the *reason* for events will become apparent.

This section has sought to overview the key related geographical themes that are pertinent to the research. These are space, distance and the network: the first two are considered the fundamental *stuff* of geography, while the latter provides a way for conceiving how agents interact through space. In the following section, the literature and notion of power will be reviewed; this builds upon the literature of space and networks.

Governmentality, Communications and Power

The power of knowledge… and the power to disseminate this knowledge…[129]

The relationship between Cable and Wireless and the British Government in the years before and during the Second World War is one of the primary concerns of this research. This relationship changed and developed from one between state government and private communications company, to the point at which Cable and Wireless were acting as a semi-official office of the government, handling the

[126] Ó Tuathail, G *The Geopolitics Reader*: 1
[127] Ó Tuathail, G *The Geopolitics Reader*: 1
[128] Ó Tuathail, G *The Geopolitics Reader*: 2
[129] Foucault, M *Power/Knowledge* Harvester Wheatsheaf Press (1980): 34

communications requirements and demands of the British Empire, and engaging in clandestine and often secret operations on the instruction of the wartime authorities. In order to understand the relationship between the two parties, it must be examined from the perspective of power. As Harris has observed, issues of power and modernity preoccupy much of the literature in social theory and, in various ways, penetrate the social sciences – including human geography.[130] There is, therefore, a wealth of literature upon which can be drawn to analyze the relationship between state and company; to review all of it would be outside the scope of this thesis. The following section, therefore, will utilize the work of Michel Foucault as an entry point into these debates to define the key themes that are a pre-requisite of the study power.

Jessop notes that although Foucault often refers to the state, he refused to take its existence for granted, and rejected any theory based on this assumption.[131] The state has no essence, is not universal and is not an autonomous source of power. Instead it is an emergent and changeable effect of incessant transactions, multiple governmentalities and perpetual reformations of ideas of the state.[132] The term governmentality can be seen as a composite of two elements: that of government – the practices, programmes and projects that aspire to bring about certain aims of the government of individuals; and that of mentality – the discursive truths that serve as rationales for the aims of government of others and the self.[133] In this Foucauldian context, the state has no essence, whereas the government extends its power, and the will to act, via what Foucault refers to as governmentality. This is achieved through an ensemble constituted by institutions, procedures, analyses, and reflections, the calculations and tactics that permit the exercise of complex forms of power, which, according to Jessop, has as its principal target the population, and as its main form of knowledge political economy; and, as its essential technical means, the apparatuses of security.[134]

---

[130] Harris, C Power, Modernity, and Historical Geography *Annals of the Association of American Geographers* Vol. 81 No. 4 (1991) pp.671-683: 671
[131] Jessop, B From micro-powers to governmentality: Foucault's work on statehood state formation, statecraft and state power *Political Geography* Vol. 26 (2007) pp.34-40: 36-7
[132] Jessop, B From micro-powers to governmentaility: 37
[133] Huxley, M *Space and Government: Governmentality and Geography* Geography Compass Vol.2 No.5 (2008) pp.1635-1658: 1644
[134] Jessop, B From micro-powers to governmentality: 37

Legg defines government as both an institutional practice and an analytical category. It describes the administrative capacities and aspirations of the state in its national, regional, and local manifestations.[135] It also describes the attempt to delineate a realm of power relations that is distinct from, but is mutually related to, categories including those of sovereignty, monarchy, democracy, development and imperialism.[136] Government, as conventionally conceived, can therefore be thought of as an apparatus. Legg states that it usually seeks stability and order, striating and territorializing the ground of globe nation-state systems, as much as ordering our conceptions of political space and its scalar divisions of responsibility and capacity.[137] Ogborn has examined the relationship between the spatial levels of the state apparatus, between central bureaucracies and local authorities, and maintains that territory is crucial to the modern state.[138] It has been argued that what is distinctive about the state is that it is a bounded space: moreover, instead of this constituting it as an empty arena where other processes are played out, territoriality provides the basis for the territorial organization of social relations by the state.[139]

The notion of power forms a central aspect to this research as Cable and Wireless allowed the British Government to extend itself far beyond the geographical borders to the United Kingdom in the pursuance of war. As Ogborn notes, states are always involved in the tenuous and difficult practice of exercising power across space: they are internally spatially structured towards this end.[140] The Foucauldian notion of power, which Ogborn maintains can be used to examine and specify the relationships between surveillance, power and modernity in the creation of the modern state and the modern business enterprise, is discussed below.[141] Chapter 4 is concluded by configuring Cable and Wireless as an institution that enabled governmental control over space, time and knowledge both in the literal, physical

---

[135] Legg, S *Governance Part II* in Agnew, J and Duncan, J, eds., *The Wiley-Blackwell Companion to Human Geography* Wiley-Blackwell (2011) pp.347-360: 347
[136] Legg, S *Governance Part II*: 347
[137] Legg, S *Governance Part II*: 347
[138] Ogborn, M Local Power and State Regulation in Nineteenth Century Britain *Transactions of the Institute of British Geographers*, New Series, Vol. 17 No. 2 (1992) pp.215-226: 215
[139] Ogborn, M Local Power and State Regulation: 217
[140] Ogborn, M Local Power and State Regulation: 218
[141] Ogborn, M Local Power and State Regulation: 217

spaces of the Second World War and in the abstract electrical spaces of communications: through the air and via the telegraph line.

Power, in the Foucauldian sense, has no fixed location, as in a sovereign, the state (as defined above), or capital, but rather is dispersed through cultural discourses and their shifting and inherently unstable networks, alliances, and strategies.[142] Power is not something that can be possessed, rather it is exercised: it is not a privilege acquired or preserved by a dominant people/political party/class, but rather is the overall effect of its strategic positions. This power, once acquired, is disseminated via multiple overlapping and intersecting sociospatial networks of power, which, according to Harris, constitute society.[143]

Foucault stated that the analysis of power in society could only be achieved through an analysis of control over space: power was inscribed in space and history – the exercise of power is embedded in specific spaces, such as churches, theatres, prisons, hospitals, schools and factories.[144] In other words, to analyze power, one must analyze the control over space and the institutions that wield this control.

Foucault's approach encourages a study of the state and other institutions not from the top down, but rather from the bottom up.[145] It is necessary therefore to examine how numerous techniques of discipline and technologies of the self operate throughout society and fix the ways in which people construct themselves, their conduct, and their relationship to others. Nowhere is this more apparent than during the Second World War where people's notions and constructions of themselves were radically redefined through the necessity of total war; conduct, too, was subject to upheaval, along with relationships between people. Foucault reconceptualised the state not as a discrete legal institution, but as a space composed of varied relations of power and mentalities they embody: to study politics is to trace the operation of power as it creates subjects, discourses and institutions through time.[146]

---

[142] Harris, C Power, Modernity, and Historical Geography: 674
[143] Harris, C Power, Modernity, and Historical Geography: 675
[144] Baker, A *Geography and History: Bridging the Divide* Cambridge University Press (2010): 65
[145] Bevir, M Foucault, Power, and Institutions *Political Studies* (1999) pp.345-359: 353
[146] Bevir, M Foucault, Power, and Institutions: 353

Foucault himself observed that studying power relations through discrete institutions could also prove problematic:

1. The fact that an important part of the mechanisms put into operation by an institution are designed to ensure its own preservation brings with it the risk of deciphering functions which are essentially reproductive, especially in power relations between institutions.
2. In analysing power relations from the standpoint of institutions, one lays oneself open to seeking the explanation and the origin of the former in the latter, that is to say, finally, to explain power to power.
3. Insofar as institutions act essentially by bringing into play two elements, explicit or tacit regulations and an apparatus, one risks giving to one or the other an exaggerated privilege in the relations of power and hence to see the latter only modulations of the law and of coercion.[147]

These problems notwithstanding, Foucault emphasizes the fact that a society without power relations can only be an abstraction: indeed, this makes it politically necessary to analyze power relations in a given society, this historical formation of these relationships, the source of their strength or fragility and the conditions which are necessary to transform some or to abolish others. To mitigate these problems, and to successfully analyze power relations, Foucault demands that a certain number of points be established correctly. These are:

1. *The system of differentiations* which permits one to act upon the actions of others: differentiations determined by the law or by traditions of status and privilege; economic differences in the appropriation of riches and goods, shifts in the processes of production, linguistic or cultural differences, differences in know-how and competence, and so forth. Every relationship of power puts into operation differentiations, which are at the same time its conditions and its results.
2. *The types of objectives* pursued by those who act upon the actions of others: the maintenance of privileges, the accumulation of profits, the bringing into operation of statutory authority, the exercise of a function or of a trade.
3. *The means of bringing power relations into being:* according to whether power is exercised by the threat of arms, by the effects of the world, by

[147] Foucault, M The Subject and Power: 791

means of economic disparities, by more or less complex means of control, by systems of surveillance, with or without archives, according to rules which are not explicit, fixed or modifiable, with or without the technological means to put all these things into action.

4. *Forms of institutionalisation:* these may mix predispositions, legal structures, phenomena relating to custom or to fashion; they can also take the form of an apparatus closed in on itself, with its specific loci, its own regulations, its hierarchical structures which are carefully defined, a relative autonomy in its functioning (such as scholastic or military institutions); they can also form very complex systems endowed with multiple apparatuses, as in the case of the state, whose function is the taking of everything under its wing, the bringing into being of general surveillance, the principle of regulation, and, to a certain extent also, the distribution of all power relations in a given social ensemble.
5. *The degree of rationalisation:* the bringing into play of power relations as action in a field of possibilities may be more or les elaborate in relation to the effectiveness of the instruments and the certainty of the results (greater or lesser technological refinements employed in the exercise of power) or again in proportion to the possible cost (be it the economic cost of the means brought into operation or the cost in terms of reaction constituted by the resistance which is encountered). The exercise of power is not a naked fact, an institutional right, nor is it a structure which holds out or is smashed: it is elaborated, transformed, organised; it endows itself with processes which are more or less adjusted to the situation.[148]

The Government and Private Enterprise

Close relationships between private commercial enterprise and the British Government do not seem that uncommon in the late 1800s and early twentieth century. It seems that there was an unwritten agreement between business and the government to allow private enterprise to 'get on' with the business of running aspects of the Empire and thus allowing the government to focus its attention on other schemes. Two examples of this can be seen in the East India Company and the Royal Nigerian Company – both of which controlled huge areas of influence, trade routes and trading wealth – effectively acting as commercial arms of the

[148] Foucault, M The Subject and Power: 792

government. In 1886, the Niger Protectorate had united and applied for and obtained a charter from Gladstone's government to become the Royal Niger Company.[149] Through the charter the Company was afforded some autonomy in dealing with states and rulers in the basin of the River Niger; to this end it had a small army, some boats on the river and was a powerful force in local affairs. It still relied on the home government however to handle relations with European authorities: the Company therefore had regional control but exercised deference on issues of an international nature. By distributing charters to overseas British companies, the government was saved from having to deal directly with local rulers. Lloyd cites further examples of this process of government, and elucidates their importance:

> In 1888 Lord Salisbury's Conservative government gave the Imperial British East Africa Company a charter to operate in what are now Kenya and Uganda, and in 1889 it gave the British South Africa Company a charter to operate in what are now Zambia and Zimbabwe. These three companies were responsible for much the larger part of British expansion in Africa. The only real interest the British government had in Africa was in Egypt and in Cape Colony, the areas which controlled the routes to India, Australia and eastern Asia.[150]

The Royal Niger Company was first and foremost a trading company whose main product of export was palm oil for soap manufacture. Supplemental to this was the diplomacy involved in the region and the occasional outbreaks of warfare.[151] By granting a charter to the Niger Protectorate, the government had effectively annexed the land it controlled into the British Empire. The newly formed company was allowed to operate as it saw fit, providing other imperial interests weren't threatened. This is exactly what happened in 1899 when the Royal Niger Company attempted to pressure the local chiefs into signing treaties against the French; the result of this could have been to lead Britain in to war with France. When it became apparent that the Company could force the country into conflict, the charter with its political powers was revoked and the British government took over the work of government in the new colony of Nigeria.[152]

---

[149] Lloyd, T *Empire: the history of the British Empire* Continuum International Publishing (2006): 110
[150] Lloyd, T *Empire*: 111
[151] Lloyd, T *Empire*: 111
[152] Lloyd, T *Empire*: 112

In this example we can see how the British government was content to allow private companies continue the business of empire at a remove to themselves. It was only when the Company began to overstep the mark and to draw the home country into a potential war that the government 'stepped in' and assumed control. The next company to be examined in this context is the East India Company.

It has been contended that throughout its existence, the East India Company was first and foremost a maritime trading company dedicated to the pursuit of profit on behalf of its stockholders[153]. An examination of Bowen's work however, immediately reveals that the Company was far more than this: a veritable empire within an empire, it enjoyed a monopoly over vast areas of the earth's surface, controlling trade and people through its fleet of ships and standing army. The Company operated largely as it pleased until 1813 when it was given a charter and vested officially in the British Crown;[154] Contemporary commentators declared that the Company had become

> A powerful engine in the hands of the government for the purpose of drawing from a distant country the largest revenue it is capable of yielding. The Company was acting as stewards to the state.[155]

A full history of the East India Trading Company is not necessary at this juncture, a simple understanding of the company as a private venture expanding into previously untapped markets and trading under the British flag will suffice. It has been argued by Bowen[156] that the company was responsible for extending the borders of the British Empire and establishing it worldwide, whilst at the same time consolidating the areas that came under its control and maintaining a trade monopoly. Ogborn has written extensively on the history and geographies of the East India Company, and has detailed the tensioned relationship between the Crown, the government and the Company.[157]

---

153 Bowen, H *The business of empire: the East India Company and imperial Britain, 1756-1833* Cambridge University Press (2006):7
154 Bowen, H *The business of empire*: 11
155 Bowen, H *The business of empire*: 11
156 Bowen, H Sinews of trade and empire: the supply of commodity exports to the East India Company during the late eighteenth century *Economics History Review* Vol. 55 No. 3 (2002) pp.466-486
157 Ogborn, M Writing Travels: Power, Knowledge and Ritual on the English East India Company's Early Voyages *Transactions of the Institute of British Geographers*, New Series, Vol. 27 No. 2 (2002) pp.155-171

As the two examples above demonstrate, business within the British Empire was largely conducted on a private and autonomous basis. It was only when the business activities of any given company began to intrude on or affect the British government at home that there was any intervention. This generally came in the guise of the granting of charters that brought the company in question, complete with its infrastructure and territories under the control (in principle at least) of the government and the Crown. It is in this context that the relationship between Cable and Wireless and the government can be approached and understood: a private company undertaking the business of running and maintaining an aspect of imperial infrastructure, allowing the government to devote its energies and finances elsewhere. This system of devolved control and authority seems to be the *modus operandi* within the British Empire of the nineteenth and early twentieth century.

It has been argued that the driving force behind Britain's conceptions of how empire should be organised and governed were mainly aristocratic in origin, derived from centuries of ruling Britain itself. Cain remarks that it is important to note that most of the nineteenth and twentieth-century imperial governing class were public school men recruited from the professional classes whose thinking had been strongly influenced by industrialisation.[158] Cain also highlights the fact that this group defined themselves as gentlemen and allied themselves with the landed class on matters imperial.[159] Questions surrounding the relationship between imperial government and business were raised as early as 1904, as Cain notes:

> Business interests were now a dominant force behind the political manoeuvrings of all the major powers and had popular support in all of them. Not just on economic libertarian grounds but because support for business interest abroad was seen as patriotic...[160]

The question of the relationship between the British Government and private commercial enterprise is central to the research; as it has been established through examples from the nineteenth century, there was a long standing laissez faire tradition of allowing commercial enterprises to 'get on' with the business of

[158] Cain, PJ Capitalism, Aristocracy and Empire: Some Classical Theories of Imperialism Revisited *The Journal of Imperial and Commonwealth History* Vol. 35 No. 1 (2007) pp.25-47: 26
[159] Cain, PJ Capitalism, Aristocracy and Empire: 26
[160] Cain, PJ Capitalism, Aristocracy and Empire: 33

running the empire at a remove. That is until the business concerned becomes of strategic or financial value to the government.

Conclusion

This chapter has sought to overview the literature that provides the theoretical foundations onto which the empirical research can be built. These foundations are fundamentally geographical: space, distance, the network and power. The opening paragraphs outlined the position of the research within historical geography and detailed the lacunae in the literature; primarily these are the Second World War, communications during wartime and the role of the telegraph during the war.

These theoretical foundations provide the lens through which the archival material can be examined, through which it is possible to reveal the sociopolitical relationships between the Company and the British Government, which enabled Cable and Wireless to undertake its wartime activities. It is also possible to examine an imperfectly understood aspect to the Second World War: this is the mobilization of industry, in this case the communications industry.

This literature review also provides the contextual leverage to the archival material, by examining the historic relationship between the British Government and private enterprise, along with a discussion of geopolitical discourses. These two approaches provide the context to the position of the Company with regard to the state, and the broader discourses that frame the activities of Cable and Wireless during the war.

In detailing the literal and metaphorical networks – the telegraph cable and the interpersonal relationship – it is possible to define the conduits by which the British Government exercised its power internationally during the Second World War. Network analysis and the work of Michel Foucault will be utilized to reveal a hitherto unexplored aspect to the Second World War and the conduct of the state, through its reliance on a private communications company.

The following chapter examines the methodological approaches that have been utilized in the research; these include archival research, oral history and the methodology of secrecy.

3. Methodology

> *…These papers and parchments, so long deserted, desired no better than to be restored to the light of day… As I breathed in their dust, I saw them rise up.*[161]

Papers, parchments and ghosts in the dust are familiar motifs of the archive; however, for the purpose of this thesis the archive is described as a less prosaic place and is, according to Lynch, a privileged site to which records are officially consigned and in which they are guarded by legal authority.[162] This definition can be refined further when considering the *classical* archive, which can be characterized as a discrete collection of documents giving original evidence about an historical event or figure.[163] It is within this type of classical archive that the primary research for this thesis took place, and in which the original documents and materials are contained; namely the company archive of Cable and Wireless, which includes many of the records of the parent and associated companies – notably the Eastern and Associated Telegraph Company. The archive spans over one hundred and fifty years of communications history, while the research is focused on just six years within that time. Supplemental to the company archive, further primary material has been drawn from the National Archives in Kew, London, providing the government narrative to the Cable and Wireless material.

The empirical chapters of this thesis also utilize oral histories to provide a lived narrative to the archival material. Riley and Harvey note that in recent years, oral histories have begun to be taken seriously by academics in their explorations of the past, particularly with respect to uncovering the lived experiences of a world that was produced and consumed in multiple ways.[164] However, it is important to note that oral histories cannot be considered definitive in their retelling of the past: they are partial, subjective, reflexive, ambiguous, sometimes contradictory and often tensioned.[165] Yow notes that a criticism of oral histories is the suggestion

---

[161] Michelet quoted in Steedman, C *S*omething She Called a Fever: Michelet, Derrida, and Dust *The American Historical Review* Vol. 106 No. 4 (2001) pp.1159-1180: 1171
[162] Lynch, M Archives in formation: privileged spaces, popular archives and paper trails *History of the Human Sciences* Vol. 12 No. 2 (1999) pp65-87: 65
[163] Lynch, M Archives in formation: 75
[164] Riley, M & Harvey, D Landscape Archaeology, Heritage and the Community in Devon: An Oral History Approach *International Journal of Heritage Studies* Vol. 11 No. 4 (2005) pp.269-288: 270
[165] Riley, M & Harvey, D Landscape Archaeology: 274

that there is no such thing as pure recollection, and that memory becomes re-written over time.[166] In this research, oral histories provide the lived narrative to the archival material. The methodology of utilizing both archival material and oral histories is defined by Pooley and Turnbull, who state that, taken with contemporary newspaper reports and related documents, such evidence can never give more than a partial view of the past.[167] While this view is only partial, by utilizing multiple sources the partial nature of the view can be mediated.

The final section of this chapter concerns the methodology of secrecy – both the secret nature of archives and the actual notion of secrecy itself: how it is enacted and maintained. Within the research there is an engagement with the archival material linked to the intelligence and security services and, as a result, requires an alternative methodological approach when utilizing this sensitive material; the approach detailed in the following section is informed by Rappert and his 'blackening out' of material in sensitive and redacted files.[168] Balmer notes that recent studies have pointed to the fracturing of space into regions of knowledge and ignorance.[169] Secrecy, according to Balmer, can take many forms; from the mundane elements of the technologies of privacy – locked doors, filing cabinets etc. – through to the techniques of control, such as compartmentalization and the classification of knowledge that can embrace entire organizations.[170] Wright and Wallace suggest that it is equally important to understand secrecy as a more complex set of social arrangements within which secrets are actively produced and which then define relationships.[171] Secrecy and classified knowledge can also be conceptualized as anti-epistemology: Galison explains that epistemology asks how knowledge can be uncovered and secured. Anti-epistemology asks how knowledge

---

[166] Hobsbawm, E *On History* Weidenfeld and Nicolson (1997); Thompson, P *The Voice of the Past: Oral History* Oxford University Press (1988); Yow, V *Recording Oral History: a guide for the Humanities and Social Sciences* Alta Mira Press (2005): 284-5

[167] Pooley, C & Turnbull, J Coping with congestion: responses to urban traffic problems in British cities c.1920-1960 *Journal of Historical Geography* Vol. 31 (2005) pp.78-93: 80

[168] Rappert, B Revealing and concealing secrets in research: the potential for the absent *Qualitative Research* (2010) Volume 10, pp.571-587

[169] Balmer, B A Secret Formula, a Rogue Patent and Public Knowledge about Nerve Gas: Secrecy as a Spatial-Epistemic Tool *Social Studies of Science* Vol. 36 No. 5 (2006) pp.691-722: 694

[170] Balmer, B A Secret Forumla: 694

[171] Wright, S and Wallace, D Secrecy in the Biotechnology Industry: Implications for the Biological Weapons Convention in S. Wright (ed.), *Biological Warfare and Disarmament: New Problems/New Perspectives* (2002) Rowman and Littlefield: 369-90

can be covered and obscured.[172] Anti-epistemology does not so much deny knowledge, as it fractures and disrupts the topography of knowledge – providing particular geographically restricted accounts of the world.[173] In this sense, according to Balmer, secrecy acts as a spatial-epistemic tool in the exercise of power. It is within this anti-epistemology that part of this research took place, and the methodology that as subsequently developed will be discussed in this chapter.

An Introduction to the Porthcurno Archive and Resources: analysis

This section will provide an overview and discussion of the Porthcurno archive and the resources consulted, along with the analytical approaches employed during the archival research for the project.

This project was the second of an extended programme of three Art and Humanities Resource Council (AHRC) Collaborative Doctoral Awards (CDA) between the University of Exeter and the Porthcurno Telegraph Museum. Through three discrete strands the aim of the CDA was to utilize the archival holdings of Cable and Wireless and its parent companies – the Eastern and Associated Telegraph Companies – to open up stories that discuss the history and roles of the company. The Porthcurno Telegraph Museum is focused around the wartime tunnels and the wartime activities of the branch; this research project had the explicit task of revealing stories from the wartime archive.

As part of the project I was embedded at the Museum, working in the archive with the curator, examining the files that were known to date from the Second World War period. Utilizing the ad-hoc catalogue at the museum, which has been created and updated by different curators over the last twenty years, appropriate files were identified. One clear result of the different approaches to cataloguing at the museum is that some files are not catalogued, and others entered incorrectly. Therefore, a central aspect to the archival work was quite literally 'digging' in the archive: searching the shelves for files without accession numbers, reviewing their contents and updating the catalogue.

Over the last three years there has been a conservation element to the work undertaken in the archive: documents and photographs have been catalogued. The diaries belonging to former Cable and Wireless employees – members of cable ship

[172] Galison, P Removing Knowledge *Critical Enquiry* Vol. 31 No. 1 (2004) pp.229-243
[173] Balmer, B A Secret Forumla: 695

crew and retired members of staff drafted back in to service for the scrutiny scheme – have been digitized and transcribed. The purpose of this exercise was twofold: first, by digitizing the diaries the original has been preserved in the archive – the digital copy can be consulted. Second, the digitized copy and transcription can be utilized to share the contents with a broader audience through online exhibitions.

There are three distinct sources of archival material that forms the empirical basis for this thesis; these are first, the company records, second, the diaries of former employees and, finally, the Cable and Wireless staff journal *the Zodiac*. The company records are – generally speaking – arranged in themed files, for example 'Foreign Office Interception'. These files are collated document records, letters and reports that pertain to the Foreign Office and its interception programmes. The documents have been arranged in chronological order and are often subdivided to reflect particular events.

The diaries of former employees are an emerging resource at Porthcurno; they are being donated to the museum by the families of recently deceased Cable and Wireless retirees. They offer an alternative and personal perspective to the Company records; these have been utilized in this thesis to supplement the company paperwork. On occasion, the contents of the transcribed diaries are far more candid than the oral histories recorded by the Company; it is supposed that the reason for this is the private nature of the diary, and its temporal proximity to events.

Cable and Wireless published an in-house staff journal titled the *Zodiac* for circulation amongst its employees. The publication dates from the Eastern and Associated Telegraph Company days to the re-privatization of the Company in the early 1990s. The journal was comprised of a number of regular sections – an editorial, news from overseas branches, staff transfers and furlough lists and the adverts of companies that could provide overseas staff with the equipment they would need for service. In this thesis it is the editorial and news section that have been utilized; the staff transfer and furlough lists were not published during the War, as it was thought that such lists would furnish the enemy with intelligence concerning ship movements.

Owing to the fundamentally textual nature of the materials consulted in the course of this research, a discussion of textual analysis is necessary. This approach involves examining the authors' purposes for the text and asking whom the intended audience is.[174] In the case of Cable and Wireless' internal files, the intended audiences are identified by the addressee, which is supplemented by the circulation list, found at the bottom of the page. This list identifies, other than the addressee, to whom the document was sent. Analysing texts can provide insight into how specific groups of people and individuals construct meaning in their lives and work. According to Wall, a basic assumption of textual analysis is that there are multiple meanings and multiple ways of interpretation.[175]

Israel, in discussing the multiple meanings and multiple ways of interpretation, suggests that for the historian, no return to a historical 'real' is possible.[176] There is no chance to step into the past and see it whole, nor to perceive the real shape and structure of life outside of representation: rather, we are faced with writing inside the kaleidoscope, of attempting to discern and describe the images beyond the glass and multiple images caught in the mirrors.[177] According to Thomas, the multiple images are the different representations of a life that emerge from the collected material narratives with a subject: these narratives are the beads at the bottom of the kaleidoscope that form the patterns that shift with the movement of the viewer.[178] Thomas suggests that the subversion of the archive structure opens up the kaleidoscope, revealing that there is no one interpretation of a subject, but the many refracted frames which cannot be reified into a single interpretation of a subject. [179] Reading the reconstructed archive enables moments of tension, deviation and contradiction to be exposed in a thematic reading across the archive.[180]

---

[174] Wall, B Textual Analysis of Retired Nurses' Oral Histories *Nursing Enquiry* Vol. 14 No. 4 (2007) pp.279-288: 279
[175] Wall, B Textual Analysis: 280
[176] Israel, K Writing inside the kaleidoscope: re-representing Victorian woman public figures *Gender and History 2* (1990): 40
[177] Israel, K Writing inside the kaleidoscope: 40
[178] Thomas, N "Exploring the boundaries of biography" the family and friendship networks of Lady Curzon, Vicereine of India 1898-1905 *Journal of Historical Geography* Vol.30 (2004) pp.496-519: 499
[179] Thomas, N "Exploring the boundaries of biography": 504
[180] Thomas, N "Exploring the boundaries of biography": 504

One approach for preparing the archive for this thematic reading is suggested by Rose through attaching a set of descriptive labels or categories, which she refers to as coding.[181] Slater notes that much of the rigour of classic content analysis relies on the structure of categories used in the coding process, because the categories should be apparently objective in a number of ways, and therefore only describe what is really there in the text.[182]Rose concludes that the process of reducing rich material to a series of codes is just that: a reduction in which much will be lost. The key point to remember is that the subject must be reduced to a number of component parts that can be labeled in a way that has some analytical significance.[183]

In this research the descriptive labels or categories were largely ascribed by the cataloguing process of the Porthcurno Museum: the material consulted was subdivided in the archive into 'Wartime Files', and then further subdivided by department concerned, or specific branch. During the archival phase of this project, each wartime file was examined and summarized; the museum catalogue was then updated with this summary. Following this initial and comprehensive scoping exercise, the broad themes that form the foundations of this research – overseas mobilization, domestic mobilization etc. – began to emerge. Specific archival material, drawn from the generic categories ascribed by the Museum, were then coded into the specific themes. Once this coding process was complete, the archival material could then be subjected to textual analysis to identify the authors, intended audience(s) and the purpose of the text. In the case of Cable and Wireless internal files, this is often self-evident and the same is true for letters to and from the Company. Personal diaries are essentially private records, with no defined or intended audience: these personal narratives offer an alternative view to the carefully curated and collected 'official' archival record.

While this was an essentially reductive process: the rich and diverse archival material reduced to a handful of key themes, it was an important process to manage the scale of material, to allow it to be subjected to analytical processes. From this reduction, the archival material can again be allowed to expand, to

[181] Rose, G *Visual methodologies: an introduction into Researching with Visual Materials* (2012) Sage: 90
[182] Slater, D Analysing cultural objects: content analysis and semiotics in C. Seale (ed.) *Researching Society and Culture* (1998) Sage: 236
[183] Rose, G Visual methodologies: 91

inform the kaleidoscopic approach defined by Israel: the final narrative contained in this thesis is just one configuration of historical events and archival material that is a result of the archival work and analysis that are detailed in the following chapters.

The above section has provided a brief introduction to the scope of the Porthcurno archive and the range of files that have been utilized in the course of this research, along with the analytical practices employed. In the subsequent sections I will examine the methodologies that have informed the thesis, that have provided the theoretical foundations onto which my own work can be built.

The Archive

The Second World War period represents a unique moment in archival study: in many cases the documents that were classified at the time are only now coming out of closure, meaning that for the last twenty years a wealth of previously unseen material has been released to the National Archives. One aspect that is unique to those studying the twentieth century is the living link that exists between the Second World War and the present day: it is possible that people detailed in the archival material are still alive and can be consulted on the events detailed in the archival documents.

According to Ashmore *et al* archival work is often figured in published accounts as something of a solitary process, a space for intimacy with, immersion in and reflection on materials and subjects past.[184] They note that this is perhaps inevitable if the work of historical geography is taken as being based on traces left by former lives and where for many historical geographers, often these traces are found in an archive.[185] Ashmore *et al* state that there has been a recent shift in the debates around the formation of the archive and archival practice; there has been a move from archive-as-source to archive-as-subject, which has created a space for exploring materials that make up collections and the practices of collecting, classifying, ordering, display and reuse which reproduce them.[186]

Steedman argues that the archive is made from selected and consciously chosen documentation from the past and from the fragments that no one intended to

[184] Ashmore, P, Craggs, R and Neate, H Working-with: talking and sorting in personal archives *Journal of Historical Geography* Vol. 38 (2012) pp.81-89: 81
[185] Ashmore, P, Craggs, R and Neate, H Working-with: 81
[186] Ashmore, P, Craggs, R and Neate, H Working-with: 81

preserve that just ended up there.[187] This observation indicates the need to consider both things intentionally preserved, as is often the case in official collections, and the accumulation of materials gathered together in other spaces, where accumulations occur with and without intent, and whose broader value might be considered archival.[188]

Harris notes that popular recollection of the Second World War was for a long time reflected in, and perhaps to a certain extent influenced by, contemporary academic and autobiographical accounts. Politicians and historians writing both during and after the war continually re-affirmed the image of the war as the cradle of the welfare state and as an epoch of unprecedented social and moral solidarity.[189] A combination of factors over the last two decades has led to increasing reassessment of many aspects of the conventional wisdom of the Second World War: the opening-up of many of the official and private archives of the war period and the sheer fact of judgmental distance and perspective as the war recedes inexorably into half-forgotten history are cited by Harris as the primary cause of this reassessment.[190] This judgmental distance and perspective, and the recent opening-up – at least to me – of the Cable and Wireless wartime archive allows for a new perspective, free from the immediate post-war victors interpretation.

Deserno notes that the archives of multinational companies are of great historical and social value.[191] They play an essential role in the formation of corporate memory, whilst at the same time they form part of the collective memory of our time and provide essential information on our current culture and society.[192] Cable and Wireless represent one of the first multinational companies of the modern era, and, as a result the archive of the company represents a unique insight into alternative narratives of the Second World War, relationships between government and private enterprise and the role of telecommunications in modern warfare.

---

[187] Steedman, C The Spaces of memory: in an archive *History of the Human Sciences* Vol. 11 (1998) pp.65-84: 67
[188] Ashmore, P, Craggs, R and Neate, H Working-with: 82
[189] Harris, J War and Social History: Britain and the Home Front during the Second World War *Contemporary European History* Vol. 1 No. 1 (1992) pp17-35: 17
[190] Harris, J War and Social History: 19
[191] Deserno, I The value of international business archives: the importance of the archives of multinational companies in shaping cultural identity *Archival Science* Vol. 9 (2009) pp215-225: 216
[192] Deserno, I The value of international business archives: 216

Presentation of information extracted from the archive is central to the methodology of archival working: some have opted for an autoethnographic style of delivery,[193] while others favour the telling of discrete stories that inform a larger narrative. [194] This thesis utilises a synthesis of the two approaches: an autoethnographic approach when examining the encounter with the intelligence services and the alternative methodology that this necessitated, and the use of vignettes to present wartime stories from the archive. The rationale behind this is twofold: first, drawing upon Haraway's work on the partial and situated nature of knowledge, emphasizing the opinion that an omniscient and detached observer stance is not possible within any kind of scholarly research: there is no view from nowhere, and as a result the research is both partial and situated.[195] Second, the use of discrete and detailed narrative interludes in the shape of vignettes has been favoured because of the scale and magnitude of the narrative of Cable and Wireless during the Second World War.

There are broadly two methodological debates concerning archival material. These are the realist approach, which involves gathering as great a volume of texts as possible and scouring them for details of 'who', 'when', 'where' and 'what', to use these texts as evidence – as a representation of reality.[196] According to Gidley,[197] this approach tends to take documents at face value and the problem with this is comparable to oral histories. Interviews are never completely transparent windows into present or past social reality, likewise nor are archived documentary sources, rather, they are socially produced.[198] The other approach is one of social construction, which sees archived texts as topics rather than resource. This approach is not concerned with the accuracy of the descriptions given in the documents, but in their social organisation. That is – how are different discourses

[193] See Bailey, A Brace, C and Harvey, D Three geographers in an archive: positions, predilections and passing comment on transient lives *Transactions of the Institute of British Geographers* No. 34 (2009) pp254-269
[194] See Lovell, WG Memories of Fire: Eduardo Galeano and the Geography of Guatemala *Geoforum* No.37 (2006) pp.31-40
[195] Haraway, D *Simians, Cyborgs and Women* Routledge (1991)
[196] Bailey, A Brace, C and Harvey, D Three geographers in an archive: 260; Gidley, B Doing Historical and Archival Research in *Researching Society and Culture* Sage Publications (2006): 254
[197] Gidley, B Doing Historical and Archival Research: 254
[198] Gidley, B Doing Historical and Archival Research: 254

(and the different identities which emerge from them) produced?[199] These two different approaches are connected at their root by the archive, which have been described as partial.[200]

Certain documents are archived, while others are not; some voices speak loud and clear in archival sources, while others are lost to the static of history. Where the two approaches are also joined is around issues of validity and authenticity; Scott suggests that an archived document should be judged by four criteria: first authenticity – is it genuine? Second, credibility – is it undistorted? Third, representativeness – is it typical of its kind? Finally, meaning – is the evidence clear and comprehensible?[201] More critical approaches to archival work would be cautious about deploying this group of criteria, as they suggest that there is a final, credible account of events.[202] By utilizing these four criteria, the authenticity of archival material can be reasonably asserted, and as Gidley notes, authenticity is a key issue for archival research.[203] The final point when considering the physical archival holdings is that of serialization and fragmentation.[204] The result of these two processes is that the materials in an archive are the traces of past events, and cannot be held up as the complete and whole narrative. While we can assemble some of the fragments of people's lives, business transactions and the relationship between government and private enterprise within the archive we again return to the notion that archives are partial.

The actual practices of the archive are largely uniform: from the National Archives in Kew to the Cable and Wireless archive in Porthcuno, there are some basic rules that must be adhered to. The first of these is the care one must take with documents – gloves are generally standard procedure – and books must not have

---

[199] Gidley, B Doing Historical and Archival Research: 254
[200] Gidley, B Doing Historical and Archival Research: 255; Gagen, E, Lorimer, H & Vasudevan, A eds. Practicing the Archive: Reflections on Method and Practice in Historical Geography HGRG, RGS – IBG. Historical Geography Research Series Vol.40 (2007); Lorimer, H Telling small stories: spaces of knowledge and the practice of geography *Transactions of the Institute of British Geographers* Vol.28 No.2 (2003) pp.197-217; Rose, G Practicing photography: an archive, a study, some photographs and a researcher *Journal of Historical Geography Vol*.26 No.4 (2000) pp.555-571; Withers, CW Constructing the Geographical Archive.
[201] Scott, J *A Matter of Record: Documentary Sources in Social Research* Cambridge Polity Press (1990): 6
[202] See, Gagen, E, Lorimer, H & Vasudevan, A eds. *Practicing the Archive*
[203] Gidley, D Doing Historical and Archival Research: 255
[204] Gidley, D Doing Historical and Archival Research: 261

their spines stretched. Second, the pencil is ubiquitous; under no circumstances must one use a pen. Finally food and drink are strictly forbidden. These rules for archival practice have been put in place for the preservation of the documents, to minimize the risk of accidental damage, but as Barnes notes:

> The physical manuscript is sacred. One should never rifle through carbon copied, onion-skin paper letters, crinkled yellowing mimeographed Departmental memos, and fading, badly typed graduate student essays written 75 years ago. But that is what I wanted to do (and ashamedly sometimes did, when no one was looking).[205]

As historical geographers working in the archive there are spoken and unspoken rules, set practices and rules that should be adhered to.[206] As Ashmore *et al* note, this raises questions about scholarly conduct and what is permissible in archive spaces and how such practices shape research and method, reflecting broader concerns about creation, custodianship and maintenance of archival collections.[207] As Bailey, Brace and Harvey note, the tactics and strategies that are used to consume archives are the partial product of research training, personal character traits and inculcated habits.[208]

Although, as de Leeuw observes, archival work is often with and about dead subjects, it would be erroneous to think the methods and methodologies of archival research were devoid of the complexities faced when working with living subjects.[209] Methods in historical geography are in various ways and increasingly drawing upon discussions across the discipline about deep personal and emotional connection with the subjects being researched and about small, intimate, biographies as a means of more completely understanding the complex, pluralistic, chance-filled and personal components that underpin – if not make up – broad systems of power.

The archival work that constitutes this research was interrupted by one such example of a chance-filled and personal encounter with the archival material. The

---

[205] Barnes, T Taking the pulse of the dead: history and philosophy of geography 2008-2009 *Progress in Human Geography* Vol. 34 (2010) pp.668-677: 668

[206] Ashmore, P, Craggs, R and Neate, H Working-with: 89; Rose, G Practicing photography: an archive, a study, some photographs and a researcher *Journal of Historical Geography* Vol.26 No.4 (2000) pp.555-571

[207] Ashmore, P, Craggs, R and Neate, H Working-with: 89

[208] Bailey, A Brace, C and Harvey, D Three geographers in an archive: 260

[209] de Leeuw, S Alice through the looking glass: emotion, personal connection and reading colonial archives along the grain *Journal of Historical Geography* Vol. 38 (2012) pp.273-281: 275

following section is comprised of excerpts from the research diary that was kept throughout the project. Through my own research interests, and the nature of Cable and Wireless' war work, the broad systems of power that create and maintain secrecy were momentarily glimpsed in the archive. *Archives of Intelligence* will provide the contextual background to the secret archive, while the section *Secrecy* will detail how this anti-epistemology impacted the research.

Archives of Intelligence

Davies notes that one of the least examined areas of British public administration is that of the intelligence and security services.[210] The main reason cited for this lack of examination is the limited number of sources publically available on the subject. Many MI5 files either have not been released, or have been destroyed. So too, with the Secret Intelligence Service (SIS, MI6) Britain's main human intelligence[211] agency from 1919. Little material is in the public domain on the organisation of SIS, its outstations and inner structure, its tradecraft, relations with and management of agents or internal analyses.[212] The little information that does make it in to the public domain offers an insight into a complex organisation that provided the intelligence for the Foreign Office, the Admiralty, the War Office, the Colonial Office and the Air Ministry.[213] There have also been questions raised in the past about the nature of the SIS archive, particularly concerning its possible destruction and custodianship for future generations. Harrison recalls a wartime conversation that sheds some light on to the mentality of SIS:

> On the 28th April 1941, Cowgill (SIS) told Comyns Carr of MI5 that 'I do not think it necessary under present circumstances to place on record in your section or in any other MI5 section a list of agents whom we [SIS] are employing in this country. The keeping of such records is always a danger even though the most stringent rules are made for their safe custody'. Cowgill was right that records were intrinsically insecure, he suggests the only way to achieve perfect security would be to have no records at all.[214]

There is a marked difference between MI5 and SIS when it comes to the release of information from their respective archives. MI5 is, in relative terms, far more open than the SIS and in recent years have released vast amounts of documents and files to the National Archive at Kew after a period of closure – generally fifty years. Both,

---

[210] Davies, P MI6's Requirements Directorate: 29
[211] Human Intelligence (HUMINT) as opposed to Signals Intelligence (SIGINT)
[212] Ferris, J 'Now that the Milk is Spilt': 529
[213] Davies, P MI6's Requirements Directorate: 32
[214] Harrison, E British Radio Security and Intelligence, 1939-45: 70

however, are exempt from the Freedom of Information Act.[215] MI5 and SIS are also exempt from the Public Records Act of 1958, which places a legal obligation on government bodies to transfer records to The National Archives; the Security Service (MI5) and GCHQ have placed some of their records in the National Archives, however:

> Because of the importance of protecting the identity of our sources, SIS maintains a policy of not releasing its records into the public domain. It is Service policy not to disclose the identities of individuals working for or cooperating with us.[216]

As a result of this blanket secrecy, scholars and researchers interested in understanding the role that British secret intelligence has played in government policy in the twentieth century face a frustrating problem: the records of the intelligence and security services are, for the most part, locked away; the issue of their eventual release is obscured by the language of never-never, and the reality of never-all.[217] Ferris states that this situation of limited source material magnifies the tendency to fetishise intelligence, which has given the study an aura of mystery, causing some military and diplomatic historians to view the matter with suspicion and other commentators to overstate its significance: the missing dimension is filled with trainspotters.[218] Wark offers various other sites from which it is possible to glean information on the intelligence services; these include archives in private hands and research libraries or among the printed pages of memoir literature.[219] However, he notes that these alternative sources will only ever provide fragmentary evidence, usually devoid of context. While it may be possible to identify alternative sites of reference in private archives, it should be noted that files pertaining to the SIS still fall within their remit, and can be closed.

The question of archival secrecy and what could or would be released to the public is not new; before the end of the Second World War, Britain's most senior intelligence official, Victor Cavendish-Bentinck, Chairman of the Joint Intelligence

---

[215] The Freedom of Information Act 2000, Part II: Exempt Information. 23: Information supplied by, or relating to, bodies dealing with security matters.
[216] SIS Website: https://www.sis.gov.uk/our-history/archive.html: accessed 12/06/2011
[217] Wark, W In Never-Never Land? The British Archives on Intelligence *The History Journal* Vol. 35 No. 1 (1992) pp.195-203: 199
[218] Ferris, J 'Now that the Milk is Spilt': Appeasement and the Archive on Intelligence *Diplomacy and Statecraft* Vol. 19 No. 3 (2008) pp.527-565: 530
[219] Wark, W In Never-Never Land?: 201

Committee turned his mind to the problem of the management of the past.[220] Aldrich notes that

> British records were certainly not a threat. Many would be burnt at the end of the war and others could remain under lock and key for decades. But in the summer of 1944, with the invasion of France under way, Italian, Japanese and German records were spilling out into the open from embassies and headquarters in the chaos of Axis retreat. Gradually, it dawned on the authorities that some of the most hidden aspects of the war were now in danger of seeping into the public domain.[221]

The release of this information, outside the control of the British intelligence services was problematic: if these enemy reports were compared to the official Allied histories it would quickly become apparent that the government must have been informed by 'special intelligence'. Some of the innermost secrets of the war – the successes of *Ultra* and the remarkable efforts of secret deception teams that helped to mask the D-Day invasion – might be revealed.[222]

The notion of 'policing the past' was embraced by the British government even before the end of the Second World War. Aldrich suggests that to simply lock the secrets away was not enough; instead, positive information control was required.[223] Official historians were recruited and were indoctrinated into the wartime operations and ordered not to 'betray' them in their writings. A further body was then created to review the work of the official historians and also to sanitise the memoirs of senior figures.[224] This policy of policing the past continued for the next fifty years, oscillating between the release of sanitised information – such as the work of the Special Operations Executive in Europe – and the suppression of the majority of the Security and Intelligence Service records. By the 1990s, the secret services recognised that the half-century that had elapsed since the Second World War provided a measure of safety. Always short of space, they were glad to transfer old records that looked increasingly inert. In 1992, SIS took the important decision to begin the process of releasing the Special Operations Executive (SOE) papers in its custody. MI5 and GCHQ also released large quantities

[220] Aldrich, R Policing the Past: Official History, Secrecy and British Intelligence since 1945 *The English Historical Review* Vol. 119 No. 483 (2004) pp.922-953: 925
[221] Aldrich, R Policing the Past: 925
[222] Aldrich, R Policing the Past: 925-6
[223] Aldrich, R Policing the Past: 926
[224] Aldrich, R Policing the Past: 926

of wartime papers, and have since released some Cold War material.[225] Both MI5 and GCHQ have, in recent years, released authorised official histories.[226] Aldrich concludes that

> From the authorities' point of view, official history remains by far the best way forward in the face of awkward declassification problems. On the one hand, secret services are imperilled if they do not keep themselves hidden… On the other hand, many historians feel impelled to investigate these secrets. In countries such as Britain and the United States, large secret services have formed an integral part of the core executive of government …To understand properly the inner thoughts and purposes of those at the highest level, it is essential to enquire into the role of intelligence. Accordingly, secret services will always enjoy an adversarial relationship with historical researchers on the outside who wish to achieve a comprehensive understanding of government.[227]

The release of material from intelligence archives that has traditionally been mediated through official histories is just one of the controls over the release of information in the arsenal of the government; the other is in legislation and the exemption from disclosure.

Harrison maintains that official history is a paradoxical genre.[228] To appeal to readers, he states, historians need to deploy all of the evidence that brings a particular issue to life, an approach which conflicts with the interests of departments that have particular requirements for secrecy.[229] This is manifest in the broad reaching opus *British Intelligence in the Second World War*, authored by Hinsley with others: the series seldom named individuals and, according to Harrison, this impersonal style makes it difficult to read.[230] Indeed, Winter describes the multi-volume official history as dry and depersonalized.[231] Sir Maurice Oldfield, the former head of the SIS called it 'a book written by a committee, about committees, for committees'.[232]

---

[225] Aldrich, R Policing the Past: 952
[226] See Aldrich, R *GCHQ* Harper Press (2011) and Andrew, C *The Defence of the Realm: the Authorised History of MI5* Penguin (2010)
[227] Aldrich, R Policing the Past: 953
[228] Harrison, EDR British Radio Security and Intelligence, 1939-43 *English Historical Review* Vol.124 No.506 (2009) pp.53-93: 53
[229] Harrison, EDR British Radio Security: 53
[230] Harrison, EDR British Radio Security: 53
[231] Winter, PRJ A Higher form of Intelligence: Hugh Trevor-Roper and Wartime British Secret Service *Intelligence and National Security* Vol.22 No.6 (2007) pp.847-880: 848
[232] Harrison, EDR British Radio Security: 53

While Hinsley's *British Intelligence* may be a difficult, impersonal series, it was authored within the remit of Official Secrecy and the fixed position of the security and intelligence services to neither confirm nor deny the identities of their operatives and operations. As this section has demonstrated, authors of official histories concerning the intelligence services are constrained in their work by the organisation that commissions the work.

The official histories of the intelligence and security services by Hinsley, and more recently by Aldrich in his study of GCHQ and Andrew, concerning MI5, offer a partial, mediated narrative of the histories of the United Kingdom's 'secret' organisations. These volumes, overseen by committees and with contents carefully screened, provide an invaluable foundation onto which the empirical material of this thesis can be built. At their most fundamental, these official histories provide a sanitized, redacted history, that serve to contextualize events during the Second World War, and the relationships between Cable and Wireless Head Office staff, and representatives of the British Government.

The Public Records Act of 1958 is the central legislative weapon in the arsenal of maintaining secrecy, which includes the fifty-year rule for the closure of government records, provide for exceptions and extended closure in the case of material with a bearing on 'national security'.[233] According to Wark, there are two sections of the Public Records Act that are relevant in this regard: Section 3 (4) and Section 5 (1). The former allows for documents to be retained by government departments for 'administrative purposes' (for instance, when they bear continuing relevance to the work of the department) or for 'any other special reason'. The latter provides for the extended closure of documents transferred to the public record office. The Lord Chancellor, the minister responsible for the operation of both the Public Records office and the Public Records Act, laid down in 1970 the criteria to be employed in granting extended closure. There are three such criteria; all of which have a bearing on government intelligence records:

(i) Exceptionally sensitive papers, the disclosure of which would be contrary to the public interest whether on security or other grounds;

(ii) Documents containing information supplied in confidence, the disclosure of which would or might constitute a breach of faith;

[233] Wark, W In Never-Never Land?: 195

(iii) Documents containing information about individuals, the disclosure of which would cause distress or embarrassment (later amended to 'danger') to living persons or their immediate descendants.[234]

With the standard closure of fifty-years, augmented by the extended closure for certain documents (as defined by the criteria above), the documents and archives relating to the security and intelligence services can effectively remain closed indefinitely. The situation was further reinforced in 1976 when the Lord Chancellor began to operate a system of providing 'blanket approvals' for the closure of records under Section 3 (4), specifically tailored for departments, which handled security and intelligence papers. This system allowed departments such as the Foreign and Commonwealth Office and the Ministry of Defence to retain whole classes of records without the need to provide a specific rational, without the need, in other words, to explain their 'special reasons' for wanting to do so. It thus became possible for departments to be secretive about their secret material.[235]

As discussed above, this secrecy is mediated and controlled through release of less sensitive information in the form of official or authorised histories and through the legislative framework that exempts information and documents relating to the security and intelligence services from both the Public Records Act and the Freedom of Information Act. Through these exemptions, the intelligence services are able to maintain a blanket withholding of-information from the public domain. Releases of information or official publications have undergone a rigorous filtering and screening to ensure that no sensitive information is published. This criteria for release is elucidated on the SIS website, under their 'Principles of Disclosure'. In their disclosure of records for the publication of 'MI6: A History of the Secret Intelligence Service 1909-1949' by Keith Jeffrey, the SIS stress that they have been careful 'neither to compromise national security, nor undermine the Government policy of neither confirming nor denying matters of intelligence interest (NCND).[236] In the Principles of Disclosure, the SIS specifies who, and what could be released into the public domain through the publication of the 'official history'.

[234] Wark, W In Never-Never Land?: 195-6
[235] Wark, W In Never-Never Land?: 196
[236] https://www.sis.gov.uk/our-history/official-history/principles-of-disclosure.html 'Principles of Disclosure': accessed 14/06/2011

Through these Principles of Disclosure, it is possible to discern the framework in which the official history of SIS was written. Information relating to agents could be released if it had already appeared in an official biography or archive, or the permission of the agent in question had been granted. Information regarding operations followed the same procedure: if the information has already appeared in the public domain it could be reused. Information relating to personnel or operations could only be released if there were no on-going concerns and no danger of compromising current, past or future operations.

Secrecy

Our knowledge is received wisdom: what we have been told, not what we have learned. Much remains to be found and some to be forgotten.[237]

Wexler describes secrecy as something that is both equally attractive and repulsive:[238] Lowry defines *secrecy* as the possession of special, hidden, and unacknowledged information.[239] Within any general culture of secrecy, a point of debate can arise for actors as to whether any particular item is – or should be – a secret.[240] Balmer notes that this raises conceptual questions about whether or not secrets have boundaries and the consequences of treating them as such; equally, he suggests, that although secrecy can usefully be construed as control of information flows, it is equally important to understand secrecy as a more complex set of social arrangements within which secrets are actively produced and which then define relationships.[241] This section examines the notion of secrecy – its social, spatial and political process; how it is enacted and performed, and how technologies of privacy actively and continually contribute to the production of multiple worlds.[242] This examination is necessary for two reasons: first, a number of the files in the Cable and Wireless archive were classified as secret and prepared in an atmosphere of secrecy during the Second World War, and second, owing to

[237] Ferris, J *The Road to Bletchley Park: The British Experience with Signals Intelligence, 1892-1945* Intelligence and National Security (2002) pp.53-70: 53
[238] Wexler, M Conjectures on the Dynamics of Secrecy and the Secrets Business *Journal of Business Ethics* Vol. 6 No. 6 (1987) pp.469-480: 470
[239] Lowry, R Toward a Sociology of Secrecy and Security Systems *Social Problems* Vol. 19 No. 4 (1972) pp.437-450: 438
[240] Balmer, B A Secret Formula: 694
[241] Balmer, B A Secret Formula: 694
[242] Balmer, B A Secret Formula: 695

the secret nature of these files and the government departments involved, the secrecy of the Second World War and the *need* for secrecy persisted to the present day. This section will demonstrate how the methodology of secrecy was enacted in the archive and through this research as an ongoing process, which has had an effect on the archival holdings at Porthcurno and the disclosure of the strategic and tactical roles of Cable and Wireless during the Second World War.

Balmer presents three questions, which he claims, are pertinent to studies of secrecy, these are: first, what makes knowledge dangerous? Second, how does secrecy operate to help produce knowledge that is dangerous or otherwise? Finally, what happens when nothing happens?[243] He argues that secrecy cannot be simply regarded as a negative phenomenon that obscures knowledge, but instead is an active tool that allows governments to define reality through the exercise of spatial epistemic power.[244] When Francis Bacon recognized that 'knowledge itself is power', he also realized that knowledge, like power, is unevenly distributed.[245] The control of information – by designating it as secret – is an exercise in power by, in this instance, the British Government and its security and intelligence departments. I will now examine the archives of the intelligence services, the disparities between departments, and the ways in which secrecy is created, enacted and maintained.

Davies notes that one of the least examined areas of British public administration is that of the intelligence and security services.[246] The main reason cited for this lack of examination is the limited number of sources that are publically available on the subject. Ferris observes that this situation magnifies the tendency to fetishise intelligence, which has given the study an odour of mystery, causing some military and diplomatic historians to view the matter with suspicion and other commentators to overstate its significance.[247] There is a marked difference between different departments and their attitudes to the archiving and releasing of information and files; MI5 has, in recent decades, released material to the National

[243] Balmer, B A Secret Formula: 692
[244] Balmer, B A Secret Formula: 692
[245] Wexler, M Conjectures on the Dynamics of Secrecy: 469
[246] Davies, P MI6's Requirements Directorate: integrating intelligence into the machinery of British Central Government *Public Administration*, Vol. 78 No. 1 (2000) pp.29-49: 29
[247] Ferris, J 'Now that the Milk is Spilt': Appeasement and the Archive on Intelligence *Diplomacy and Statecraft* Vol. 19 No. 3 (2008) pp.527-565: 530

Archive in Kew. MI6 (the SIS) – Britain's human intelligence agency – has officially released nothing.

As a result of this blanket secrecy and discretionary terms for release, scholars and researchers interested in understanding the role that the British secret intelligence – the missing dimension – has played in government policy in the twentieth century face a frustrating problem: the records of the intelligence and security services are, for the most part, locked away; the issue of their eventual release is obscured by the language of never-never, and the reality of never-all.[248] Wark offers various other sites from which it is possible to glean information on the intelligence services: these include archives in private hands and research libraries, or among the printed pages of memoir literature.[249] However, he notes, that these alternative sources will only ever provide fragmentary evidence, usually devoid of context. Alternative archival sources pertaining to the Secret Intelligence Services do still exist – as the following section will demonstrate – but it should be noted that files pertaining to the SIS still fall within their remit, and can still be closed or redacted at their discretion.

This raises the question of the rectitude of the researcher: upon the discovery of files pertaining to the SIS, should one use and publish the contents, and hang the consequences; or alert the department to the existence of the files and suffer the potential results – closure and/or redaction? In order to address this, I will examine this dilemma through the work of Zamir and his study of the security services in Syria and the Lebanon during the Second World War. This is by way of a counterpoint to my own approach to the secret documents utilized in this research.[250] Zamir's approach was to publish and damn the consequences,[251] while my own was to liaise with the security services and submit to their control.

In his 2010 study of the British intelligence services 'secret' war against France in Syria and the Lebanon, Zamir utilizes documents pertaining to the SIS found in a

[248] Wark, W In Never-Never Land? The British Archives on Intelligence *The History Journal* Vol. 35 No. 1 (1992) pp.195-203: 199
[249] Wark, W In Never-Never Land?: 201
[250] Zamir, M The Missing Dimension: Britain's Secret War against France in Syria and the Lebanon, 1942-45 *Middle Eastern Studies* Vol. 46 No. 6 (2010) pp.791-899
[251] The consequence of disregarding – or breaking – the Official Secrets Act is prosecution under criminal law in the case of material that the government believes to be harmful to national security. Under the Act, it is not a crime to disclose information that is already in the public domain.

French archive.[252] Like the documents at Porthcurno, these wartime files represent a discrete portion of the archives of the intelligence services that Wark suggests can be used in examining the 'missing dimension' – archives in private hands that have evaded the scrutiny of the intelligence services. It is important to note that the equivalent British documents – those produced by the SIS or MI5 would simply not be accessible in the United Kingdom: they would not have been released to the National Archives.

Zamir observes that the documents uncovered in the French archives offer a unique insight into the secret activities of the British intelligence agencies during and after the war.[253] For the first time, he states, we have direct access to uncensored SIS documents that shed light on recruitment methods, names of intelligence officers and agents, and the type of information required of them.[254] Zamir takes the information held in the archive and publishes it wholesale; the latter part of the paper is made up entirely of reproductions of original documents, which name names and detail work undertaken on behalf of the SIS.

The publication of original documents and the identification of agents run abroad – and the operational techniques they used – runs contrary to the intelligence service's Principles of Disclosure, which state that:

i) SIS will neither confirm nor deny the names of serving or former officers during their lifetimes, with the exception of C, whose name is announced publicly on appointment. The strong presumption is that this policy continues to apply after the death of an officer or former officer. An exception to this would be if the name of an individual officer serving between 1909 and 1949 has already appeared in an official or approved history or been released to an official archive.

ii) It is SIS policy not to disclose the names of agents; however, if an agent has given their agreement either in person or in testament or if an agent's relationship with SIS has already been disclosed by a foreign government their name may be released, but only if SIS has judged that

[252] The archive utilized by Zamir is never explicitly named; however, accession numbers would indicate that it is the archive of the Ministry of Foreign Affairs, Nantes, France.
[253] Zamir, M The Missing Dimension: 793
[254] Zamir, M The Missing Dimension: 793

there are no on-going operational or political sensitivities and no risk of detrimental impact on the United Kingdom's vital interests.

iii) Information regarding the operations of SIS between 1909-49 have only been released where the operation, operational technique or methodology used does not compromise the security of subsequent, current or future operations, or where the operation has already been released to an official archive or authorised biography.[255]

Zamir's approach of publishing documents from the archive wholesale runs counter to SIS disclosure guidelines and is potentially irresponsible; if one was prone to melodrama, 'outing' British run agents in the middle-east could endanger the former agent themselves, or their surviving family: the researcher must surely be informed by an ethical responsibility.

O'Halpin has first hand experience of the use of redacted files, and highlights the inconsistent nature of the redaction process whilst considering the Liddell Diaries. Liddell was an intelligence officer with MI5 from the 1930s to his death in 1958, and throughout this time kept a detailed daily diary, which has been redacted and released to the National Archives. O'Halpin notes that in the earlier volumes of the diaries, redactions are usually confined to blanking out individual names, but in later ones more text has been withheld.[256] He posits two possible reasons for the increased redaction in the diaries; first, it may reflect sensitivity about aspects of the discussions on post-war intelligence organization. Second, and here he makes a key point, historians must beware of imputing too much rationality to the excision process: it may simply be that the volumes covering 1944-45 were policed by a more neurotic hand unaware of or critical of the lighter touch applied to the earlier ones.[257]As an alternative to Zamir's methodology of publishing and disregarding consequences, I will detail the methodology of secrecy that informed and, to a degree, defined the empirical chapters in this thesis. This methodology involved co-operation with the intelligence services, the redaction and closure of material, and a glimpse into a rarely seen world of secrecy in action.

---

[255] https://www.sis.gov.uk/our-history/official-history/principles-of-disclosure.html 'Principles of Disclosure': accessed 14/06/2011

[256] O'Halpin, E The Liddell Diaries and British Intelligence History *Intelligence and National Security* Vol. 20 No. 4 December (2005) pp.670-686: 676

[257] O'Halpin, E The Liddell Diaries: 676

Redaction, like the notion of secrecy, is inconsistent in its application and elusive in theory: a name can be redacted in one context, but be completely benign (and therefore unredacted) in another, thus making the whole process fraught with second-guess work. The process of redaction was experienced and performed during the research for this thesis and necessitated the adoption of Rappert's blackening out approach.

Methodologies of Secrecy

A number of the files in the Porthcurno archive detail a relationship between Cable and Wireless and the secret intelligence services of the United Kingdom during the Second World War. All such files are marked 'Secret' or 'Most Secret'; the standard with secret files is a period of closure, which is generally fifty years. Given the content of these files, I contacted the National Archives in London to request clarification; the Copyright Officer there was unable to offer a conclusive answer, but suggested that the departments concerned would be able to give a final decision on the status of the files. I then sent emails to both MI5 and SIS in February 2011, detailing the nature of the archive and the contents of the files. This marked the start of an anxious three-month wait, in which the wartime files were closed to the public on the order of one of the departments – it was never made clear which. There was an exchange of letters and emails, and later phone calls, between the museum, Cable and Wireless and various departments in the government, each increasing in anxiety to find out the exact extent of the archival holdings and exactly what my project was examining. On the 1st of June 2011 the situation reached crisis point, and Alan – the then curator of the archive – received a communication to the effect that the wartime files were to be placed in safe stowage and closed to the public with immediate effect: 'someone' would be coming down to the museum to examine them on the 13th and 14th of June.

This closure caused something of a hiatus in the research: it was quite conceivable that all of the wartime files would be closed and taken to London – all work ceased. On the 14th of June a meeting was convened between the gentleman from the government, Alan and myself. Excerpts from the research diary kept throughout the project will be utilised in order to detail the events that took place.

> It was first explained, that the situation that we found ourselves in was unique – his department had never come across anything like it before, the archive of a multinational business with such comprehensive records of,

> and with the intelligence and security services – so we were all effectively muddling through as best we could, he said. He also said that he had been through about twenty of the wartime files, along with the ten that I had indicated to be the most sensitive (in my opinion). Of his rationale he made no mention, but as far as I could gather it was people, places and specific *things*.[258]

The result of his examination of the files was evident: emerging from the open ends of the binders were post-it notes, each with a clear copperplate note, detailing the 'offending' portion of the document. These notes, on closer examination, were broadly in line with the SIS Principles of Disclosure. It was explained that the indicated parts of the document would have to be redacted before the files could be opened to the public again, and, in one or two exceptional cases, whole documents would have to be retained – removed from the file and placed in safe stowage.

> Our man from London wanted to know if I would undertake the task of 'redacting' the files. He explained the practice to me: the offending page is removed from the file, and the name, sentence or paragraph that needed to be redacted is covered over with sticky-paper. The whole page is then photocopied, the resulting facsimile is then effectively 'cleared' for public consumption. The original, with sticky-paper removed, is placed in a separate file and secured safely, whilst the clear-copy takes its place in the file. The rationale behind this was that in ten, thirty, fifty years, (ever?) when the files could be released, the original – un-redacted – copies could go back in to their original files.[259]

I accepted the task for a number of reasons – not least because if it were refused, the work would have to be undertaken by someone else, which would necessitate a further delay in accessing the wartime files again. Another motivation was that by doing the redaction work, I would see exactly what was being removed and what would still be of use to the research.

> Following my acceptance, we then went through one of the files – Foreign Office General – and the scope of the task became apparent. In this one file, there were no less than fifty documents that needed names, paragraphs or whole pages removing…[260]

In this one file, substantive parts of the material of relevance to my thesis were being removed: narratives concerning the wartime work of Cable and Wireless were being excised from history – potentially forever. The final extract from the research diary reflects on this situation:

---

[258] Cable & Wireless 2010-11 (Research Diary 1): 14th June 2011
[259] Cable & Wireless 2010-11 (Research Diary 1): 14th June 2011
[260] Cable & Wireless 2010-11 (Research Diary 1): 14th June 2011

> Without doubt, the material I will be removing from the files is clearly still sensitive and as such I am prevented from disclosing it under Section 1: Security and Intelligence of the Official Secrets Act.[261] There are now pieces of information that I was using to demonstrate the strategic and tactical role of the Company during the War, which were now un-publishable; will this affect the validity of the project? Will it be possible to discuss the wartime work of the Company and provide any kind of analysis, knowing that there were a handful of events that I know took place, but cannot impart in the research?[262]

The process of redaction began in June 2011 and involved extracting the offending document from the file, obscuring the portions that required removal with sticky paper, and photocopying the original onto acid-free paper. The redacted copy would be replaced in the archival file and the original placed in safe stowage. This process took two months, and was supplemented by a conservation task for the museum: the original wartime ring binders were not conducive to long term preservation. As a result, as the files were removed, each page was numbered so the correct historical sequence could be maintained. The numbered originals and redacted copies were then placed in archive envelopes, with the original wartime binders kept as part of the archive.

I maintained a furious pace throughout the redaction process: until it was finished, no further work could be undertaken on the research. As for the work itself, it afforded an insight into the material that various government departments still considered sensitive enough to be redacted from public view seventy years after the events. It also called my attention to documents that I had previously considered innocuous. The nature of the material that was redacted – and thus still considered sensitive – was broadly in line with the criteria detailed on the SIS website: the names of agents and operations, or operational techniques that still have a bearing are not, and would not be disclosed. Where there was doubt in the archival material as to the department a particular letter had come from – for instance, the anonymous 'Room [redacted], The Foreign Office', which was later revealed to be Bletchley Park – the redaction of the name and signature of the author immediately highlighted the fact that the person was, in all likelihood, in the employ of MI6 – the Secret Intelligence Service. This information served to contextualize the material, and encouraged a closer reading than it would perhaps ordinarily have received.

---

[261] Official Secrets Act 1989: Section 1 – Security and Intelligence.
[262] Cable & Wireless 2010-11 (Research Diary 1): 14th June 2011

One result of the redaction work is that an important group of archival resources could not be used to support the research: this was comprised of a series of letters exchanged between Cable and Wireless, the SIS and the Manager of an overseas station. These documents, rather than being subjected to the redaction process had simply the word 'RETAIN' written on them: they were removed from the archival record in their entirety. As a result, there is at least one facet to the strategic and tactical role of Cable and Wireless during the Second World War that cannot be discussed, nor contribute to the overall analysis. While the contents of these files cannot be discussed, their existence does demonstrate that Cable and Wireless were involved in secret operations in concert with MI6, the nature of which must remain obscured. This again posed the question of how complete a narrative the research could convey; following the redaction work in the archive the partial nature of the research was prescribed. Rappert's 'blackening out' technique for managing the disclosure of information – and highlighting to the reader that redaction had taken place – would be impossible in the instances of retention, as the documents have been removed from the archive and there is nothing left to blacken.

The encounter with British Intelligence concluded in April 2013, following the receipt of a letter (see Figure 1). There was a degree of uncertainty regarding the ultimate fate of the redacted documents – the museum wanted to hold them in safe stowage, while the intelligence services wanted them in their own archive in London; Cable and Wireless, however, remained silent on the subject. Ultimately it was decided that the files would be handed over to the Ministry of Defence, for safe stowage. In true Le Carré fashion, a meeting was arranged between Porthcurno archive staff and the man from the government at, Penzance train station. One would identify the other by their blue raincoat. The exchange was made, before each went off in separate directions: one on the return train to London, and the other back to Porthcurno.

As this narrative of scrutiny, redaction and retention shows, the notion of secrecy is central to this thesis for a number of reasons. First, much of the work undertaken by Cable and Wireless during the war was secret in nature. Second, the archival material was, and in some cases, still is sensitive and therefore secret. Finally, the secret nature of the wartime work and the archival material led to an

encounter with the intelligence services that created a fracturing of space into regions of knowledge and ignorance.[263] According to Balmer, within any general culture of secrecy, a point of debate can arise for actors as to whether any particular item is (or should be) a secret.[264] This raises conceptual questions about whether or not secrets have boundaries and the consequences of treating them as such: it suggests that although secrecy can usefully be construed as control of information flows, it is equally important to understand secrecy as a more complex set of social arrangements within which secrets are actively produced and which then define relationships.[265]

Throughout the early archival research for this project – before the involvement of the government – there had been many conversations between supervisory staff and family members about the archival material. After the gentleman from London's visit, there were a number of subjects and operations undertaken by the Company during the War that were now off limits and could be discussed no further. There was also a general understanding that the Official Secrets Act applied to the project and those associated with it. Family, friends and supervisors are bound, through this research, into the process of secrecy. Contrary to popular belief, one does not have to 'sign' the act; the undertaking that people often refer to as 'signing the Official Secrets Act' is actually a reminder of the individual's obligations to this piece of legislation. As an Act of Parliament, one is bound by it by virtue of being in this country and subject to the law of the land.

Secrecy is difficult to conceptualise in terms of a methodological approach: it can be defined as an anti-epistemology that seeks to obscure knowledge; it is a process that is applied to documents, archives and conversations. Secrecy is also enacted in tentative and deliberate ways; often what is unsaid carries far more meaning than that which is spoken aloud. The notion of secrecy fractures spaces into knowledge and ignorance, power and weakness. Secrecy, like power, can be enacted over distance at a remove; indeed, power creates secrecy, and secrecy (re)enforces power: it is not simply the control of information flows.

[263] Balmer, B A Secret Formula: 694
[264] Balmer, B A Secret Formula: 694
[265] Balmer, B A Secret Formula: 694

MINISTRY OF DEFENCE

PO Box 1680, London, SW1P 1ZE.
Telephone 020-7218 9048

Porthcurno Telegraph Museum,
Eastern House,
Porthcurno,
Cornwall TR19 6JX

Your reference

Our reference: Porthcurno

Date 18 April 2013

Dear ,

Thank you very much for your help in coordinating Ben Oldcorn's redactions of the many items in your archive which I flagged for redaction. Thank you, too, for delivering the originals to me in Penzance earlier this week; I acknowledge receipt of a file box containing a number of envelopes of the papers concerned. I have not checked them in detail – there is nothing to check them against – but I have no reason to suppose that all is not in order.

As I said when we met, would you kindly thank Ben on my behalf? If as a final check, and perhaps to set his mind at rest, Ben would like to send a copy of the draft of his PhD thesis we would undertake to read it rapidly to ensure that there is nothing likely to cause a problem.

Lastly, I mentioned that I shall shortly be retiring. My successor will be who will act as a point of contact if you or Ben need one in the future and can be reached at the address and telephone number at the head of this letter.

Many thanks again for your help.

Good wishes,

Yours sincerely,

Figure 1 The End of the Story: letter of confirmation from the Ministry of Defence

Oral Histories

…How the big history accounts of wartime can be supported or challenged by the experience of everyday existence.[266]

When presented with the challenge of archives that are partial, historical geographers have looked creatively at finding ways to tell hidden histories;[267] oral history is one of these creative methodologies. At their most fundamental, oral histories are the recounted memories of people who experienced an event, or a period of history first hand. However, the notion of an oral history has a long and contested genealogy and, as Harvey notes, the term is often used as an all-encompassing short hand both for the practices of interviewing or recording oral testimonies, as well as the resulting testimonies themselves – either in recorded or transcribed form.[268] Harvey and Riley also provide the definition of oral history, which is the form of a life history, which can be defined as an account of a person's life based on spoken conversation and interviews. This is defined further through the concept of the topical life history, which focuses upon one aspect of a person's life.[269] The value of these topical life histories lies in their roots – they are rooted in real experience and are, therefore, capable of generating wholly fresh sociological insights as opposed to the self-reflecting answers of predetermined questions.[270]

A criticism of the use of oral histories is the suggestion that there is no such thing as pure recollection, and that memory becomes re-written over time.[271] As a way of countering and exploring this re-writing of memory, Yow suggests the following analytical approach, whereby researchers should look for the way in which the speaker organizes the past, present and future time during an interview; the way in which the speaker describes himself or herself in relation to the past; the way in which the speaker describes, or fails to describe, interaction with objects and persons of the past and the interaction of the two sets of scripts, the historians and

---

[266] Harvey, D & Riley, M 'Fighting from the fields': developing the British 'National Farm' in the Second World War *Journal of Historical Geography* Vol. 35 (2009) pp.495-516: 496
[267] Driver, F Hidden histories made visible? Reflections on a geographical exhibition *Transactions of the Institute of British Geographers* Vol. 38 No.3 (2013) pp.420-435
[268] Harvey, D Oral Histories and Farming Practice *Social and Cultural Geography* Vol.8 No.3 (2007) pp.391-415: 392
[269] Harvey, D Oral Histories: 393
[270] Harvey, D Oral Histories: 394
[271] Hobsbawm, E *On History* Weidenfeld and Nicolson (1997); Thompson, P *The Voice of the Past: Oral History* Oxford University Press (1988)

the speakers.[272] The scripts to which Yow refers are the cultural scripts that both the interviewer and interviewee carry with them, that dictate how they act, respond to questions and remember events. In the case of using oral histories recorded by another party, there is a third script to consider – the researcher – and this, Yow states, requires considerable self reflection.[273]

Approaching Third Party Oral History Transcripts

This thesis utilizes the oral history recordings and transcripts that are held in the Porthcurno archive. There are seventy-eight catalogued oral histories, held on cassette, DAT tape and in transcribed format.[274] Cable and Wireless recorded these interviews between 1992 and 1999 as part of the Company's Oral Histories project, which captured the memories of over a hundred individual former employees.[275] The interviews and recordings were conducted by a David Souden and have been published in two volumes, *Voices Over the Horizon* and *Voices of Change*. Souden states that:

> Every business is composed of individuals, each with his or her own part to play in the enterprise. Some are blissfully unaware of wider political and economic realities, others are only too well aware. Political and economic realities, others are only too well aware. People and personalities frame a business's endeavours, whether the tasks they perform are mundane or instrumental in shaping its politics and destiny.[276]

In this the motivation for the Oral Histories Project can be found: Cable and Wireless wanted to preserve, for posterity, the role of individuals in the Company's history. It is through individuals and their memories that Cable and Wireless's story is told, using selections from interviews recorded with the men and women that have worked for, or were associated with Cable and Wireless. The resulting archive, it is noted, contains something in excess of two million words.[277] In the two published volumes, Souden observes that

> The speech has been tidied up to a limited extent to improve its readability. That has been kept to a minimum and for the most part stories are reproduced verbatim, pithy or lengthy as circumstances and speaker dictate.[278]

---

[272] Yow, V Recording Oral History: 284-5
[273] Yow, V Recording Oral History: 285
[274] Accession Numbers DOC/CW/5/250 to DOC/CW/5/327
[275] Souden, D *Voices of Change*: x
[276] Souden, D *Voices of Change*: ix
[277] Souden, D *Voices of Change*: x
[278] Souden, D *Voices of Change*: x

This 'tidying up' of speech necessitated the methodological approach that was utilized in this research. After consulting the index to the oral histories, which details the dates of the individuals company service and the topics covered in the interview, the transcription was read in full. If this contained information that could be used to inform the textual archival material, the interview was listened to and my own transcription made. While this was undeniably a lengthily process, it highlighted any of Souden's 'tidying up', and allowed me to hear the entire interview in an unedited way.

The validity of oral histories is of prime concern to researchers; this will be obtained by comparing reports by the participant with other primary sources, such as written documents, published work and archival sources that are contemporary to the period. Recognizing the limitations of memory, and the nature of what is remembered and how, oral histories and the oral record are an essential resource for documenting the personal and lived experience. Wall notes that in oral history, time allows interviewees to rewrite events in their own minds, and recall what they now think their actions were. What the interviewees choose to remember is for public consumption, and more private memories are not likely to be revealed. Care must be exercised, because of oral histories' inherent subjective quality and the problems with selective memory.[279] Utilizing primary source material to contextualize and, to an extent, fact-check oral histories, the subjective and selective nature of oral histories can be mediated; however, one must be conscious of the fact that both oral histories and the archival record are open to interpretation by its author or the reader. Oral histories and the archival material are used together in this research, in a supporting capacity. Their potential unreliability does not, however, reduce the value of oral histories in creating a lived and populated narrative.

Narratives of the Second World War, particularly those concerned with secret activities and – often – the less glamorous and more mundane day-to-day work are riven with what Alexander calls 'historical silences'.[280] These, he states, can at times be marginalized and at best excluded, through a sensitive configuration of material evidence with oral history. Oral reflections, especially when shaped by

[279] Wall, B Textual Analysis: 280
[280] Alexander, B Excluding Archival Silences: oral history and historical absence *Archival Science* Vol. 6 (2006) pp.1-11: 1

material evidence, can be an effective tool for preserving the dynamics of a culture that often remains undocumented.[281] Through the use of oral histories this research will seek to preserve and explore the dynamics and narratives of a culture and period of time that is tentatively close temporally, yet historically distant and discrete.

While oral histories and archival material cannot be considered definitive accounts of the past, oral histories are an invaluable primary source that serves to exclude Alexander's archival silences, and can create populated and lived narratives out of documentary archival sources. It is in this capacity that they will be used in this research – telling personal narratives that supplement the events in the historical record. By centering the oral histories in their historical context, while at the same time being mindful of their creation in the modern day, their use can be justified in the exploration of the strategic and tactical role of Cable and Wireless during the Second World War; after all – what is history without people? It was the employees of the Company that took part in the wartime work, and as a result, their memories – no matter how subjective, partial or selective – must be included.

Conclusion

This section has sought to identify and discuss the methodological approaches utilized in the research; these are the archive, oral histories and secrecy. The first two are the methodologies of *doing* the research, while the third was the theoretical and methodological consideration that was imposed on the project. By defining the archive at Porthcurno as a privileged site to which records are officially consigned and in which they are guarded by legal authority,[282] and, more specifically a classical archive, which can be characterized as a discrete collection of documents giving original evidence about an historical event or figure,[283] a framework is provided through which archive material can be explored and used. The supplementary considerations of how one actually works in the archive, and the considerations that must be given to the material itself – is it genuine, serialized, etc. – have also been discussed.

[281] Alexander, B Excluding Archival Silences: 1
[282] Lynch, M Archives in formation: privileged spaces, popular archives and paper trails *History of the Human Sciences* Vol. 12 No. 2 (1999) pp65-87: 65
[283] Lynch, M Archives in formation: 75

The accepted use of oral histories in historical geography to tell alternative, personal and lived narratives to historical events has also been discussed, along with the caveats and cautions synonymous with the approach. There is no such thing as pure recollection, and that memory becomes re-written over time;[284] as a way of mediating these concerns, there has been a discussion of the analytical approach defined by Yow. The oral histories utilized in this research are already recorded and can be found in the Porthcurno archive, as both transcripts and audio recordings, as a consequence of this, a discussion of textual analysis has provided one method of examining the material.

The final subject discussed in this section is that of secrecy, and the different ways in which it is manifest throughout the research. From the straightforward control of information flows, through to the way it is enacted physically, through people, understandings and the archive. The notion of secrecy was persistent throughout the research, from the archival documents to the effect that it had on the final form and subjects of the empirical chapters in the following thesis. By utilizing Rappert's blackening out approach, this secrecy is highlighted within the research.

These three methodologies provide the theoretical tools with which the research was conducted; when taken in conjunction with the contextual review of the literature in the preceding chapter they provide the theoretical and contextual foundations upon which the research can be built. Focused and located within the traditions of historical geography, and utilizing the approaches congruent with this discipline, what follows is an historical geography of the strategic and tactical role of Cable and Wireless during the Second World War.

[284] Hobsbawm, E *On History* Weidenfeld and Nicolson (1997); Thompson, P *The Voice of the Past: Oral History* Oxford University Press (1988)

4. Placing Cable and Wireless: telegraphic histories

Communications Context

Headrick states that throughout history, governments have invested enormous sums in communications networks designed to bind their far-flung outposts into cohesive empires. He notes that:

> Even the earliest empires considered effective communications essential to their survival. King Darius of Persia built a 1,677 mile-long Royal Road from his capital Susa to Sardis on the Aegean Sea and posted fresh horses every dozen miles for his couriers.[285]

The Romans also understood the need for efficient communications: using their network of roads and relay stations, couriers of the *cursus publicus* carried government messages and important officials traveled at government expense. Likewise, the Incas built a network of 25,000 miles of graded footpaths along which runners carried messages throughout the empire.[286] From the 1800s, such networks have been essential elements in the formation of the global economy; and, according to Headrick, the most complete of all networks was the one that the British built in the nineteenth century to communicate with and control the far-flung colonial empire.[287]

Telecommunications are now commonly accepted as an essential tool of empire for colonial powers,[288] giving value to a handful of largely deserted islands in the most isolated parts of the world through the establishment of cable stations that connected the submarine network, and in the case of the British Empire, helping empires to expand. More important was the fact the cable and wireless communications served to tie European empires together:

> In times of peace they were the lifelines of the ever-increasing business communications that bound imperialist nations to their colonies around the world. In times of crisis, they were invaluable tools of diplomacy. And in times of war, communications were security itself.[289]

Given the prevalence of European empires in the nineteenth century, it is immediately possible to see the need for improved communications. In most

---

[285] Headrick, D A Double-Edged Sword: Communications and Imperial Control in British India *Historical Social Research* Vol. 35 No. 1 (2010) pp.51-65: 51-2
[286] Headrick, D A Double-Edged Sword: 52
[287] Headrick, D A Double-Edged Sword: 52
[288] Yang, D Telecommunication and the Japanese Empire: a Preliminary Analysis of Telegraphic Traffic *Historical Social Research* Vol. 35 No. 1 (2010) pp.66-89: 66
[289] Yang, D Telecommunication and the Japanese Empire: 66

European countries the telegraph system was run as a state monopoly, almost from its inception. The telegraph was considered to be of critical military and political importance, and no important lines were constructed by private enterprise.[290] In France, for instance, the first electric telegraph line was constructed by the government for its own use in 1845, and not until November 1850 was public use allowed, with priority for official dispatches.[291]

Telegraphy marks the technological detachment of complex (tele)communication from transportation. Although communication systems based on acoustic or visual information transmission – such as fire beacons or drum and smoke signaling – had been in use for millennia, only the development of telegraphy eventually allowed for the dematerialized communication of flexible, non-pre-arranged messages over large distances. With the help of both technological advances in the handling of electricity and the systematic improvements of the codes used in the process, complex content now travelled faster than any known means of transport ever could. It was this detachment of communication and transportation that created a virtual space of information and information flows that did not need physical presence or movement and thus freed communication from many of its former limitations.[292]

Prior to the advent of the electric telegraph, information could only travel at the speed of the fastest ship. An example cited by Standage is the transmission of news around the world:

> The *Times* of London had a particularly extensive network of foreign correspondents, so that its largely business readership could be kept informed of overseas political developments that might affect trade. Foreign reports also reported that arrival and departure of ships and detailed their cargoes. On 9 January 1845, the *Times* included reports from Cape Town that were eight weeks old and news from Rio that was six weeks old. The delay for news from New York was four weeks, and for news from Berlin a week. And the *Times* was a newspaper that prided itself on getting the news by the fastest means possible…[293]

Telegraphy as a means of communication has its origins in the eighteenth century and was initially a mechanical and optical method for transmitting signals along a

---

[290] Lubrano, A *The Telegraph: how technology innovation caused social change* Garland Publishing (1997): 98
[291] Lubrano, A *The Telegraph*: 98
[292] Wenzlhuemer, R The Development of Telegraphy, 1870-1900: A European Perspective on a World History Challenge *History Compass* Vol. 5 No. 5 (2007) pp.1720-1742: 1722
[293] Standage, T *The Victorian Internet* Walker and Company (1998): 147

chain – much like the fire beacons of the Elizabethan era.[294] In 1773 the French government provided the first public funds to Claude Chappe for the construction of an optical telegraph that would provide a communications chain throughout the country. The system proved effective and was used to inform Paris of the outcomes of battles.[295] Napoleon recognized the usefulness of high-speed communications for military campaigns and invested heavily in the new technology: by 1842 the French War Department operated a 3,000-mile optical telegraph network.[296] Not only was this network utilized by Napoleon for the conduct of military campaigns, it was also utilized in the transmission of false information: on his return from exile he seized one of the telegraph stations and transmitted to Paris that he had been vanquished; while the Bourbons breathed a sigh of relief, Bonaparte was actually marshaling his forces and marching on the capital – arriving at the gates largely unannounced.

Rapid developments in the understanding of electricity and magnetism in the nineteenth century allowed for the evolution from optical to electrical telegraph. In the early 1800s many telegraph pioneers experimented with various systems and arrangements of circuits; the first single circuit electromagnetic telegraph was built by Baron Pavel Shilling, a Russian diplomat who exhibited his system in Bonn in 1835.[297] So successful was his system, the Tsar of Russia asked Shilling to draw up plans for an undersea telegraphic connection between the naval base at Kronstadt and St Petersburg; this never materialized and Shilling died in 1837. The first commercially viable electric telegraph was that of Cooke and Wheatstone, which followed the same principles as Shilling, Gauss and Weber. The system was successfully patented in 1837 as 'Improvements in Giving Signals and Sounding Alarms in Distant places by means of electric currents transmitted through Metallic Circuits.[298] This system, coupled with the code devised by Morse in 1844 meant that for the first time it was possible to transmit a message of any length over vast distance – assuming that the cable infrastructure was in place.

---

[294] Solymar, L *Getting the Message: a history of communications* Oxford University Press (1999): 27

[295] Wallsten, S Returning to Victorian Competition, Ownership and Regulation: an empirical study of European telecommunications at the turn of the twentieth century *The Journal of Economic History* Vol. 65 No. 3 (2005) pp.693-722: 696

[296] Wallsten, S Returning to Victorian Competition: 697

[297] Solymar, L *Getting the Message*: 52

[298] Solymar, L *Getting the Message*: 53

The first practical application, however, was in parallel to another expanding communications network – the railway. It was applied for the first time on the Great Western Railway in 1839, and a contemporary report noted that the system was

> Useful for engine drivers, it prevented a number of accidents; helped greatly the efficient running of the railways...[299]

Expansion of the telegraph network continued along the railway lines, connecting cities and towns, until in 1867, the prospect of nationalization appeared over the horizon of what had been – in the United Kingdom at least – an otherwise private venture. On the 28 January 1870, the Post Office assumed control of all telegraphic communications, lines and operations. During the first year the number of telegraph offices increased by approximately fifty per cent in major cities. In London the increase was from ninety-five to three hundred and thirty four offices. By 1872 the system comprised of more than five thousand offices including the railways and the length of wires reached eighty-three thousand miles.[300] Post Office control of the telegraph network also standardized time throughout the country with the distribution, via the telegraph, of the Greenwich Time Signal; in 1872 this was formalized and all Post Offices throughout the country were instructed to maintain this uniform time.[301]

The next, and perhaps most vital, telegraphic milestone occurred in 1850 when the Brett brothers raised sufficient funds from private capital to lay a cable under the English Channel and successfully connected Britain to continental Europe for the first time. On connection Queen Victoria and Louis Napoleon immediately exchanged greetings. The connection however was short-lived and lasted only a few hours; the failure was blamed on a French fishing vessel:

> The fisherman caught the cable in his net, cut off a piece and showed it to his friends as the new kind of seaweed with a golden centre.[302]

The Brett brothers were unable to recover the cable and as a result a replacement was laid the following year – this time it worked successfully for thirty-seven years.

---

[299] Solymar, L *Getting the Message*: 55
[300] Solymar, L *Getting the Message*: 66
[301] Morus, I 'The Nervous System of Britain': Space, Time and the Electric Telegraph in the Victorian Age *The British Journal of the History of Science* Vol. 33 No. 4 (2000) pp. 455 – 475: 469
[302] Solymar, L *Getting the Message*: 69

By 1857 there were direct submarine communication links from the UK with Holland, Germany, Austria and Russia. The next target in the sights of the submarine telegraph pioneers, who, it should be noted, were still private ventures, was a submarine cable to the United States, crossing the Atlantic.

As a commercial venture the Atlantic cable was an important enterprise, but it was also of interest to the British Government, who offered a subsidy of £14,000 per year during its working life, technical help by the Royal Navy, and the loan of warships.[303] The first attempt in 1855 was abandoned due to a broken cable, but the second attempt in 1858 was a success; again, Queen Victoria exchanged greetings with the President of the newly connected country. The cable quickly deteriorated and stopped working a few months later: the total number of messages passed was seven hundred and thirty two. Following another failed attempt in 1865, the 1866 cable again connected the two continents; in addition to this the 1865 cable was grappled and repaired, so that by the end of 1866 both cables were working. Since then there have been uninterrupted communications between Britain and the United States, with the telegraph cable replaced in 1962 in favour of the higher capacity coaxial line.[304]

As Headrick notes, businesses of great economic or strategic importance attract government supervision, manipulation or subsidies. Telecommunications enterprises are so vital to national security, economic prosperity, and the dissemination of news that all governments regulate them to a greater or lesser degree. [305] The relationship between Cable and Wireless and the British Government will be examined more fully in a subsequent section, however a number of introductory remarks concerning the British submarine cable network are necessary. Headrick observes that

> International telecommunications companies have always been hybrid creatures: private in appearance and by law, but ultimately tied to their home governments. An account of the history of international telecommunications cannot, therefore, be limited to a strict business or

[303] Solymar, L *Getting the Message*: 70
[304] Hills, J Regulation, innovation and market structure in International Telecommunications: The case of the 1956 TAT1 submarine cable *Business History* Vol. 49 No. 6 (2007) pp. 868 – 885: 869
[305] Headrick, D Submarine Telegraph Cables: 543

> economic perspective but must also consider their role in international politics.[306]

From the 1860s to the 1920s British submarine telegraph cables monopolized and later dominated the North Atlantic market. Elsewhere in the world the Eastern and Associated Telegraph Companies owned or controlled most of the long distance cables. The reason for this dominance, according to Headrick, is threefold: on the supply side, the capital investment required to build, lay and maintain long-distance cables; on the demand side, Britain's lead in global trade and shipping; and, most importantly, the subsidies and hidden support provided by the British Government.[307] This third factor was essential to the success of the industry because submarine cables, like shipping and aviation, were enmeshed in international politics and, occasionally, warfare. Although government intervention waxed and waned with the state of world politics, no cable enterprise was entirely free of government manipulation.

One clear example of this can be found in 1929 when Imperial and International Communications (the immediate forerunner of Cable and Wireless Ltd) requested permission to shut down money-losing cables, such as the one between Ascension Island and Sierra Leone. The fact that the Company first had to seek permission to shut down these cables is indicative of early governmental control of the cable network. The Imperial Communications Advisory Board refused this request, stating that such cables were 'deemed essential on strategic grounds'.[308] Two years later and stung by the depression, the Company requested permission to either close down the 'strategic' cables or to receive a subsidy of £450,000 per year to keep them operating. The Imperial Communications Committee then established a Strategic Cables Subcommittee to investigate the question. It concluded in 1933 by acknowledging the strategic importance of the cables and citing security reasons for keeping them. By way of a compromise the Company was allowed to put the named cables on a care and maintenance basis, meaning that they could be closed down but kept in such a sate that they could be brought back into operation with a month's notice, or two days where there was no wireless connection.[309]

---

[306] Headrick, D Submarine Telegraph Cables: 544
[307] Headrick, D Submarine Telegraph Cables: 544
[308] Headrick, D *The Invisible Weapon*: 212
[309] Headrick, D Submarine Telegraph Cables: 577

Lubrano offers a useful model for examining the development and expansion of the telegraph network: this is described as Merton's theory of multiple-invention as the result of social need and accumulated cultural knowledge.[310] She suggests that there are five primary stages in the emergence of new technologies; these are ownership, development, infrastructure building, expansion (or diffusion) and decline. Each of these stages will be examined, with a view to reflecting them back onto Cable and Wireless later in the thesis.

With regard to ownership, Lubrano notes that communication is the lifeblood of societies.[311] The way we choose to interact is an integral element of the way we structure our society, and essential in affecting control:

> Because communication technology is a social phenomenon intimately related to issues of control, the question for ownership of a radical, new technology becomes an issue. The major choice is between government ownership and control, and private ownership and control. Each will have a different impact on the diffusion process.[312]

The issue of ownership is most crucial for diffusion after the initial invention, though it should be noted that questions of ownership and control do not always arise during the initial phases of diffusion, but will arise at some point. It is also worth noting at this point that that the domestic and international telegraph networks were respectively governmentally and privately owned, before nationalization in 1946; the effect that this had on the diffusion process will be examined shortly.

According to Lubrano, if the invention is a radical one and is to be developed by private industry, mass markets must be identified: culture will play a major role at this point: this is reinforced by Headrick, and is noted earlier in the section. Collectivities, as represented by organisations, industries, government or the public need to be convinced that this new form of interpersonal communication technology is better than that which currently exists – in this instance, the conventional post – and will afford them greater control over their lives and work. Sometimes it will be the confluence of invention and historical condition that work

[310] Lubrano, A *The Telegraph*: 7
[311] Lubrano, A *The Telegraph*: 30
[312] Lubrano, A *The Telegraph*: 30

together to aid in finding an initial market and application for the new technology.[313]

With regard to infrastructure building, Lubrano states that if the technology in question was a radical invention, then the infrastructure for that technology needs to be built:

> Typically, this stage will witness the introduction of many competing firms, each with its own variation of the invention and control over its portion of the physical network, and each incompatible with others. Due to the systematic requirements of interpersonal communication, the ability of the new invention to perform efficiently and up to its potential will be hampered by the existence of such competing firms and equipment. The diffusion of the new technology will be slow or retarded due to the lack of standardization. Consequentially, it will not be a period of large economic growth for the emerging industry.[314]

Driven by economic pressures in this situation a natural monopoly will emerge. A particular company is likely to become dominant in the industry and set the technical standards for the new technology. Additionally, the organizational form that has emerged will also be the standard for this type of technology. Once the infrastructure is built, diffusion can accelerate.

Once the infrastructure and standarisation of the industry has taken place, a period of expansion follows. Lubrano suggests that this is the period at which the new technology operates at its optimum level due to the benefits accrued from systemization and economies of scale. The role of diffusion agencies assumes great importance during this period as they represent systemic markets to which the new technology can be applied, and therefore significantly aid the diffusion process. It is during this phases that the new technology becomes the social standard for the culture.

The final phase suggested by Lubrano in the development and expansion of the telegraph – and other communication technologies – is that of decline. As the new invention becomes embedded in the culture, the initial period of diffusion will begin to slow and the decline can be final if one form of interpersonal communication technology is replaced with another.[315] This can be seen in the twentieth century with the telegraph superseding the conventional post and both

[313] Lubrano, A *The Telegraph*: 31
[314] Lubrano, A *The Telegraph*: 31
[315] Lubrano, A *The Telegraph*: 32

being supplanted by the telephone. However, it is only the telegraph that has – on the whole – suffered a terminal decline:

> Alternatively, if the technology continues to exist over time, the succeeding rises and falls in the diffusion curve over time may be explained by: a) incremental improvements in the original technology, which are themselves subject to the particular political cultural, and economic conditions of their historical time; b) a disturbance in the diffusion process due to a cataclysmic event such as war or economic depression; c) it could represent a partially unsuccessful diffusion and the subsequent industry adjustments in marketing specific applications.[316]

In the example of Cable and Wireless, the decline of the industry was held at bay by a number of the factors outlined by Lubrano. Incremental improvements in the technology, for instance, the 'duplexing' of cables, which allowed multiple signals to be sent along the same cable increased the longevity of an industry that was frankly outmoded with the advent of wireless technology and was only kept in use for strategic reasons (i.e. wireless was easy to intercept). The overseas telegraph network was also stung by two of Lubrano's 'cataclysmic events': namely the Great Depression of the 1930s and the Second World War. In the case of the former, redundancies and a pause in network construction were the result, whilst in the latter; the overseas network was partially contracted owing to the loss of overseas stations to the advancing Axis forces. It was only in the post-war years that the network began to expand again – or diffuse – globally.

The preceding section has sought to provide an introduction to the telegraph network, and to chart the effect it had on society and governance. The following section will focus on the company at the heart of this research, Cable and Wireless, and will examine the origins of the company, and its relationship with the British government. This section provides one of the central contextual foundations to the research.

Merging Cables and Wireless

As it has been asserted in this thesis, an imperfectly understood aspect to the study of the Second World War is the scale and scope of industrial mobilization. In order to understand how and why Cable and Wireless were mobilised in the broader war effort and the Company's relationship to the state, it is necessary to explore the origins of Cable and Wireless. It is in these origins that the foundations of the state/company relationship can be found, enshrined in the legal structure and

[316] Lubrano, A *The Telegraph*: 32

agreements, and enacted through the sociopolitical networks that were fostered and existed between Eastern and Associated, Marconi Wireless and the British Government.

The following discussion also serves to highlight the difference between domestic and overseas communications: the former was nationalized when the technology was in its infancy, whereas the latter remained in private hands until the end of the Second World War. The origins of the Company also serve to demonstrate the perceived strategic importance of the submarine cable network: when Eastern and Associated threatened to dissolve the network, or to sell parts to – potentially – foreign powers due to the competition of new wireless services, the British Government was compelled to intervene. It is the threat of the loss of the coherent strategic network that necessitated the formation of Cable and Wireless.

In 1868 the British Government nationalized all domestic telegraph companies; the compensation paid to their share-holders allowed them to invest in several new cable ventures, including the Falmouth, Gibraltar and Malta and the British Indian Submarine Telegraph Companies, which coalesced in November 1872 to form the Eastern Telegraph Company.[317] Both companies were under the control of John Pender, the cotton mill owner with an eye for opportunity and shrewd business acumen. By 1901, 91 per cent of all British overseas cables were privately owned – the majority of which were in Pender hands, directly or indirectly, through subsidiary companies or joint purse agreements.[318]As Headrick notes:

> By the outbreak of the First World War, the Eastern and Associated Companies had become one of the most powerful multinational conglomerates. Their capital, valued at nearly £13 million, was controlled by the Pender family and the Marquess of Tweedale. Through their London headquarters came much of the world's commercial traffic, and a good part of the rest was funneled through Eastern's secondary nodes at Aden, Cape Town, Singapore, Bombay, and Hong Kong. Eastern was one of the pillars of British commercial and strategic power…[319]

Until 1878, this commercial and strategic powerhouse of the British Empire received no subsidies or dividend guarantees from the British Government – it was wholly a private and independent communications company. Eastern did, however, receive considerable help in the form of landing rights, ocean-bed surveys

[317] Headrick, D *The Tentacles of Progress*: 104
[318] Headrick, D *The Tentacles of Progress*: 106
[319] Headrick, D *The Tentacles of Progress*: 105

provided by the Admiralty, diplomatic support, and government cable traffic.[320] Strategic cables – those which were not commercially viable, or duplicated existing commercial routes – were of little interest to the Company; however Eastern maintained and operated these routes on behalf of the government owing to the subsidies it paid for strategic cables: the South Africa – Australia cable, for instance, cost the government £1,750,000.[321]

The relationship between Eastern and the British Government was forced to change by the advent of new technology; this will be explored through the files of the Cabinet archive. The Marconi 'Beam' wireless service utilised shortwave frequencies for transmission and reception, as opposed to the earlier longwave stations. The benefits of shortwave were primarily the low cost and reliability of service: shortwave stations were smaller and cheaper to construct and operate, and the wireless circuits were less prone to fading and interference. In 1919 Marconi Wireless was awarded the contract by the British Government to begin the construction of the Imperial Wireless Chain that would link every point in the Empire, and would be operated by the General Post Office. The immediate result of this government-subsidized, cheaper technology was the lower tariffs available on the Beam service. As the report on the Imperial Wireless and Cable Conference notes:

> Before the opening of the Beam services, the cables were working with a large margin of annual surplus, and there is evidence that the introduction of cheaper rates has already led to an appreciable increase in the total volume of telegraph traffic. But in spite of this it has been represented to us that the cable undertakings affected and the Indo-European landline service have been brought to a serious position by the two-fold reduction in their receipts resulting from the operation of the lower rates introduced as a means of countering Beam competition and also from the loss of a considerable volume of traffic to the Beam services.[322]

Indeed, the report goes on to quantify the diminution of revenue due to the reduction of rates resulting from Beam competition; in the case of Eastern and Associated it was estimated to be at the rate of nearly £225,000 per annum, making a total estimated reduction of £662,000 to the annual revenue of the Company.[323] With this loss of revenue showing no sign of abating, the management

[320] Headrick, D *The Tentacles of Progress*: 105
[321] Headrick, D *The Tentacles of Progress*: 109
[322] CAB/24/196 Secret Report on the Imperial Wireless and Cables Conference, 1928: 5
[323] CAB/24/196: 5

at Eastern sought to force the hand of the British Government by threatening to sell off some of its loss-leading assets – potentially to an unnamed foreign power. This implied threat serves to reinforce the strategic nature of the cables, as the report states:

> …The bulk of the important trunk cables must be retained for the maintenance of vital communications in time of war. Moreover, there are many parts of the Empire (besides foreign countries served by the Eastern system) which are not at present, and may not be for some time to come, served by wireless. Further, the existing wireless services are subject to fading and occasional prolonged interruptions, which would be a serious hindrance to urgent commercial telegrams if the cables were not available. To sum up, therefore, it may be said that wireless offers a cheap service, but not all-sufficing. It remains important for strategical and commercial purposes that the majority of the cables should be kept in operation.[324]

This section of the report serves to highlight the fundamental differences between the two competing forms of communications: wireless was certainly cheaper, but was unable to provide a reliable and secure means of communications. The cable, on the other hand, was entirely secure and entirely reliable: the redundancy in the Eastern network meant that even if one cable was interrupted, messages could be sent via alternative routes.

It was the threat of Eastern and Associated to break up and sell the network that necessitated the conference of 1928, and the threat from foreign enterprise was at the forefront of the government's mind: should a foreign power take over even part of the cable network, the security and reliability – the fundamentals of the cable network – would be compromised. As the report states:

> It is obvious that, if the Eastern and Associated Telegraph Companies went into voluntary liquidation and wished to dispose of their assets, the opportunities presented to foreign interests to strengthen their position would be considerable. It is true that in the case of the cables landing on British territory, licenses could be withheld from any foreign purchaser; but the sale to such a purchaser of cables, which land at both ends of foreign territory, could hardly be prevented. Moreover, it has to be borne in mind that the purchaser of a cable landing in British territory could in certain instances divert the cable to foreign territory.[325]

In summary, the problem faced by the British Government was as follows: the state funded Beam wireless service was severely undermining the finances of the cable companies. These companies could not be allowed to liquidate their assets because

[324] CAB/24/196: 5-6
[325] CAB/24/196: 6

the cables were still of vital commercial and strategic value – the threat from foreign enterprise to any aspect of the imperial cable network could not be countenanced. As a result, the government mediated between the two competitive industries to find a solution.

Faced with the imminent collapse (or at least, the threat of collapse) of the cable companies, and thus the imperial strategic cable network, the government convened the Wireless and Cables Conference in 1928; this was a meeting between representatives of the cable companies, Marconi wireless and representatives of Empire and Dominion governments. Five possible solutions to the problem were mooted and discussed:

(a) Non-intervention – to refrain from any intervention and allow economic causes to decide the issue.
(b) Subsidy – to assist the cables to remain in operation until such a time as they may no longer be required owing to developments in wireless.
(c) Minimum Revenue Guarantee – to check the inroads of competition, mainly by Government control of wireless and cable rates, respectively, and to give an undertaking that should the disparity between the tariffs lead to a large diversion of traffic from the cables, the Government would undertake responsibility for making up an agreed standard revenue to the cables.
(d) Pooling scheme – to diminish the force of wireless competition on the Imperial routes by sharing part of the joint revenue of the Beam and cable services.
(e) Fusion – to amalgamate so far as possible in one undertaking all the cable and wireless interests conducting communications between the various parts of the Empire so as to secure unity of control and unity of direction.[326]

However, before the Conference could consider the above points in any great depth, the following letter was received:

> *London, E.C.2, March* 14, 1928
>
> Dear Sir,
>
> We beg to advise you that the negotiations between the Eastern and Associated Cable Companies and the Marconi Wireless Telegraph Company have resulted, on the recommendation of Sir William Plender and Sir

[326] CAB/24/296: 6

> Gilbert Garnsey, in an agreement having been reached between the Boards of the two groups providing for a fusion of the interests of the Companies through the medium of a proposed Holding Company.
>
> The Agreement so arrived at is subject to satisfactory arrangements being made with the British Government and the Governments of the Dominions and India, and also to acceptance by the Stock and Shareholders of the Cable Companies and of the Marconi Company.
>
> Yours faithfully,
>
> J. Denison Pender, *Chairman, Eastern Associated* & Iverforth, *Chairman Marconi*

This proposed merger company would latterly become Cable and Wireless, and it is at this point in the proto-history of the Company that the relationship with the British Government begins in earnest: from its very earliest moments, the two parties were drawn together, through the conditions that were placed on the merger.

The first of these was the creation of an Imperial authority representative of the Home Governments and of the Dominions and India, which was to advise the Companies on all questions of general policy affecting Empire external telegraphic and telephonic communications, such as the instigation of new services, the opening of new routes, the linking-up of scattered parts of the Empire with 'the great trunk services', the fixing of rates and *the control of the services in the event of war of other national emergency*.[327] This long-standing legislative prerogative of the government to assume control of communications during a national emergency or in the event of war was fundamentally enshrined in the origins of the Company: this will be returned to later in the section.

It was also advised that it would be desirable, both to increase the authority of the New Company and to provide a liaison between the Company and the Government, that there should be Government representation on the Board of the New Company in the United Kingdom, and upon the Boards of the existing Wireless Companies operating in the Dominions and India. In the Eastern and Associated days, members of the Government had been on the board of the Company by virtue of the fact that they owned shares, or were simply on friendly terms with the Pender family. This time, it was enshrined in writing that the government should have official representation of the board – for liaising purposes. Through each of

[327] CAB/24/296: 9

the conditions attached to the proposed merger, the gossamer threads that would bind the two parties were woven, and were gradually being pulled tighter with each caveat.

The penultimate condition attached to the merger was fundamentally to ensure that the Company remained British and under immediate British control – the New Company was to take over and work from central offices in London, all present and future external telegraph and telephone services of the United Kingdom, both cable and wireless. This distinction is again important, as the domestic (internal) telegraph and telephone services were still under the ownership and control of the GPO, and thus the state. The final condition imposed on the merger was intended to unify all external communications, by placing ownership of the Beam wireless service and the Pacific Cable Board into this new company; all non-domestic Empire communications could be centralized in one place.

It was concluded at the conference that an Advisory Committee, which would include representatives of the Governments of the Empire and Dominions, would oversee the new Company. Membership of this Committee would not be fixed, and representatives from various governments and institutions concerned could be added or removed at approval of other members. The Imperial Advisory Committee, the conference concluded, should have access to all information in the hands of the Communications Company, which was necessary to enable it to carry out its duties; such information would, of course, be treated as confidential.[328]

It is in the formation of Cable and Wireless that the relationship with the British Government begins to take shape; building on earlier formal and informal ties – subsidy, surveys and preferential rates – the Conference of 1928 formalised the bonds between the two parties; by enshrining in the foundation of the Company the ability to control rates, the appointment of a Chairman, routes and the entire network in times of crisis, the power relationship, with its inherent dynamics and idiosyncrasies was formed. It is this relationship of power that is fundamentally the central concern of this thesis; from its origin in 1928, through to the nationalization of the Company in 1947, the British Government and Cable and Wireless were in a relationship that grew closer and closer, until – through the

[328] CAB/24/296: 14

forge of the Second World War – the Company was acting as an additional department of Whitehall.

Configuring the Company as an Institution

In the discussion of Foucault in the literature review, it was asserted that in order to analyze power in any given society, one must analyze the control over space and the institutions that wield this control. Cable and Wireless controlled the electronic space of communications; it was through this space that the British government was able to exercise its power and to conduct and orchestrate its wartime activities. Cable and Wireless wielded control over the electronic space of communications as a private business in the pursuance of profits and as a pseudo agent of the state, within the relationship that the previous section has sought to define. By way of conclusion to this chapter, I draw upon Foucault's defining criteria of the institution, and reflect this onto Cable and Wireless. In doing so, the Company can be used to demonstrate and analyse governmental power during the Second World War. Below are the five themes that together serve to define Cable and Wireless in the Foucauldian sense.

The legal structure that established the Cable and Wireless in 1928 ascribed the Company with a number of rights, responsibilities and described the structure and ownership of the new company. This founding document also provided the British Government with some measure of control of the Company – by setting tariffs, consistently reducing rates and limiting the profit that the company could make – any surplus had to be ploughed back into the infrastructure or lowering rates.

The customs or fashions of Cable and Wireless were inherited directly from one of the parent companies – the Eastern and Associated. A clear example of this is the routing instruction 'Via Eastern' now became 'Via Imperial'; other instances include the structure of the company, head offices, the Exiles Club and the rebranding of stationary with the different company name in the same font. These instances of continuity between old and new serve to reinforce the institutional identity of Cable and Wireless, and to hint at a longer pedigree.

Cable and Wireless also had a carefully defined hierarchical structure – something Foucault considered important, if not essential, to an institution. Externally the Company was overseen by the Imperial Cable Committee, whereas the internal structure remained largely unchanged from the Eastern and Associated days with

the Chairman, the Managing Director, the Court of Directors controlling the company, with Managers, Engineers, Telegraph Clerks and Messenger Boys forming the lower echelons of the hierarchy. One key difference between the Eastern and Associated and Cable and Wireless was the government appointed Chairman. This hierarchy, along with the continuity of customs within the Company reinforced its institutional nature both within the company and to the outside world throughout the British Empire.

The relative autonomy of Cable and Wireless, like scholastic and military institutions, is central defining it as 'an institution'. The Government's ability to select a Chairman and to set tariffs notwithstanding, the company was treated with a laissez-faire attitude typical of the administration of the British Empire in general, like the Royal Niger Company and the East India Company before it, Cable and Wireless was fundamentally left to its own devices, except when calls were made on the Company directly in response to the war effort.

Finally, the principle of regulation formalizes the status of Cable and Wireless as an institution in the Foucauldian sense; from an external perspective the Company was regulated by legislature, in the form of various Telegraph and Communications Acts, along with the regulatory body of the Imperial Communications Advisory Committee, who set and reduced the rates. Internally, Rule Books, uniforms and rigorous standards of dress and behavior regulated the Company both domestically and overseas. Cable and Wireless also sought to regulate communications, and issued instructional booklets to the press on the most efficient way of writing, dispatching and reading messages.

These five points together define Cable and Wireless as a Foucauldian institution, and allow for the analysis that follows.

5. Mobilising/Intelligence

Gathering intelligence from the overseas telegraph network

The role of intelligence during wartime – its gathering, collating and dissemination – was a central aspect to the strategic culture that dominated successive British administrations throughout the twentieth century. The following chapter examines how Cable and Wireless as a private communications company mobilised its overseas network in the pursuance of this intelligence. This mobilization occurred in an atmosphere of secrecy: secret intelligence gathering and secret reports. It also demonstrates the relationship between the British Government and private commercial enterprise, furthering our knowledge of how intelligence was gathered and put to use during the Second World War, outside the popular discourses of Bletchley Park.

In this, the first of two chapters that examine overseas mobilization, my focus is on four branches – Ascension, Aden, Malta and Mombasa – as typical of the extraordinary wartime work of Cable and Wireless. These branches are representative microcosms of the company's wartime activity because all of the aspects of mobilization can be found at these stations, to a greater or lesser degree.

Key Stations in the Chain 1939-45

The mobilization of the Cable and Wireless network began on the 24th February 1939 when the Chairman, Sir Edward Wilshaw, dispatched a letter to the 'key stations in the chain'.[329] This letter represented the culmination of years of work between Head Office staff and the Foreign Office, and it prepares the ground for the scheme that would be put into effect to scrutinize and censor communications passing over the Cable and Wireless network in the event of hostilities; enclosed with the letter was a copy of censorship regulations, British Government telegraph addresses, the handbook for telegraphic censors and Secret Instructions addressed to Cable and Wireless Ltd.[330] This demonstrates that both strategic and tactical cooperation between the Company and the British Government was taking place almost a decade before the outbreak of hostilities.

[329] DOC/CW/1/469 Ascension Gen.1: Letter from Edward Wilshaw to Manager, Ascension: censorship scheme and documents.

[330] DOC/CW/1/469 Ascension Gen.1: Letter from Edward Wilshaw to Manager, Ascension: censorship scheme and documents.

The scrutiny scheme was first mooted in January 1937 in an exchange of letters between Cable and Wireless and the Communications Department in the Foreign Office and would work as follows: recently retired members of the Company's staff were contacted by Wilshaw directly and asked if, in the event of war, and owing to their expertise in 'reading slip' (the raw output of the telegraph equipment), they would be prepared to be posted to overseas stations in the network to read the messages as they passed through, or transited, the offices. A list of approved (presumably vetted) and agreeable members of staff was compiled and the development of the scheme can be found in the 'Office Scrutiny Scheme' file.[331] One such individual was John Norman, whose personal diary recounting his posting to Aden aids our understanding of this scheme. [redacted], a representative of the Communications Department in the Foreign Office outlines the proposed scrutiny scheme to Sir Edward Wilshaw; he states that:

> As far as Cable and Wireless is concerned, it would seem that we shall have to arrange for leaks to be put in at Aden, Ascension, Barbados, Hong Kong, Jamaica, Malta and Singapore …In my opinion this substitution for scrutiny for censorship of transit traffic will benefit the Company as there is little doubt that under modern conditions censorship would drive traffic to other routes.[332]

The seven stations identified in [redacted]'s letter are later referred to as the 'Key Stations in the chain'; this is because of their central nature in the larger cable network. These central nodes were choke points where cable circuits intersected, connecting east with west, and north with south. It was at these stations where the maximum amount of traffic could be scrutinized for the minimum outlay of staff and equipment.

The slip copies that were taken from the 'leaks'[333] were the product of 'competent and trustworthy staff'; all communications, which, as a result of the scrutineers' examination, that were thought to be of interest to various government departments, were telegraphed to London for distribution by a central

[331] DOC/CW/1/488 Office Scrutiny Scheme: Letters exchanged between Cable and Wireless and the Foreign Office concerning retired members of Company staff.
[332] DOC/CW/1/576 Foreign Office Interception: Letter from [redacted], Communications Department, Foreign Office, to Sir Edward Wilshaw dated 22nd January 1937.
[333] The 'leaks' were copies drawn from the cable circuits as the messages transited a particular branch; in this way the message was not slowed, nor was it possible to detect that a copy had been taken.

government office.[334] The author of the report – unnamed, but presumably Head Office senior staff – goes on to state that:

> From the figures of the traffic values of messages forwarded to Censorship Headquarters in London by the scrutiny parties overseas, it is evident that much information has been obtained, and no doubt the nation's war effort must have been afforded considerable assistance by action taken by the Admiralty, Ministry of Economic Warfare, Foreign Office etc. arising from knowledge gained as a result of the operations of the scheme.[335]

Perhaps the most revealing aspect to the report is the breakdown of the financial aspect to the scheme: it is observed that the Company have undertaken to pay the salaries, bed and board of the scrutineers and reclaim the costs from the Treasury – effectively making the scheme cost-neutral to Cable and Wireless. However, the scrutinized and potentially valuable cables are forwarded to Censorship Headquarters in London along the Company's lines and charged at the preferential Government half rate. This is broken down in the following way:

1939	September	£1,384
	October	2,163
	November	5,218
	December	5,669
1940	January	4,376
	February	3,658
	March	3,895
	April	5,831
	May	4,636
	June	3,283[336]

[334] DOC/CW/1/576 Foreign Office Interception: Note and Summary of the Scrutiny Scheme, dated June 1941.
[335] DOC/CW/1/576 Foreign Office Interception: Note and Summary of the Scrutiny Scheme, dated June 1941.
[336] DOC/CW/1/576 Foreign Office Interception: Note and Summary of the Scrutiny Scheme, dated June 1941.

The author of the report notes that the average rate per annum is approximately £53,736, dated from the full working of the scheme.[337] This demonstrates just how lucrative the scrutiny scheme was for Cable and Wireless, a topic that will be returned to in the section below, *Financing Intelligence*.

With all collaborative endeavours between the British Government and Cable and Wireless, the final approval for the scheme hinged on the finances: the Company seem willing to undertake almost any request made by the government, but were unwilling to shoulder the financial responsibility. By the 28th March 1939, the Treasury approved the scheme, and Wilshaw is instructed to begin sending out personnel immediately and to recover the costs from the government later.[338] A key difference between state censorship of messages and the Cable and Wireless (albeit on behalf of the state) scrutiny of messages is highlighted by Wilshaw in the coded service message that was dispatched to the 'scrutineers'[339] overseas: they are to *scrutinize* messages rather than censor them, and this is to encourage foreign nationals and governments to keep using the Cable and Wireless network, retaining the impression that their messages will not be censored.[340] In 1937, [redacted] of the Foreign Office, highlighted to Sir Edward Wilshaw another vital aspect of the Scrutiny Scheme, one that seems deliberately included to 'sweeten' the scheme to Cable and Wireless. He states that the scrutiny of transit traffic will benefit the Company, as there is little doubt that under modern conditions censorship would drive traffic to other routes.[341] This is a central distinction: during the Second World War, not only were messages being openly censored by the Government (this was an accepted practice in warfare), but an ostensibly private communications company had turned its entire network over to the pursuit of clandestinely gathering information from messages that were simply crossing its circuits. The difference between censorship and scrutiny is subtle: censorship is a highly visible method of information control – the recipient of a

[337] DOC/CW/1/576 Foreign Office Interception: Note and Summary of the Scrutiny Scheme, dated June 1941.
[338] DOC/CW/1/488 Letter from [redacted] at the Foreign Office to Sir Edward Wilshaw dated 28.03.1939 concerning the Scrutiny Scheme.
[339] This is a term coined by Sir Edward Wilshaw in his correspondence with the Foreign Office. See DOC/CW/1/488 28.03.1939.
[340] DOC/CW/1/488 Service Message from Sir Edward Wilshaw to scrutiny staff at overseas and provincial stations dated 22.06.1939.
[341] DOC/CW/1/488 Letter from [redacted] at the Foreign Office to Sir Edward Wilshaw dated 28.03.1939 concerning the Scrutiny Scheme

censored message knows it has taken place because words have been blacked out. Scrutiny, however, leaves no traces – messages are simply read 'in transit'; the recipient therefore has no knowledge that his or her communications have been intercepted. Censorship and scrutiny represent two aspects to the gathering of intelligence: one is visible, the other is not.

Cable and Wireless were not the only civilian organisation tasked with the gathering of intelligence via its infrastructure and resources; in 1939 the BBC were instructed to form a secret organisation – the BBC Monitoring Service – that would monitor and record broadcast transmissions worldwide 'for the benefit of the intelligence departments of His Majesty's Government, for the propaganda service, and for the home, Overseas, and Foreign News Services of the British Broadcasting Corporation'.[342] From 1939 the BBC Monitoring Service had been producing a *Daily Digest*, a compendium of edited items broadcast by foreign radio stations:

> Already capturing 250,000 broadcast words per day, in late 1939 the Monitoring Service were supplying reports to interested departments in Whitehall, including the Ministry of Economic Warfare, the Foreign Office, India Office, Colonial Office, the Dominions Office, the Ministry of Information, the Admiralty, Air Ministry and the War Office's MI7 (responsible for censorship, monitoring the foreign press and analyzing propaganda), MI9 (which organized aid to resistance fighters, Allied prisoners, and escape and evasion planning), and MI5 (defence against espionage and sabotage in Britain).[343]

By the end of the war, however, it was estimated that the Monitoring Service was intercepting approximately 1,250,000 words per day – broadcast in languages ranging from English to Hungarian;[344] coupled with the fact that approximately two million words passed through the London Station of Cable and Wireless on a daily basis, the combined efforts of the BBC and Cable and Wireless, therefore, resulted in the British Government having access to approximately three and a quarter million words from around the world.

While the BBC Monitoring Service existed before the war, albeit in a different guise, for the benefit of the domestic and foreign news services, its adaption to intelligence purposes demonstrates planning and cooperation between

---

[342] Calkins, L Patrolling the Ether: US-UK Open Source Intelligence Cooperation and the BBC's Emergence as an Intelligence Agency, 1939-1948 *Intelligence and National Security* Vol. 26 No. 1 (2011) pp.1-22: 2
[343] Calkins, L Patrolling the Ether: 3
[344] Calkins, L Patrolling the Ether: 7

Government and Broadcaster – it is unlikely that the scheme was adapted overnight. As the Cable and Wireless scrutiny scheme demonstrates, plans and procedures to maintain readiness were put in place years before the outbreak of the Second World War. By July 1939 the scrutiny staff were in position around the globe. A month later, and days before the outbreak of the Second World War, the following Service Message is received in London from Ascension:

> H0 763 RIO ORD 1 A BUNKER/AO MD 15 URGENT = Z/IC 25062 STOP 31012 25062 16558 TM/H B/FED 1938 04815 05833 12646/S 15063/S +
>
> Z/IC SECRET STOP YOUR SECRET LETTER EM/H B/FEB 1938 CENSORSHIP COMMENCED GOVENOR'S INSTRUCTIONS +[345]

This message demonstrates that, following the years of arrangements and financial wrangling between the Treasury and Cable and Wireless, censorship and scrutiny is imposed on Ascension Island, at the instruction of the Governor of St Helena.

The final aspect to the scrutiny scheme – the mobilization of the key stations in the chain – is the ultimate destination of the scrutinized messages. As it has already been noted, these messages were transmitted – at government expense – back to Electra House in London. During the Second World War, Electra House (Embankment) was not only the Head Office of Cable and Wireless, but also the wartime home of the Censorship Department. From the 18th July 1939 to the end of the War, the Censorship Department rented the entire top floor of Electra House for the sum of £1,668 per annum.[346] In preparation for the arrival of the censors, Post Office engineers installed high-speed teleprinter lines between Electra House and 'a number of departments in Whitehall'.[347] These dedicated, high-speed lines would allow the immediate transmission of messages from the UK terminus of the Cable and Wireless network to the appropriate department within Whitehall with the minimum of delay. This dedication to speed highlights the potentially tactical nature of intercepted messages: it was vital that the correct authority saw the content of these messages in time for them to be of value.

The teleprinter lines between Electra House and Whitehall were not the only new lines to be installed in the course of the War; in September 1939 GPO engineers

[345] DOC/CW/1/469 Service Message Bunker (Ascension) to MD dated 26th August 1939.
[346] DOC/CW/1/441/1 War Office UK – Censorship. Internal memo concerning the establishment of Censorship personnel at Electra House, dated 18th July 1939.
[347] DOC/CW/1/441/1 War Office UK – Censorship: Memorandum concerning completed works by GPO engineers. 14th April 1939.

connected Electra House with the Central Telegraph Office and Bletchley Park – the United Kingdom's code breaking and signals intelligence centre.[348] These new lines meant that messages in code that had been intercepted or scrutinized could be transmitted to the code breakers; again, highlighting the value of clandestinely acquired tactical knowledge. However, gathering information through scrutiny and transmitting it along Post Office domestic telegraph cables to Bletchley Park was not Cable and Wireless' only involvement in the now celebrated discourse of British code breaking.

On the 12th September 1939 [redacted] of the Foreign Office Communications Department – MI6, in this instance – contacted Sir Edward Wilshaw, requesting the secondment of eleven Cable and Wireless men to operate the now operational high speed teleprinter circuits and to read intercepted slip that had come to their hands through other means.[349] On the 22nd September [redacted] requested a further operator,[350]and on the 10th October a further three are requested.[351] These operators are paid their full Cable and Wireless salary while undertaking this work, along with a wage from the War Office; they are also permitted the same leave passes and accommodation conditions as the War Office staff already at Bletchley Park.[352] These fifteen Cable and Wireless personnel remained at Bletchley Park, reading telegraph slip and operating the teleprinter circuits for the remainder of the war.

This moment in the archival files – that in reality only amounts to five or six pages – contributes a new and hitherto unknown aspect to the discourses of British code breaking during the Second World War. While attention has focused on the code breakers themselves and the challenge of Enigma, no attention has been afforded

---

[348] DOC/CW/1/576 Foreign Office Interception: Head Office memo dated 5th September 1939

[349] DOC/CW/1/576 Foreign Office Interception: Letter from [redacted] requesting Cable and Wireless staff for Bletchley Park operations, dated 12th September 1939. NB there are documents, now redacted, that state that the Foreign Office Communication Department acquired physical copies of telegraph slip – outside the scrutiny scheme – from Cable and Wireless and other communications companies. This practice was particularly prevalent in Latin America.

[350] DOC/CW/1/576 Foreign Office Interception: Letter from [redacted] requesting Cable and Wireless staff for Bletchley Park operations, dated 22nd September 1939.

[351] DOC/CW/1/576 Foreign Office Interception: Letter from [redacted] requesting Cable and Wireless staff for Bletchley Park operations, dated 10th October 1939.

[352] DOC/CW/1/576 Foreign Office Interception: Letter from [redacted] discussing staff arrangements at Bletchley Park.

to *where* Bletchley Park received its raw intelligence. Cable and Wireless were central to the intelligence activities of the United Kingdom: by gathering information through scrutiny, transmitting these messages back to Electra House and finally, from there, to Whitehall and Bletchley Park. At the end of the high-speed teleprinter circuits, more Company personnel received messages and interpreted captured telegraph slip.

The provision of raw intelligence material for the intelligence community in London and Bletchley Park was central to the prevailing strategic culture in the United Kingdom during the Second World War. How this intelligence was gleaned – through both censorship and scrutiny, undertaken by Cable and Wireless – is the focus of the next section, which examines the Ascension branch, which has been located in the broader geopolitical discourses of the war.

Ascension Island: Censorship in Practice

Graves describes Ascension as one of the loneliest stations of the Company's 365,000 miles of telegraph routes that covered the world.[353] This was no exaggeration: measuring only five miles by seven, Ascension lies between Africa and Brazil in the middle of the South Atlantic. The nearest inhabited neighbour is St Helena[354] which lies some eight hundred miles distant.

Officially Ascension Island was and is classified by the British government as an overseas territory, which makes its governance as problematic today as it has been historically. The island was originally annexed in 1815 by the British Government to deny the French its use, and by 1822 it had been garrisoned and served many roles: as a revictualling station, a sanatorium and a naval base used in the suppression of the slave trade.[355] During its one hundred and seven years of naval occupation, the Island was viewed as a ship, 'His [or Her] Majesty's Island', rather than as a territorial possession. Round-the-world sailor Joshua Slocum visited in

[353] Graves, C *The Thin Red Lines*: 96
[354] St. Helena was the island on which Napoleon was detained until his death in 1821; Ascension was considered so bleak that it was rejected as a prison, on the grounds that it was too inhumanely isolated, even for their greatest enemy.
[355] Royle, S 'The Island Has Been Handed Over to Me': Ascension Island as a Company Colony, 1922-42 *Singapore Journal of Tropical Geography* Vol. 25 No. 1 (2004) pp109-126: 113

1898 and called it Stone Frigate, RN.[356] From 1815 until 1922, when the military withdrew, the island was

> "Imperial" – a military base entirely at the service of the distant British state which, through its navy, exercised total control in dividing the island's population structure and settlement system. There was no contestation, or none that could proceed far as the captain of the 'ship' had unchallenged control of both military personnel and the few civilians permitted there[357]

In the period of military reassessment following the First World War, Ascension was deemed redundant and the Navy withdrew, according to Royle completing Ascension's first imperial era.[358] The Island was translated from a naval station to a commercial implement, essentially becoming the possession of the Eastern Telegraph Company. Officially however, Britain retained the function of state control by annexing Ascension to St Helena, in this way the legal, judicial and administrative systems of St Helena were extended to Ascension with such modifications as circumstances render necessary, of which the Governor will give public notification.[359] Of this unusual situation, *The Zodiac* staff magazine notes:

> No representative of the crown to be maintained as permanent resident, but the Superintendent of the Eastern Telegraph Company's Station on the Island to be [the Resident] Magistrate for the preservation of law and order[360]

By 1922, Ascension Island had completed the transition from Naval station to Company Island, existing solely for the maintenance of the cable and wireless networks. This would remain the status quo on the island to the present day, and indeed into the foreseeable future; Ascension is still a British Overseas Territory that is administered at a remove, and currently plays host to the BBC, Cable and Wireless and the United States Air Force.[361]

To underline the importance of the Ascension Island station in the wider Cable and Wireless network, it is worth considering the broader geopolitical discourses of the Second World War. When Italy joined the War in June 1940, the Mediterranean cables were interrupted, as a result an increasing volume of traffic was relayed via

---

[356] Royle, S 'The Island Has Been Handed Over to Me': 113
[357] Royle, S 'The Island Has Been Handed Over to Me': 114
[358] Royle, S 'The Island Has Been Handed Over to Me': 114
[359] Royle, S 'The Island Has Been Handed Over to Me': 114
[360] *The Zodiac* 1922: 82
[361] One of the more novel features of the island in recent decades was that it was the site of the emergency landing strip for the space shuttle.

Ascension until the cables were loaded to capacity. By the end of the war, the recently liberated Paris had to relay its messages to London via Ascension, which, throughout the War had become an increasingly vital link between London and Montreal.[362] Ascension therefore emerged as one of the most vital nodes in the Imperial network handling communications between Europe and the Americas, and consequentially beyond.

Ascension Island was strategically important for two main reasons: first, as a key station in the Cable and Wireless network, handling traffic between Europe and the Americas and beyond, it provided an outlet for international communications that could be scrutinized by the staff and forwarded to the authorities in London. Second, and considering the broader geopolitical discourses of the Second World War, the island provided a staging post on the supply route from the United States to the European and North African theatres of war.[363] Given the Island's importance in the Imperial cable network commentators have questioned why it was never targeted by the Axis during the War, indeed Graves notes that:

> It has always been a mystery why Ascension was never bombarded, because the destruction of the Cable Office and wireless installations would have been invaluable to Hitler, while a successful landing would have secured oil, water, food, bullion and other loot for the raiding party who, properly equipped, might have been very difficult to dislodge if they had to remain there.[364]

However, the isolated nature of Ascension and its presence as a militarized staging post, resulted in Cable and Wireless enabling uninterrupted connections with London and the rest of the world: the–all red cable network meant that British communications remained on British soil.

Setting in train censorship and scrutiny operations on the Island from 1939 onwards was not as straightforward as shipping in extra staff, as had been done in other parts of the world. There were several stations in the chain where it was not practicable for one reason or another to accommodate the extra censorship and scrutiny staff; these branches include Labuan, Cocos, Mauritius and Ascension. At Ascension it was simply a question of logistics: the isolated island in the middle of

[362] Graves, C *The Thin Red Lines*: 98
[363] Following the passing of the Lend-Lease Act in March 1941, the United States supplied the Allied forces fighting in Africa with transport aircraft. These were ferried from Florida – via Ascension – to Takoradi on the Gold Coast.
[364] Graves, C *The Thin Red Lines*: 97

the South Atlantic had precarious access to resources. While there was a farm and a facility to desalinate seawater, the station still relied on supplies from the mainland – particularly South Africa. Additional staff on the island would cause two main problems: first accommodation and second the supply of food and materials. It is for this reason that the Foreign Office authorized current members of the Cable and Wireless staff on the Island – the Station Manager and the Company Doctor – to undertake the scrutiny work.[365] However, with the outbreak of hostilities, the Manager and Doctor were no longer required to simply scrutinize the messages that transit the station, but were officially tasked to censor them. The Station Manager agreed to undertake the censorship and scrutiny of the telegraph traffic, and the Doctor to handle conventional post. It is noted in a letter to Wilshaw in January 1940 that the Doctor has been censoring some five hundred letters per month, on top of his medical duties.[366] For this extra, and hitherto unpaid work, the Doctor is awarded an honorarium by the Foreign Office of forty guineas a year for the remainder of the war.

Owing to the relative speeds of the two means of communication, there were different rules and regulations for postal and telegraphic censorship. A letter from Ascension would take around a month to reach London making it effectively useless as a means for passing on tactical, sensitive intelligence to the enemy – for example, the movements and cargoes of ships. The immediacy of the telegraph was recognized and thus far more stringent censorship was applied to control the flow of information.

Postal censorship on the island had five general rules. No mention was allowed in the correspondence of island inhabitants or Cable and Wireless staff of:

1. Cable and Wireless Communications system, Wireless or Cable.
2. The name of any vessel calling at Ascension.
3. Anything with reference to Naval, Air Force or military matters, establishments (existing or contemplated), personnel or look-outs.
4. Local Defence matters and organisation.

[365] DOC/CW/1/488 Letter from the Communications Department at the Foreign Office to Cable and Wireless, authorising the managers of certain stations to act as censors – later corrected to scrutineers.
[366] DOC/CW/1/469 Ascension Gen.1: Letter from Manager, Ascension to Edward Wilshaw concerning censorship.

5. Any establishment under construction or completed at Ascension or of such establishment's staff and purpose.[367]

In addition, it is noted that no photographs of any building(s) connected with any of the above establishments may be transmitted in the mails, and that it is a contravention of censorship regulations to post letters on board ships or to ask passengers, officers or crew of vessels to post letters outside Ascension.

The general rules for telegraphic censorship are, by comparison, far more detailed and reflect how, to the enemy, the speed of telegraphic communication could be of value. The rules stated that Government telegrams were not subject to censorship, however if the Censor considered that a Government telegram written in plain language should be transmitted in code, he may call attention to it. Telegrams should be handed in at the Telegraph Office, not taken first to the Censor: they are passed to the Censor only after they have been accepted by the Cable Staff. Private telegrams were subject to stringent conditions, which included making no mention of shipment of material or movements of ships unless they are worded so as not to associate the name of the ship, the cargo or the port of arrival or departure. The text of the telegram had to be in plain language and must not have a secret meaning and finally, the address must contain the full name and address sufficient to ensure delivery and to satisfy the Censor as to the identity of the addressee. [368]

The importance of the Ascension Island station in the scrutiny of messages transiting the Cable and Wireless network cannot be overstated, indeed, Wilshaw himself highlights this in a Service Message sent weeks before the outbreak of hostilities: Ascension will be responsible for all foreign to foreign traffic which does not pass through London.[369] Where there are instances of Cable and Wireless co-operating with the intelligence services, the scrutiny of messages must surely be the biggest contribution to the war effort made by the Company. Whether or not any important or valuable information was gleaned by the retired members of staff is unclear, and no examples survive in the archive of the scrutineers reports, but it seems probable that given the massive volume of information that crossed the

[367] DOC/CW/1/470 Ascension Gen.2: General Notes on Ascension Island, dated 1st Mach 1942.
[368] DOC/CW/1/470 Ascension Gen.2: General Notes on Ascension Island, dated 1st Mach 1942.
[369] DOC/CW/1/470 Ascension Gen.2: Service Message from Edward Wilshaw to 'Key Stations in the Chain' detailing the Scrutiny Scheme.

Company's wires during the Second World War, some of it must have been made use of.

The first stage of the mobilization of Cable and Wireless' overseas network was that of information gathering. However, where most stations received an influx of extra scrutiny and censorship staff, the Manager and Doctor on Ascension were forced by necessity to fulfill these roles. While this is not the typical mobilization seen across the Cable and Wireless network, it is nonetheless indicative of the broader actions that were taking place. By utilizing the telegraph network in this way – effectively as one giant listening post – the British Government had access to every message that was not only sent using the *via Imperial* service, but that transited the network as well, be they from Western Union or the Great Northern. By having access to this flood of information, the Government was able to extend its range not only into the private messages of the individual (which would have been available through conventional censorship) but into the diplomatic and business messages of the world, wherever they contacted the Cable and Wireless network.

Financing Intelligence: Mombasa

The motivation for Cable and Wireless' participation in so many wartime schemes conceived by the British Government is not immediately clear in the archival material. It was first assumed that the Company was acting in a patriotic way: putting its personnel and equipment at the behest of the state in the pursuance of the common victory. The Mombasa wartime file subverted this assumption, and offered an explanation that was less altruistic and patriotic, and more financially motivated. This section expands the financial aspect to the company's war work by examining three months at the Mombasa branch, which was utilized by the Admiralty for interception purposes.

On the 10th June 1940 Italy entered the war on the side of the Axis; this new enemy further stretched Allied resources, particularly in Africa. The Italian East African Squadron – consisting of seven destroyers and eight submarines – were a threat to British convoy in both the Indian Ocean and South Atlantic. Knowledge of their location and movements was therefore vital to the African campaigns of the

Allies.[370] With this geopolitical situation in mind, an agent of the Admiralty (Naval Intelligence) contacted the Manager of the Mombasa Branch.

Events are reported to Head Office on the 15th June 1940 in a Service Message, which requests that Wilshaw send out English staff to assist with a new, non-commercial service; these staff must also have characters of undoubted integrity.[371] The Manager at Mombasa suggests that Sir Edward Wilshaw should speak to the Admiralty in London in person, to ascertain the details of the proposal. The result of this meeting is included in the Mombasa file; it is noted that the Manager is undertaking interception work of Italian ship-to-shore high frequency radio traffic.[372]This interception continues for the next six months.

The next recorded contact with the Mombasa branch concerning this interception occurs on the 5th October 1940, when the Manager writes to Sir Edward Wilshaw with a statement of the stations accounts covering June-October 1940. The basic income for the Mombasa branch is broken down into radio and cable: the former was £8.7.9, while the latter was slightly higher at £27.13.1. With the instigation of the interception scheme – referred to as the Procedure Y Service – revenue soars: accounts record radio takings at £121.13.9 and cable revenue at £1900. In other words, six years of revenue was taken for the station in one month alone, thanks to the Admiralty traffic.[373]

The Procedure Y Service was discontinued on the 20th December 1940, as the Manager reports to Head Office.[374] He states:

> …It is regrettable that this very handsome revenue should be lost …in the six months it has been in effect it has generated some £7,600 for the company at practically no extra cost to the branch…[375]

[370] DOC/CW/1/530 Mombasa Wartime File; Summary Document dated 1941.
[371] DOC/CW/1/530 Mombasa Wartime File; Service Message Mombasa to Head Office, dated 15th June 1940.
[372] DOC/CW/1/530 Mombasa Wartime File; note by Wilshaw concerning Mombasa Manager 20th June 1940.
[373]DOC/CW/1/530 Mombasa Wartime File; letter from Manager, Mombasa to Head Office, 5th October 1940.
[374] DOC/CW/1/530 Mombasa Wartime File; letter from Manager, Mombasa to Head Office, 20th December 1940.
[375] DOC/CW/1/530 Mombasa Wartime File; letter from Manager, Mombasa to Head Office, 20th December 1940.

This letter demonstrates that the relationship between Cable and Wireless was predicated on two things: first, maintaining the Company's trusted position with the state and second, vitally, the financial benefit to Cable and Wireless. Each scheme that the Company was involved in during the war was established with this financial consideration in mind: the additional government traffic was always invoiced to the Treasury. Even though the British Government enjoyed a preferential rate per word, the sheer volume of traffic compensated for the reduced price. In addition to charging the Treasury per word, Cable and Wireless also presented invoices for staffing and equipment costs, these were justified under Article 21 or the Agreement of 1929, which concerned the reimbursement of additional expenditure. These were always paid in full. This benefit to the Company did not go unnoticed, as Lord Moyne[376] states in a letter to Sir Edward Wilshaw on the 11th April 1941. He notes that

> It is indisputable that the war has involved a very heavy increase in the traffic handled by your Company and corresponding increase in the Company's revenue. At some Colonial stations the telegraphic expenditure is now several times as great as in pre-war days, and in the minds of some in the Government there is undoubtedly the feeling that the additional revenue accruing to the Company in respect of the increased traffic arising out of the war has been more than sufficient to compensate the Company for any additional expenditure which they may have incurred by maintaining a service at stations at which such a service is not normally maintained.[377]

Lord Moyne goes further, stating that the total amounts invoiced cannot be significantly comparable with the total revenue of the Company and its associates.[378] He concludes that:

> In the long run, it will be in the interests of the Company to accept the view that, if a continuous service is necessary in time of war, the Company may reasonably be expected to provide it, whatever their precise legal obligations in the matter.

Lord Moyne is correct when he states that the additional work undertaken by the Company more than covers any expenses incurred. However, according to Article 21 of the Cable and Wireless agreement, the Company is quite justified in

[376] In 1941 Lord Moyne was appointed Secretary of State for the Colonies
[377] ADM 116/5138 Letter from Lord Moyne to Sir Edward Wilshaw concerning financial position of the Company with regard to additional war work, dated 11th April 1941
[378] ADM 116/5138 Letter from Lord Moyne to Sir Edward Wilshaw concerning financial position of the Company with regard to additional war work, dated 11th April 1941

presenting invoices to the Treasury – which they continue to do for the remainder of the war and the post-war period, even after nationalization.

Thus far this chapter has examined the establishment of the scrutiny scheme, its implementation on Ascension Island and has demonstrated the stark reality of the finances involved in the scheme. A personal perspective of the work of the scrutineers has been forthcoming in a diary that has been recently digitised at the Porthcurno Telegraph Museum.[379] The next section switches attention from the Ascension branch to another key station in the chain – the central node at Aden.

Hidden Comparative Histories: the work of Scrutineers at Aden

There is no surviving record of the experiences of the Ascension staff as they undertook their duties. However, a surviving diary of a scrutineer based at Aden can be used to open up our understanding of the day-to-day work of this role. John Norman, was one of Cable and Wireless' retired members of staff to be recalled under the scrutiny scheme. His diary offers a rare, personal insight into the way the scrutiny scheme operated outside the planning and paperwork of Head Office and Whitehall. His diary details a quiet retirement in Dorset with his wife Freda and daughter Molly, and goes on to chart the developing crisis in international affairs right up until the outbreak of the war.

The exact date that he was first contacted by Sir Edward Wilshaw is not explicitly clear – perhaps unsurprising, as the scheme was 'secret' – however, on the 31st August 1939 Norman received his orders from the War Office (General Staff) to report before Sunday 3rd September at GHQ (Group Headquarters) Glasgow and was told

> …to keep the matter dead secret, could not even tell Freda, poor lass, she was so cut up for I knew it meant foreign service.[380]

By the 19th September, Norman's diary records that he is on board the Strethard, a P&O vessel, somewhere in the Red Sea, bound for the telegraph station in the Protectorate of Aden.

---

[379] The diary of John Norman does not have an accession number on the Porthcurno Catalogue and it is unclear how long it has been in the collection. It was digitized as part of this project.

[380] Digitized copy of John Norman Diary 1938-41 (IMAGE 9_30) Dorset and Aden. Un-catalogued. Porthcurno.

Upon his arrival at Aden – along with an unspecified number of other scrutineers – Norman is billeted in the Old Quarters, and set to work immediately. He notes that neither he nor the other scrutiny staffs are in the employ of Cable and Wireless, but rather under the War Office and supervised by the Chief Censor.[381] He goes on to say that:

> Our work in the office is not laborious, we call it 'snooping', for apart from local cables, all of which we have to censor, we just watch out on the main lines and snoop any foreign cable – that is, take a copy – that is not clear or is at all suspicious. The staff is more than ample, so at present we are having two days off a week. An easy life – a great contrast to those awful days in the London office.[382]

However, these were the early days of the Second World War, when events happened 'over there' and seemed to have no real bearing on those outside continental Europe. Within a few months the traffic levels had increased commensurately, until Norman records in his diary:

> It is no joke censoring a mass of urgent and non-urgent cables in telegraph code and signals… We have to get a hustle on and see that Government and real commercial cables are not delayed and do lots of thinking at the same time, and all in various types of cable, wireless and landline signals…[383]

At Aden the scrutiny staff were also drafted into a censorship capacity, increasing their workload and increasing the strain on some of the staff.

This strain was acutely felt by one of the scrutineers who Norman names in full but will be referred to here as [anonymous]. The climate, food, workload and illness are all factors that Norman suggest may have contributed to

> [anonymous] appears to be going crackers, and has had a bust up with some Bombay local clerks in the middle of the night, a lot of their crockery smashed. We think [annonymous] may be feigning lunacy to get invalided home. He is getting us a bad name by getting drunk and being a nuisance to people in the town. Drinks for him stopped in the mess some days ago, but apparently he has a private supply.[384]

[Annonymous] is indeed sent home – not invalided as Norman intimates, but in disgrace for his drunken conduct. He is not the only one; as the archival material has demonstrated,[385] there was a high attrition rate on the scrutiny staff, leading to

---

[381] Digitized copy of John Norman Diary 1938-41 (IMAGE 9_35)
[382] Digitized copy of John Norman Diary 1938-41 (IMAGE 9_34)
[383] Digitized copy of John Norman Diary 1938-41 (IMAGE 9_44)
[384] Digitized copy of John Norman Diary 1938-41 (IMAGE 9_38)
[385] One such example can be found in DOC/CW/1/502 Malta – General (1935-43). On the 20th September 1939 it is reported to Head Office that six scrutineers wish to be

excessive drinking and unruly behaviour. In most cases this is attributed to the rigours of the job.

As the war progressed, the carefully conceived scrutiny scheme begins to lose cohesion as duties and staffs are moved around.[386] Towards the end of his overseas wartime service, Norman records:

> Am in a disgusted mood tonight, reasons:
>
> 1) We have 51 men here, only need half that number so we are only working 3 days a week and not doing much then.
> 2) Quite a few of the Censor staff – that is us – are of military age and cannot read (or could not on arrival) the cable signals and know nothing about cable working etc. Why were they sent abroad on this job?
> 3) Women, European ladies, are doing the postal censorship in town whilst we are drawing money for jam here.
> 4) Some of our men are actually drawing overtime, in addition! Nobody is doing more than about 30 hours actual work weekly. Overtime! We are supposed to do 8 hours daily.
> 5) Our name is mud, everybody except the Manager, the Servants and one or two of the permanent staff look down upon us and we are continually being cautioned about things, mostly trivial. For instance, they have forbidden us to use the office typewriters, we must write any copies of cables. Whoever heard of writing off these days!? Accuracy is essential, and very few nowadays can write legibly enough for code messages to be accurately transmitted from their writing. This is an example of the childish hate there is against us.
> 6) So on the whole I heartily wish I'd never dreamt of taking up this job. Even the humblest ARP and cabbage-growing job at home would be better than fucking about here.
>
> There is a rumour that staff is to be reduced by ten, so shall wait events, but am dying to get out of this.[387]

Conceived in the years before the Second World War as a supplementary scheme to the censorship programme, the scrutiny scheme – once put into effect – was decentralized and entirely contingent on local conditions. At Aden the scrutineers were plagued by ill health, the climate and personal problems; these were quite apart from the professional difficulties they were presented with. From the lack of technical ability on the part of some of the censorship staff and apparent prejudices leveled against them – like the denial of typewriters. The nature of the

---

repatriated. On the 2nd October 1939 one of these men has hospitalized himself in 'alcoholic delirium' in a bid to be repatriated. Head Office, however, consider that 'given the circumstances', he should pay for his own passage.

386 Digitized copy of John Norman Diary 1938-41 (IMAGE 9_38): Norman discusses how half of the scrutineers are being transferred to another (unnamed) station. In DOC/CW/1/502 (Malta), it is recorded that six scrutineers have been seconded for 'special duties' by the Foreign Office. Replacements are requested.

387 Digitized copy of John Norman Diary 1938-41 (IMAGE 9_40)

work and the overstaffing at Aden also conspired to create difficulties for the volunteer staff: Norman refers to the work as 'snooping' – which fundamentally is what it was, and copying out any suspicious or unclear in any way. The scrutiny staff at Aden was, according to Norman, thoroughly overstaffed – fifty-one men were in position and only half of those were required.

In his final diary entry made at Aden, Norman spells out his frustrations with the posting: overstaffing, underworked, reputations being dragged through the mud, dishonesty and office politics. All of these factors led to his desire to be sent home and the uncharacteristic expletive: efforts have been made to excise or disguise the word in the diary, but it is however clear.

Maintaining the Cable and Wireless Blockade

A common sentiment expressed within oral history interviews and within the Cable and Wireless in house journal, the *Zodiac,* during both the First and Second World Wars is the frustration of the telegraphists at being in a reserved occupation. They were exempt from conscription and were dissuaded from signing up to fight and 'abandoning their posts'. As company staff member, John Kellor recalled

> At one stage, I used to get very cross with myself and with everything and everyone, because I was stuck out there and I, I thought that troops, German troops were going to march through Hitchin. That sort of hurts sitting idle doing nothing.[388]

For many, acting as a censor or scrutineer compounded this frustration. The article, 'Three Dawns' published in the *Zodiac* of March 1940,[389] details the work of a First World War censor in the exposure of a circle of French spies utilizing the telegraph network. While the exact origins of this prosaic and seemingly allegorical story are unclear, it does have its basis in fact: it was a widely repeated story following the First World War on the value of censorship and the interception of messages. While the task itself may have been arduous and unrewarding, and may have lacked the glamour or apparent patriotism of serving in the fighting forces, it was nonetheless an invaluable role that the telegraphists fulfilled. The inclusion of this story in the *Zodiac* so early in 1940, following the end of the Twilight War, seems to be a reminder to the men and women of Cable and Wireless that their work is equally as important as serving in the forces.

[388] DOC/CW/6/406: Transcript of Interview with Stanley Theobal and John Kellor.
[389] See Appendix

The Scrutiny Scheme, quite separate from the official censorship of communications orchestrated by the government, provided a hitherto untapped source of information: from embassies in neutral countries to the business affairs of private firms, the British Government was able to observe, clandestinely, worldwide events. This so-called 'cable and wireless blockade' allowed the government access to any information that was transmitted, provided it was not on the enemy's closed system. An example of this can be found in January 1940, when after four months of war, German firms switched their traffic to the Italian owned Italcable; this is reported to Sir Stewart Menzies, head of MI6:

> Information received direct from the Western Union verifies the switching of traffic sent by German firms to Italcable. The case in point is traffic exchanged between Iahusen and Cia, Buenos Aires and 'Locodam Amsterdam' which recently was switched both ways from Western Union to Italcable. We had enjoyed this file both ways for many years.

The reply from Menzies is on heavy blue paper[390] and states:

> I am greatly obliged to you for sending me the report you recently received from your Commercial Manager in the Argentine. The contents are, however, disturbing, insofar as it means a gap in our Cable & Wireless blockade…[391]

This is the first and only such direct allusion to an effective blockade of worldwide communications across the network. Identifying exactly what information the scrutineers (as opposed to censors) are watching for is never made explicitly clear in the archive, and many documents that pertain to the scheme are marked 'destroy by fire after reading' (why the Company has not is rather unclear). One example that highlights a specific task of the censorship and scrutiny personnel can be found in a memorandum dated 19th April 1940.[392]

In this instance a special watch was to be kept for messages to or from 'DANCOM', which concerned shipping in some way. If one of these messages was spotted, it was stopped and forwarded to London before retransmission. In this way the government was able to intercept messages, hold them up to reduce their strategic value or alter the contents to make them worthless. This memorandum epitomizes the work of the Cable and Wireless scrutiny personnel: they were to keep a

[390] Letters from Sir Stewart Menzies (MI6) are immediately identifiable in the Cable and Wireless archive; they are typed or written on thick sky blue paper.
[391] Letter from Sir Stewart Menzies to Sir Edward Wilshaw dated 10th January 1940.
[392] See Appendix 1.2

constant watch on messages transiting the network, maintaining a constant vigilance for messages of a strategic or intelligence nature.

The scope of the censorship and scrutiny programmes, while never made explicitly clear in the Porthcurno archive, can be found in the Postal and Telegraph Censorship Department archives in the National Archives, Kew. The work of the Maltese censors and scrutineers is tabulated, and examples of messages reported. In March 1942, censors reported:

1) Cables

(a) Terminal Outward	1714
(b) Terminal Inward	3486
(c) Transit	10

2) Wireless

(a) Terminal Outward	17426
(b) Terminal Inward	13609
(c) Transit	36386[393]

This information is further broken down and the numbers of messages that are both censored and scrutinized are detailed. All of the cable traffic is both censored and scrutinized, however, the wireless traffic is not:

Details of Telegrams: No.		% Scrut'd	No. Cens'd	% Cens'd
Terminal Outward	17426	100%	17426	100%
Terminal Inward	13609	"	13609	"
Transit	36386	62%	36386	"[394]

Following the cutting of the Mediterranean cables, the Malta station primarily handled wireless messages and, like Ascension, was a vital node in the network, handling and forwarding messages between Europe, the Middle East and Asia. While telegrams destined for, and originating from the island were censored, the sheer volume of transit traffic meant that only 62% could be scrutinized. As for the nature of the messages that were scrutinized and the action that was taken, the Malta file is revealing, as the following transcript illustrates:

[393] DEFE 1/238 Postal and Telegraph Censorship Department; Overseas Censorship; Middle East Area; Malta: Censorship Reports. Details of Telegrams March 1942.
[394] DEFE 1/238 Postal and Telegraph Censorship Department; Overseas Censorship; Middle East Area; Malta: Censorship Reports. Details of Telegrams March 1942.

Docket 1023/182 23.12.41

From: [redacted] Norfolk Street, Siliema, Malta.

To: [redacted] Vulcan Street, Middleborough.

(See Report No. 36, Docket 1032/578, and earlier interceptions from the same writer)

"I will not dwell this time too much on conditions, but I am going to say without fear or favour that I, and plenty more from home, are right down disgusted with it all. There is not sufficient to feed you by legal buying but if you have sufficient to live on the black market, you can buy what and when you like, so now who runs it and where is it coming from? ...and so on. The writer continues in his customary strain, sneering at what is provided, hinting at corruption, administrative weakness and indifference to the lot of what he calls the "good old tax payer" – a favourite theme which has appeared in earlier letters from this address.

Action. Condemned. A special watch on this person's correspondence has now been imposed.[395]

While it is clear that [redacted] is not spying for the enemy, or committing great crimes against the state, he is guilty of detailing conditions on the besieged island and hinting at corruption in the administration: information that would be of great value to enemy propagandists, and potentially the domestic press of the United Kingdom. What is interesting is that rather than censoring the offending message, it is instead condemned (to destruction or to a department file is not made clear), and a watch imposed on any further communications. This is a recurring theme throughout the report: civilians living in Malta attempting to report conditions back to the UK are routinely having their communications condemned, watches placed on further messages and on some occasions, are warned by the security services about the content of their messages. The British Government exercised tight control during the Second World War over civilian communications within Malta. The censorship and scrutiny schemes not only served the purpose of scouring messages for intelligence that could be used to the benefit of the war effort, but also allowed the government to control the narratives, and to an extent, the propaganda it was disseminating. The control of information leaving Malta seems to be with the express purpose of maintaining the 'brave Malta' narrative that maintained morale within the domestic space of Britain at the expense of those within Malta itself.

[395] DEFE 1/238 Postal and Telegraph Censorship Department; Overseas Censorship; Middle East Area; Malta: Censorship Reports. Reports of censored correspondence 1942.

Conclusion

The first phase of the mobilization of Cable and Wireless network was the scrutiny scheme, which acted as a separate operation to the work of the official war censors. Where censorship allowed messages to be edited or stopped before transmission, this could only be undertaken in areas under British administration. The scrutiny scheme, however, allowed the British government access to every message that transited the network – regardless of its point of origin on the globe. This facilitated a form of telesthesia – knowledge perception at a distance – for the British Government, and the information that was gleaned from the scheme could be quantified, documented and disseminated around the various government departments concerned – particularly the war ministries and intelligence services.

The sociopolitical networks that existed between members of Head Office staff and representatives of the Foreign Office, Treasury and War Cabinet allowed the Company to be drawn in to operations of state. These networks – the personal relationships between Company and State representatives – contributed to the strategic culture of war time Britain which was one driven by the collection, analysis and dissemination of intelligence concerning enemy, neutral and allied powers. This is demonstrated in the preparations made by representatives of the Foreign Office and Cable and Wireless from the 1920s to the outbreak of the war in the establishment of the scrutiny scheme. Under the Official Secrets Act of 1920, messages transmitted from or received on British soil were copied and forwarded to the intelligence services to be sifted. The Scrutiny Scheme, however, established in 1937 allowed all messages that transited the Company's network to be read and copied, giving the impression to users of the service that messages would be secure and unmolested.

The scrutiny scheme utilized the physical network not only as its source of information or intelligence, but also as the means for disseminating information that was of value; the hierarchical structure of the scrutiny scheme can also be likened to a decentralized network, with regional centres that pooled information gleaned by the scrutineers, that would then forward information to a central point – in this case, the top floor of Electra House, London, where representatives of the government – the Foreign Office – would then translate the information into the closed and secret networks of the intelligence services. Where knowledge can be conceived as power, the scrutiny scheme afforded the British Government access

to a hitherto untapped reservoir, which in turn empowered the British over enemies, allies and neutral countries. The scrutiny, and, to a degree, censorship schemes were both conceived with the intention of controlling information. Cable and Wireless were the institution responsible for affording this control to the government. The scrutiny of messages transiting the Cable and Wireless network demonstrates the strategic culture prevalent in the United Kingdom, one that was centred on the gathering of information, of strategic and tactical knowledge, which in turn empowered the British Government.

With regard to the Company's participation in secret activities, the mobilization of overseas stations is a narrative littered with secret operations of various kinds. However, this did not extend to code breaking in the context of overseas stations, though this was undertaken domestically. Head Office provided direct services from the Central Telegraph Office to the Foreign Ministry for the transmission of intercepted messages, and provided telegraphists to work at Bletchley Park. Throughout the war, the Company's domestic wireless stations were routinely utilized by the intelligence services to 'watch' particular frequencies. Cable and Wireless' participation in intelligence activities is perhaps most clearly demonstrated in the preceding chapter: from the scrutiny of messages transiting the network *for* intelligence, to the transmission of secret intelligence via the company's uncensored Service Messages, there is a clear and established relationship between Cable and Wireless and the intelligence services of the United Kingdom. As it has been asserted, the Second World War mobilization of the overseas network effectively turned it in to one giant listening post, both in terms of spatial distribution and comprehensive monitoring of communications in the twentieth century.

6. Defending the Station

Reprisals and unnecessary danger

Having mobilised a network of retired former employees to act as scrutineers within the overseas network in the pursuance of their wartime work, Cable and Wireless attended to the physical security of the cable network. For the majority of overseas stations a Local Defence Force was raised; the English staff would assume the role of officers, while the local employees would form the corps of men. The raising of defence forces are another aspect to the ways in which Cable and Wireless were tasked by the Government with the security and maintenance of cable communications. A further consideration in this chapter is the ways in which Local Defence Forces were raised and structured so as to fit within the definition of combatants on the battlefield, as described by the Hague and Geneva Conventions. This is discussed in detail in Chapter 7.

Local Defence Forces were raised in areas of the world where the provision of professional personnel – the army or local Police force – was not possible. These were often the island stations that formed nodal points within the submarine cable network. One such example can be seen in September 1938 when the English staff at the Seychelles branch were enrolled in the local defence force.[396] A persistent point in the mobilization of the overseas network is the level of preparedness: both the scrutiny scheme and the Seychelles defence force are in place a year before the outbreak of the war. This is at odds to the level of preparation for the domestic stations (see chapter 9).

The relationship between the British Government and Cable and Wireless was manifest in the establishment of these local defence forces. In a handful of places within the British Empire, all able-bodied men were expected to undertake national service in the event of war. This was particularly true in Kenya and Nairobi, where Company employees were being called away from their stations.[397] By campaigning through the Colonial Office, Sir Edward Wilshaw was able to arrange for telegraphic workers to be included on a list of reserved occupations –

[396] DOC/CW/1/492 Defence Precautions at Branches. Cable from Manager, Seychelles to Edward Wilshaw dated 28.09.1938.

[397] DOC/CW/1/450 Nairobi. Letters between the managers at Kenya and Nairobi stations concerning 'national service'; letters between Wilshaw and the Colonial Office arranging for the exemption of telegraph workers for enrolment.

thus exempting them from this service.[398] In doing so, the able-bodied men in the Company's employ could then be utilized by Cable and Wireless to defend the overseas cable network. The mobilization of the local defense force within cable stations reveals the specific ways in which Cable and Wireless attended to the security of the international cable network.

The following discussion addresses the specificities of the moblisation of the defence force on Ascension Island to explore how Cable and Wireless placed its employees in uniform to protect both the employee and the station. The island can be situated as a small but important telegraph station in the South Atlantic into the global narratives of the Second World War.

The Ascension Island Local Defence Force

The mobilization of a Local Defense Force on Ascension was first suggested in a letter from the Colonial Office in June 1939, which noted that the island was not of sufficient importance to justify the provision of fixed defences or a regular garrison, but that the Company should explore the possibility of raising a small local defence force comprised of company staff.[399] It was stated that such a force would be powerless to prevent a raiding warship from destroying the cable station by gunfire, but it might act as a deterrent to landing parties, and should therefore be armed with machine guns.[400]

Following the receipt of this letter, Sir Edward Wilshaw sends a Service Message to the Manager at Ascension, instructing him to investigate the possibility of raising:

> 'A SMALL DEFENCE FORCE COMPOSED OF EUROPEANS AND ST HELENIANS THAT COULD BE ARMED WITH MACHINE GUNS…'[401]

Whilst in London a series of meetings take place between Cable and Wireless and the Colonial Office discussing the practicalities and purpose of the proposed force.

---

[398] DOC/CW/1/450 Nairobi. Letters between the managers at Kenya and Nairobi stations concerning 'national service'; letters between Wilshaw and the Colonial Office arranging for the exemption of telegraph workers for enrolment.
[399] DOC/CW/1/472 Ascension Island Defence Force. Letter from Colonial Office to Admiral Grant, dated 26th June 1939.
[400] DOC/CW/1/472 Ascension Island Defence Force. Letter from Colonial Office to Admiral Grant, dated 26th June 1939.
[401] DOC/CW/1/472 Ascension Island Defence Force. Service Message from Sir Edward Wilshaw to Bunker, Ascension.

The minutes of these meetings, dating from the 12th July 1939 offer an insight into exactly what was expected of the Company staff and St Helenians on the Island. It is made clear at the outset the notion of providing a professional, permanent garrison had been turned down, but the War Office proposed the following:

> Major Mears said that the idea of a defence force at Ascension was intended to be a deterrent against landing parties from armed vessels, and he explained the difficulty, owing to the heavy armour piercing shells used by modern men-of-war, of dislodging properly entrenched forces, and he said that this type of shell also rendered accurate bombardment of buildings, etc., difficult, as the shell was apt to pass straight through the building without exploding. He said that the defence of Ascension had already received consideration, and its fortification by means of guns, etc., had been turned down by the Authorities. The defence force, therefore, was only to cope with landing parties.[402]

The Cable and Wireless response to this position is interesting and draws on the experiences of the Company in the First World War. For example, Wilshaw notes that:

> I went on to remind the meeting that the defence forces, even after they had been served out with ammunition had never been called on to offer any resistance, and in fact that as early as October 1914 the Defence Committee had told us that, whilst desiring every show of resistance to be made, it would be better not to aggravate the position by firing if it was found quite useless to prevent a landing. I said that towards the end of the war the Army Council had gone even further, and had told us not to offer any resistance whatsoever and to assume a strictly non-combatant role.[403]

The associated documents concerning the defence forces raised during the First World War are illuminating, not least because the defence forces were raised and equipped – with standing orders that in the event of the enemy approaching or attacking a station, the staff were to assume a strictly non-combatant role. In the event of an attack, the staff were to refrain from making any forms of resistance and so rendering themselves liable to punishment by the enemy in the event of their capture.[404] It was hoped that, failing material damage to the cable, any interruption caused by a landing would be of a temporary nature only, and the

[402] DOC/CW/1/472 Ascension Island – Suggested Local Defence Force: note of a meeting at the Colonial Office on Wednesday 12th July 1939.
[403] DOC/CW/1/472 Ascension Island – Suggested Local Defence Force: note of a meeting at the Colonial Office on Wednesday 12th July 1939.
[404] DOC/CW/1/472 Letter from the War Office to Eastern and Associated Telegraph Companies, dated 29th July 1918.

provision of concealed spare instruments would enable the rapid reconnection of service.[405]

The position immediately before the Second World War seems to be identical to that of the First: it would be desirable to have *some* defence at the Cable Stations, but the effectiveness would be highly questionable. The War Office note that It is therefore preferable to have spare equipment and to hope that the enemy will arrive, do his worst and leave, and for the station to be restored as quickly as possible.[406] A Mr. Sidebotham, a member of the Colonial Office staff, who had recently returned from Ascension, concluded the meeting by expressing himself strongly of the opinion that:

> Nothing whatever should be done, and said that he was delighted to find that his opinion seemed to have been borne out by the Military Authorities in the last war. He said that, in his opinion, bombardment from the sea would be possible whatever happened, and any steps taken to prevent a landing would only result in reprisals and unnecessary danger to the Company's Staff.[407]

The concerns of the War Office and Mr. Sidebotham however are disregarded and preparations to defend Ascension continued apace, until in November 1939 a draft scheme is returned to Head Office for consideration, in which the Manager notes that there are only two staff members at the branch that have any military service – both ex-Royal Navy men – and that the total compliment of volunteers will be approximately twenty-eight men. [408] However, the Manager observes that volunteers would be forthcoming only from a sense of duty, and that the weak armament suggested is considered worse than useless, and that no defence at all would be preferable to the scheme as envisaged.[409] The concerns of the War Office and Mr. Sidebotham are also reflected by the Ascension Station Manager who

[405] DOC/CW/1/472 Letter from the War Office to Eastern and Associated Telegraph Companies, dated 29th July 1918.
[406] DOC/CW/1/472 Ascension Island – Suggested Local Defence Force: note of a meeting at the Colonial Office on Wednesday 12th July 1939.
[407] DOC/CW/1/472 Ascension Island – Suggested Local Defence Force: note of a meeting at the Colonial Office on Wednesday 12th July 1939.
[408] DOC/CW/1/472 Letter from Bunker, Ascension to Sir Edward Wilshaw regarding the Ascension Island Defence force – composition, uniform etc.
[409] DOC/CW/1/471 Decode of Telegram Ascension to MD dated 14th February 1940

echoes the dubious value of poorly equipping Company employees to stand in the face of a U-boat landing.[410]

As the previous chapter demonstrated, agreements between Cable and Wireless and the government hinged on finances and equipment; following the meeting of 12th July 1938, letters are exchanged between Electra House and Whitehall, until in April 1940 the Ascension Island Defence Force has been enshrined in statute in the form of a draft ordinance from the Governor of St Helena, in which the composition, rights and uniform of the Force is finalized. It is confirmed that the bulk of the Force will be comprised of St Helenians, with Company men making up the Officers and the Manager assuming control of the unit.[411]

Before the Defence Force could be enrolled and enshrined in Ordinance the island is apparently threatened by a marauding submarine.[412] An exchange of telegrams throughout December between Head Office, the Admiralty and Ascension detail how a submarine has been seen in the area, and how it is presumed hostile. On Christmas Day 1939, the submarine surfaced two miles off the coast of the island, and attempts were made to signal it. When these received no response, the Manager at Ascension took matters into his own hands; with three boatmen, he 'put off in the lighter and boarded the submarine'.[413] Fortunately for the Manager, the submarine was revealed to be British and:

> The Officer commanding informed the manager that there was no particular purpose for the ship's visit but that shortage of fresh fruit and vegetables would render welcome such supplies. In response to a signal sent to the shore, vegetables were rushed down from the Mountain and a house-to-house collection was made at Georgetown. The staff households responded very generously to the calls made on them and some Christmas fare was included. The submarine left at 3pm without effecting a landing.[414]

The purpose of this letter becomes clear towards the end of the submarine narrative: this situation would have been avoided, had the island been issued with

---

[410] DOC/CW/1/472 Ascension Island – Suggested Local Defence Force: note of a meeting at the Colonial Office on Wednesday 12th July 1939.
[411] DOC/CW/1/472 Draft Ordinance of the Ascension Island Defence Force, published by the Governors Office, St Helena.
[412] DOC/CW/1/471: Letter from Manager, Ascension to MD, London. Dated 25th December 1939.
[413] DOC/CW/1/471: Letter from Manager, Ascension to MD, London. Dated 25th December 1939.
[414] DOC/CW/1/471: Letter from Manager, Ascension to MD, London. Dated 25th December 1939.

a suitable pair of field glasses. While a lookout has been kept from the Island at all times, the Manager states, they only possess nothing but 'one small type Naval pattern telescope in poor condition'.[415] The Manager wonders whether an approach might be made to the Government in this connection: to supply the island with three pairs of glasses, and one spare. Sufficed to say, upon receipt of this request, four pairs of binoculars are on the next mail boat to the island.

From April 1940 to March 1941, this group of twenty-eight men, with limited armaments and training were the first and last line of defence between the cable station and the potential, and expected, landing by a German submarine. It wasn't until the 7th March 1941 that this irregular, and ill-prepared force were augmented by an artillery detachment complete with two six-inch guns.[416] Soon after the arrival of the Royal Artillery detachment, it was decided that their battery could cover any direct approach on Georgetown. The Colonel in charge of Ascension Island's defence, based at St Helena, suggested that the Defence Force should no longer be confined to the defence of Georgetown and the Cable Station, but should become a mobile striking force; the purpose of this force would be to intercept and engage the enemy at any point on the island where he might make or attempt a landing.[417] Now, on the sounding of an alarm, the Force no longer took up the prepared positions as it formerly had, but instead assembled near the telephone exchange and awaited instructions from the Officer Commanding at the Battery.

'Changes are Impending' 1942

By 1942 Ascension Island was a key station in the Cable and Wireless network connecting the Americas and beyond with Europe (via an indirect route). Within Britain there was limited knowledge about the Island, which may also indicate why it was never subject to attack by the enemy forces. The following letter from the War Office demonstrates how little official information was known about the Islands:

Dear Sir Edward,

---

[415] DOC/CW/1/471: Letter from Manager, Ascension to MD, London. Dated 25th December 1939.

[416] DOC/CW/1/472 Letter from Bunker, Ascension to Head Office dated 03.03.1941 – Defence Force has been augmented by a detachment of Artillery. The guns were never fired in combat throughout the course of the entire war.

[417] DOC/CW/1/470 Ascension Gen.2: General Notes on Ascension Island, dated 1st Mach 1942.

> As you personally know, changes are impending in Ascension.
>
> We have been asked to provide all available information about the island, and so far all we have been able to find is Admiralty Chart No.1691, the information in the Africa Pilot Part II and an article in the Scottish Geographical Magazine. The Colonial Office tell us that you may be able to help us. We would be very grateful if you could lend us any maps or any other information which you may have about Ascension, additional to the information we have already quoted.
>
> The impending changes at Ascension should be regarded as Most Secret and for your personal information only.[418]

It seems remarkable that the British annexed the island in 1815, and in the intervening one hundred and twenty seven years, the only information they had managed to amass were some Admiralty charts and an article from the Scottish Geographical Magazine.[419] If this was the extent of the British holdings on the island, the Germans must have been only faintly aware of its existence.

The Company addressed the lack of official information on Ascension Island in March 1942 in a report to the War Office compiled by Cable and Wireless. The report detailed the geographical, telegraphic and population history of the Island. Within the communication the 1935 population is described as comprising of sixty Europeans and one hundred and twenty St Helenians and it notes that this population has not changed in the intervening years. Further to this Cable and Wireless draw attention to the fact that the mail boat brings all the supplies to the Island. Of particular interest is the fact that a letter from England could not be answered for a minimum of forty-six days.[420] These facts provided by the Company illustrate just how isolated and sparsely populated the Island was, and highlight the dramatic effect what was about to take place would surely have.

On the 18th December 1941, Cable and Wireless in London received a joint communication from the War Office and the American Government, requesting

---

[418] DOC/CW/1/471 Ascension Gen.3. Letter from the War Office to Sir Edward Wilshaw dated 17.02.1942. Forming an information request concerning Ascension Island; marked Most Secret.
[419] [Author Unaccredited] Ascension Island *Scottish Geographical Magazine* Vol. 49 No.1 (1933) pp.18-23
[420] DOC/CW/1/471 Report prepared by Cable and Wireless for the War Office concerning the history and disposition of Ascension Island.

official permission to survey the island, with a view to constructing an aerodrome.[421] The construction of the airstrip on Ascension was considered vital to the war effort, and would provide a safe haven and a refueling point for aircraft flying transatlantic. Considering the geopolitical narrative of the Second World War this date is very revealing, as this request came from the American government just ten days after the United States joined the war. The Company naturally granted permission for this survey and by February 1942 the advance party of American servicemen is ready to leave for Ascension [422] This reconnaissance force consisted of five officers and five ratings that 'busied themselves on the island, while aerial reconnaissance was carried out by sea-planes from the US aircraft carrier *Omaha*.[423]

Throughout 1942 the cable station and community of Ascension is mobilised in the war-effort, as the presence of the American taskforce must remain a closely guarded secret. As a consequence of this, in March 1942 further censorship instructions are dispatched to the island which state that no mention can be made in any communication – other than coded service messages – of the presence of Americans on the island, nor their activities.[424] This secrecy is further reinforced on the 26th March when Head Office in London takes further measures to obscure not only the activities taking place on the island, but the location of the island itself. This scheme is first mooted in a Memorandum between the Traffic Manager and the General Manager, who states:

> It has been deemed desirable to eliminate the Office of Origin from telegrams originating in Ascension, to make such telegrams "Sans Origine" … Would you

[421] DOC/CW/1/471 Letter from British Government to Cable and Wireless concerning the American survey of Ascension Island.
[422] DOC/CW/1/471 Service Message to Manager Ascension regarding American survey party.
[423] Graves, C *The Thin Red Lines*: 98. Throughout 1939 and 1940, the United States remained, as far as diplomatically possible, neutral in the War in Europe. From late 1940 into early 1941, this position began to change with mounting pressure from Churchill on the American administration. Eventually, the Lend Lease Act was passed on 11th March 1941, which allowed the United States to sell, transfer title to, exchange, lend, lease, or otherwise dispose of, to any such government whose defence the President deems vital to the defense to the United States, any defence article. A direct result of the Lend Lease Act was the establishment of the Air Transport Command in spring 1941.[423] This organization served two purposes: it provided the British fighting forces with a stream of new aircraft for the North African campaign, but it also served to train American pilots and crews experience flying combat aircraft.
[424] DOC/CW/1/470 Letter to Manager Ascension from Head Office; cover note of new censorship arrangements for the island.

> please take such action as is necessary to put the arrangements into effect immediately.
>
> The matter is highly secret and urgent.[425]

By removing the Office of Origin from telegrams, if there was an accidental release of information in a message – detailing events on the island – it would not be immediately, or easily traceable to Ascension Island. To an employee of Cable and Wireless however, the source of such messages would still be identifiable from the various prefixes and coding within the *preamble* of the message, but to the recipient of the message or an outside observer, messages from Ascension for the remainder of the War would come from an undisclosed location. To mitigate the possibility of identification from the *preamble*, Ascension was provided with a new prefix code that made its location within the Cable and Wireless network shift to appear closer to South Africa.[426]

While designating the office *sans origine* would make it difficult to identify its location, for a Company employee it would be possible. For all the preparations on behalf of Cable and Wireless and the government, they had not taken into account the human element. The surviving archives of this period, albeit those that have undergone the redaction process, reveal how the actions of one person could lead to a release of information, and are revealing of the level of control the government had over communications during the Second World War.[427]

The Company first hears of this apparent breach of censorship precautions on 11th September 1942 when the following is received by the Censor in Charge at Cable and Wireless, from the Chief Telegraph Censor:

> With reference to the attached telephone intercept regarding the improper disclosure of the office of origin of a telegram marked by Censorship "Sans-Origine", it would appear from the text that [redacted] is an employee of Cable and Wireless.
>
> Perhaps you will be good enough to approach the Company with a view to disciplinary action being taken. [redacted], of course, should not be informed of the source of the information.

[425] DOC/CW1/470 Memorandum from General Manager to Traffic Manager, 26th March 1942: Ascension

[426] DOC/CW/1/470 Service Message from Edward Wilshaw to Manager Ascension.

[427] Rappert's 'blackening-out' approach is adopted to highlight the redactions, whilst maintaining the coherence of the narrative.

Please return the intercept as soon as finished with.[428]

While it is almost certain that the Company did indeed return the transcript of the telephone intercept, it is first copied and can be found in full in the file. It reads as follows:

CALLER: This is [redacted] speaking. I'd just thought I'd let you know there's a telegram on the way to you from Lloyd's dated the 15th of August, its been delayed.

CALLED: Oh good, where was it sent from?

CALLER: Capetown, but of course when you get it, it won't have Capetown marked on it. In any case I expect he was only passing through. I told Mick to address it to me at the office, but he didn't – he sent it to my private address but I happened to be sitting next to the operator who passed it through, it was a bit of luck because Cable and Wireless handle about 10,000 telegrams per day. Still I had told the operators to look out for one addressed to Lloyd's and hand it to me. The only difficulty would have been had the telegram gone to one of the new operators.

CALLED: Thanked [CALLER] for giving the information.[429]

This exchange of papers is revealing for a number of reasons. First, it demonstrates how an employee of the Company would be able to interpret the information contained in the preamble and second, it demonstrates that the Government – through MI5 or SIS – were monitoring telephone communications in the United Kingdom during the Second World War. Not only were written communications scrutinized and censored, but verbal communications as well. The employee in question is interviewed by Denison-Pender and admits the offense, but protests his innocence throughout: he denies doing anything wrong, or endangering lives or the state. Denison-Pender states:

> I don't think you can say that you had not disclosed that that message had originated from Capetown: that is the serious part of it. This goes beyond the Company's own activities. You are not only breaking the Company's regulations in the Secrecy Form which you signed, but there is also the further point that you are not only liable to disciplinary action by the Company, but also liable to prosecution under the Official Secrets Act. You have disclosed to some one the fact that a telegram, which was marked 'Sans Origine' originated in Capetown and that her son was there.

[428] Memorandum from Chief Telegraph Censor to Censor in Charge, Cable and Wireless, dated 11th September 1942.
[429] Transcript of Telephone Intercept dated 28th August 1942. From London (untraced) to Portsmouth 2740?

Following this interview, [redacted] is suspended for a week without pay, while Denison-Pender reports back to the authorities. In his report to the Censor in Charge, he states:

> [redacted] has been interviewed, and has admitted that he disclosed the office of origin of the telegram in question. [redacted] expressed his deep regret at the occurrence and states that he had no intention of endangering the safety of the State and that, as he was aware that the message in question had been delayed for some days, he thought that he was not giving away any important information.
>
> [redacted] has been warned that he has not only rendered himself liable to dismissal from the Company, but also to prosecution under the Official Secrets Act, and he has been suspended from duty pending consideration of his case. I have therefore to ask whether you consider that the Company should dismiss [redacted] for this offence, of whether, in view of the fact that nothing else is known against him during his fifteen years of service, some other form of disciplinary action would meet the case.[430]

The Censor in Charge is of the opinion that [redacted] should not 'suffer dismissal for what was at most unwise, but possibly unconsidered, indiscretion', and the punishment is allowed to stand at a week of unpaid suspension.[431] With all of the elaborate arrangements to keep activities taking place on Ascension Island a secret, there still existed the rogue element that could be entirely accounted for: that is the employees themselves.

The final obscuring of the location of the island comes on the 27th May 1942 when it is decided that:

> Replies to Sans Origine messages from Great Britain and countries beyond are charged at flat rate irrespective of origin or destination so that destination of reply cannot be identified.[432]

In this way, the location of Ascension cannot be calculated from the cost of sending a reply: effectively the island completely loses its location in the telegraph network, except for those who can interpret the technical string that precedes a message when it is first printed, and even then the location is only approximate – somewhere near South Africa. With the arrival of the American reconnaissance force, Ascension Island effectively becomes a secret station.

---

[430] Letter from Denison-Pender to Sir Preston Colvin dated 16th September 1942.
[431] Letter from Sir Preston Colvin to Denison-Pender dated 19th September 1942.
[432] DOC/CW/1/470 Service Message from Managing Director to Manager, Ascension, dated 27th May, 1942

However, for all of the secret preparations made in advance of the American contingent, it struck the Manager at Ascension that one detail had been overlooked – notably the postage stamps and franking that would take place on the Island:

> BG/K Your P/TS (?T/PS) USE OUR POST OFFICE FOR STAMPS AND MAILS WILL REVEAL THEIR LOCALITY[433]

Because letters sent through the mail had to go through the Ascension Island Post Office, they would all bear 'Ascension' issued stamps, and the post-mark of the office. As the Manager quite rightly notes, an influx of letters into the United States from the small island in the South Atlantic would surely raise some eyebrows somewhere – potentially revealing the location of the 'large contingent'. The response of Head Office seems somewhat cavalier, as the MD replies the following day:

> YOUR BG/K AS MAIL PROBABLY WIDELY SPREAD ON ARRIVAL AND NOT PRESUMABLY SEEN IN BUILK BY NEUTRAL COUNTRIES MATTER NOT OF GREAT CONSEQUENCE BUT SHOULD BE MENTIONED APPROPRIATE AUTHORITY AS PART OF HIS SECURITY DUTIES.[434]

Whilst the greatest care had been taken on the behalf of both the British and American Governments, along with Cable and Wireless, to obscure not only the telegraphic location of Ascension Island, and by tightening the censorship procedures to conceal the presence of the American task force, this oversight regarding the stamps seems potentially foolhardy. It seems that the Company was hoping that no neutral country would ever see the large batches of American mail post-marked 'Ascension'. Fortunately this seems to have been the case, but it seems a rather reckless decision to take unilaterally.

The reason for these measures to obscure the location of the island become clear, when the scale of the American scheme becomes apparent. Approximately 1,750 men, and enough machinery to 'scallop out 7,000 feet of the side of the volcano' are scheduled to arrive in April, with the remit of constructing a functioning runway in eighty days.[435] On the 30th April the task force arrives in three ships – the SS Coamo, SS JZ Luckenbacks and the SS Pan Royal – and what followed was one of the largest and most secret Allied construction projects of the Second World War.

---

[433] DOC/CW/1/472 Telegram from Ascension to MD, dated 27th March 1942.
[434] DOC/CW/1/472 Telegram from MD to Ascension, dated 28th March 1942.
[435] DOC/CW/1/472 Message from Manager Ascension to Head Office

Cant, a former Cable and Wireless employee stationed on Ascension, records that Task Force 2612, codenamed 'Agate' established its camp overlooking Georgetown, and for fourteen days bivouacked on Long Beach, before moving to the South West Plains between Horseshoe Crater and South West Bay where they then established 'Camp Casey', close to the site selected for the airstrip.[436] For the next three months, the American Combat Engineers worked furiously to construct the airstrip, until on the 10th July an inspecting team of ten officers officially inaugurated it when their plane landed safely after flying from Accra on the African mainland. The next day it took off for Natal, Brazil, to complete the first Atlantic crossing using the Island.[437] The first official flight of the Ferry Service touched down on the 20th July, when fourteen American aircraft halted *en route* to Africa from Natal; these were the first of some 20,000 planes to utilize the airstrip.[438]

On the 26th July 1942, the USS 'James Packer' set sail from Charlestown for Ascension, bringing the American contingent that would augment the Ascension Defence Force mobilised by Cable and Wireless at the outbreak of the war. It arrived on the 14th August, and this permanent garrison, which eventually spent three years on the island, consisted of a further 1700 officers and men. This included men who would form the Army Air Force's Composite Force 8012 and the 692nd Signal Aircraft Warning Company, who would operate the two radar stations newly built on the island.[439] The largest Army Air Force unit was the 1st Composite Squadron, which was comprised of thirty officers and 219 men. This force undertook the tasks of island defence, sea patrols and anti-submarine offensives and was equipped with eighteen Bell P-39D fighters and five North American B-25C bombers, which arrived on the island on the 17th August.[440]

The defence of the island against sea-borne attack, hitherto handled by the Ascension Defence Force and the Royal Artillery contingent, was taken over by the 3rd Battalion of the 91st Infantry Regiment. Included within these ground forces were two artillery batteries and a search light platoon. As for ordinance: four anti-

[436] Cant, JA *Wideawake Field*: 2
[437] Cant, JA *Wideawake Field*: 3
[438] Cant, JA *Wideawake Field*: 3
[439] Cant, JA *Wideawake Field*: 3
[440] Cant, JA *Wideawake Field*: 3

tank guns, four anti-aircraft guns and four naval guns augmented the two Lewis Guns of the Defence Force.[441]

American servicemen on the island were forbidden direct telegraphic contact with the home, as it was assumed that such an increase of traffic from the small Atlantic Island to the United States would be sure to draw attention (notwithstanding the rejection of similar concerns about mail). The presence of such a large contingent and the newly constructed aerodrome, it was thought, would make the largely undefended island an all too tempting target for the U-Boat fleet. To mitigate this, all American communications were routed via London and South America.[442] It seems that this worked as an effective rouse for just over a year, until the 26th May 1943, when a message was received via wireless in both Ascension and London; this message was broadcast from Mackay Radio in New York, requesting information as to when US servicemen posted on Ascension Island would be able to communicate directly with home.[443] This message was greeted with both surprise and incredulity: by virtue of being broadcast by wireless and in plain text (i.e., not in code), it could have been, and probably was, intercepted by the Axis powers – effectively alerting them to the fact that *something* was afoot on Ascension Island. In a letter to Wethered at the Postal and Telegraph Censorship Department, Denison-Pender states:

> Insofar as we are concerned, the strictest secrecy has been observed in this matter, and every precaution has been taken at our end. We were therefore surprised to receive this morning a service telegram from Mackay Radio in New York to the following effect:
>
> > "PLEASE ADVICE WHETHER EFM SERVICE WILL BE AVAILABLE OVER OUR CIRCUIT BETWEEN USA FORCES AT ASCENSION ISLAND AND THEIR FAMILIES AND FRIENDS AT HOME IN USA MAINLAND"
>
> As this message came by wireless in plain language, it has, if intercepted, disclosed the existence of American forces on the Island, and I thought that you should know what had occurred in case you would like to take the matter up, if you thought it necessary, and prevent any repetition of this.[444]

---

[441] Cant, JA *Wideawake Field*: 3
[442] DOC/CW/1/470 Service Message from Manager Ascension to Edward Wilshaw, dated 20/03/942
[443] DOC/CW/1/470 Exchange of Service Messages between Manager Ascension and Head Office dated 26/05/1943
[444] DOC/CW/1/471 Letter from MD to Wethered, Postal & Telegraph Censorship Department, dated 26th May 1943.

The result of this message was that US servicemen were allowed to communicate directly with their families, but the Office of Origin remained absent from messages and Ascension retained its 'Cape Town' prefix for the remainder of the war. Remarkably, after this breach of security on the part of Mackay Radio, the Axis powers continued to ignore Ascension Island, which had become a key stations in the chain of Allied communications serviced by an American aerodrome.

The presence of the American contingent on Ascension Island remained a closely guarded secret for a further eight months, until the following small article appeared in the Times on 30th December 1943:

> AERODROME BUILT ON ASCENSION: BLASTED OUT OF ROCK
>
> CAPETOWN, Dec. 29 – It has been made known here that Ascension Island has been used for months past as a stage in the movement of 5,000 aircraft from the United States to Africa.
>
> A battalion of American engineers were sent to this lonely island in the South Atlantic early in 1942. Soon they had blasted an aerodrome in the rocky formation, thus providing an intermediate landing stage for aircraft being flown to West Africa *en route* to the Middle East. After leaving Ascension the aircraft flew on to Liberia, where landing grounds were also prepared in record time by American engineers.
>
> There was great difficulty in landing supplies at Ascension because there was no harbourage and everything had to be landed by lighter in usually rough surf. – *Associated Press*.[445]

The movement of some 5,000 aircraft was truly a remarkable achievement; before the war only about a hundred aircraft had attempted to cross the Atlantic in good weather, and only half of those had successfully made it. The use of Ascension Island as a staging post in the transport of aircraft for use in the African and European theatres is just one way in which the island was involved in the broader geopolitical narratives of the Second World War. Coupled with the vital nature of the node in the communications network for scrutiny purposes, the mobilization of the island, while typical of activities at other stations, is a unique insight into the role the Company played in the larger narratives of the war.[446]

---

[445] DOC/CW/1/471 Extract from *the Times* dated 30th December 1943.

[446] 'The presence of the American contingent on Ascension radically altered another key discourse of the war: the submarine battle of the Atlantic. See Blair, C *Hitler and the U-boat War 1942-45* Weidenfeld and Nicolson (1999): 57-66

[446] Cant, JA *Wideawake Field*: 6'; Bennet, GH *The 1942 Laconia Order: the murder of shipwrecked survivors and the Allied pursuit of justice 1945-46* Law, Crime and History (2011)

Local Defence Forces: Analysing Employee Mobilisation

The second phase of the mobilization of the overseas network was the raising of defence forces at key stations in the cable chain. The actual duties or effectiveness of these forces was in doubt throughout the planning and realization stages of the scheme, and the ultimate orders issued to the Ascension Island staff, as in the First World War, was to stand aside and let the raiding party do their worst. Provision was made for emergency wireless sets that would ensure communications were re-established as soon as the raiders had left. The creation of armed defence forces is the first instance of company employees being placed in uniform to protect not only communications, but the individuals as well. Rather than being perceived as irregular combatants, the uniform afforded company employees the protection of the Geneva and Hague Conventions and gave them a status on the imagined battlefield.

In the months preceding the war, the British Government was in discussion with the Company with a view to raising a local defence force at the station; all the advice offered by qualified people suggested that this would be a futile act – as experience in the Great War had demonstrated. The effectiveness of such a force was, and remained in doubt. To counter this, Colonial Wireless Sets were issued to overseas stations so that, in the event of the destruction of the primary cable or wireless gear, the spare wireless equipment could be utilized to bring the station back online. This strategic planning on the part of the Company and the government can be seen as a back up in the event that the worst should happen.

This chapter has detailed the second discrete phase of the mobilization of the overseas network: the raising of defence forces at key stations in the cable chain. The actual duties or effectiveness of these forces was in doubt throughout the planning and realization stages of the scheme, and the ultimate orders issued to the Ascension Island staff, as in the First World War, was to stand aside and let the raiding party do their worst. Provision was made for emergency wireless sets that would ensure communications were re-established as soon as the raiders had left. The creation of armed defence forces is the first instance of company employees being placed in uniform to protect not only communications, but the individuals as well. Rather than being perceived as irregular combatants, the uniform afforded company employees the protection of the Geneva and Hague Conventions and gave them a status on the imagined battlefield. This cover was stretched further when

the Cable and Wireless men were selected to land with the amphibious forces on the Portuguese Islands.

The mobilization of the Cable and Wireless stations reveals much about the function and practices of secrecy within the theatre of war: from the secret archival material, to the creation of a secret space. The location of Ascension Island was obscured, geographically and telegraphically – by removing the office of origin from the preamble and altering its geographic code. The result of these measures was to shift the perceived location of the island to somewhere off the South African coast. This chapter, however, has also demonstrated the fragile nature of secrecy, and how it is entirely contingent on people behaving in a certain way; as the telephone intercept demonstrates, this momentary lack in judgment in disclosing to a friend the location of a loved one had the potential to unravel the preparations made to disguise the island. This example also serves to demonstrate the level of governmental power exerted over the domestic communications network of the United Kingdom; it seems unlikely that this telephone call would have been intercepted by chance, which raises the question of trust: were the intelligence services monitoring the telephone lines to and from Electra House. There is no additional archival evidence for this, and given the nature of MI5 archival holdings and their release, it may never be known. The individual concerned was also disciplined via the sociopolitical networks that existed between Head Office staff and the government – in this instance between Denison-Pender and the security services, essentially through unofficial channels. This is noteworthy because the employee in question has broken not only the Official Secrets Act, but also Company confidentiality agreements; for his indiscretion he is punished fairly lightly.

A further example of how secrecy is a contingent and fundamentally unstable construction can be seen in the provision of postage stamps for the island. This seemingly insignificant detail had the potential to alert an enemy power to the level of American presence on the island, simply through the volume of letters home. If the letters to American families from servicemen on the island had been seen *en masse* by an interested party, it would be immediately suspicious and could have had potentially disastrous consequences for the Company and the transatlantic ferry service. This carefully constructed secrecy is shattered, however,

when the Mackay Wireless service in New York broadcast a plain text message asking when US Servicemen can have direct communications with home; the secret is out, and still, Ascension is not targeted.

This draws into focus the weak link in the notion of secrecy: the human element. No matter how secure the legislative framework, the archival door, or indeed the rectitude of the individual, the actions of others cannot be quantified or guaranteed. This is a recurring theme in the archival material: no matter how secure the secrecy seems, the actions of an individual – well meaning or otherwise – can shatter it. The sample telephone intercept included in the preceding chapter demonstrates this: Cable and Wireless and the British Government went to extreme lengths to obscure the location of Ascension Island to provide cover for the secret activities there. However, when an employee in the receiving room in Head Office sees a message destined for a friend, he discloses the location of the individual: potentially shattering the secrecy that had taken years to establish. According to Vincent, secrecy is a profoundly volatile compound.[447] It is precisely because the rules are so easily breached that any system of regulation has to be embedded in a dense set of values: the preservation of secrecy is something so unstable; the temptations of betrayal are so manifold; the road from discretion to indiscretion is in many cases so continuous, that the unconditional trust in discretion involves an incomparable preponderance of the subjective factor.[448]

Conclusion

The shattering of secrecy can be seen in the research for this thesis and the wider literature. The co-operation with the intelligence services created an extension of the secrecy fostered during the Second World War, carrying it forward into the present day and, as a result of the archival material, into the future as well. The approach detailed here, however, is just one of two: the other choses to publish wholesale with little regard for the consequences. This highlights Baez's dilemma, which researchers face when dealing with confidential or sensitive information; it has two points:

> (a) Researchers can disclose accurately and faithfully their findings, potentially exposing respondents' identities and placing them at risk of

[447] Vincent, D *The Culture of Secrecy: Britain 1832-1998* Oxford University Press (1998): 14
[448] Vincent, D *The Culture of Secrecy*: 14

> harm; or (b) they can withhold certain information (or alter it in some way) thus raising some questions about the accuracy of their studies.[449]

This dilemma was central to the presentation of the archival material and the creation of Cable and Wireless' wartime discourses: in particular while dealing with the sensitive and often redacted files. A balance was therefore struck between Baez's two points: archival material has been reproduced wholesale and in as complete a form as a possible; the only revisions have been the blackening out of certain names, places and addresses. In this way the accuracy and integrity of the research has been maintained and the ethical consideration of exposing those named in the archival files to harm has been mitigated.

Further examples of the interpersonal relationships between Company and State can be seen in this chapter. Through personal intervention by Sir Edward Wilshaw at the Colonial Office, overseas Cable and Wireless staffs were exempted from national service in the colonies that they are working. While the telegraphist was a reserved occupation in the United Kingdom, this was not the case overseas, but by speaking to the right people in the right department, Wilshaw is able to effect this change in status. Finally, while Ascension Island was an overseas territory, administered from St. Helena, but still a British asset, it seems remarkable that the governments of the United Kingdom and United States would request the Company's permission to conduct a survey of the island. Whether this was simply a courtesy or a necessity is unclear, however, it does demonstrate that Cable and Wireless were held in some regard in Whitehall for this request to have been put forward. After all, the company did not own the island.

To return to the original research questions: distant cable stations were mobilised in the war effort for two primary reasons, first, the maintenance of world wide, and vitally British communications and, second, the scrutiny of messages that crossed the submarine cable networks and wireless circuits. This mobilization was manifest in the provision of extra staff to cover scrutiny duties and the establishment of local defence forces to physically defend the stations from attack: the effectiveness of the latter was in question long before their deployment. As the preceding chapters have demonstrated, there were instances during the war when specific cable stations were mobilised in response to the broader discourses of the

[449] Baez, B Confidentiality in qualitative research: reflections on secrets, power and agency *Qualitative Research* (2002) Vol. 2 No. 35 pp.35-58: 35

Second World War; at Ascension Island, for instance, their was a heightened level of secrecy owing to the presence of the American forces. This resulted in the blurring, and indeed almost erasure of the island from the telegraphic network; its location was disguised geographically, physically and electronically.

A persistent question throughout the archival material, and articulated by Graves is just why Ascension Island was never attacked during the Second World War. In this chapter I have demonstrated *why* the island was never attacked: the British and American government, in concert with Cable and Wireless went to extraordinary lengths to enfold the island in both geographic and telegraphic secrecy. As it has been demonstrated, secrecy is entirely contingent on individuals behaving within a prescribed framework: with the exceptions detailed in this chapter, the tremendous effort to disguise the island was a success. It is for this reason that Ascension Island was never attacked during the Second World War.

In conclusion, this chapter has again demonstrated how the prevailing strategic culture in the United Kingdom defence establishment was one of forewarned is forearmed: by preparing in advance for the worst possible outcome – in this instance providing emergency wireless equipment – the potential crisis can be averted. The relationship between the state and company has also been further explored, from the raising of a local defence force to the request to survey Ascension Island. The theme of secrecy has again been persistent: not just in the work undertaken by the company. In this chapter the frailty of secrecy has been demonstrated and how it is entirely contingent on the behavior of individuals. Supplementary to this, the control of domestic communications exercised by the British government has been hinted at in the archival material, along with the possibility that the telephone lines entering Electra House were being monitored.

This chapter has demonstrated how Cable and Wireless employees were mobilised and tasked with the defence of the overseas telegraph network. This mobilization provides an insight into the partnership between the state and private commercial enterprise: where it was not practicable or desirable to provide regular forces to defend the overseas stations, company employees were enrolled into uniformed and armed organisations and put at risk on behalf of the state in the maintenance of communications.

7. Messages from the Battlefield:

Cable and Wireless on the Front Line

> *In time of war, particularly in theatres of active operations the services of commercial wireless and submarine cable communication agencies are in constant demand by the fighting Services, particularly the Army, to provide such operational and administrative signal communications as the Services cannot provide themselves. There is also a constant demand for the services of such commercial agencies for the carriage of message traffic for government departments and organisations, for the Press, for troops and for the public.*[450]

This thesis has sought to examine one of the imperfectly understood aspects of the Second World War – the mobilization of industry. By detailing the role of Cable and Wireless on the front line, it is possible to reveal a hitherto unexplored aspect to the War, specifically how press, service and personal messages were transmitted from theatres of war. These messages allowed readers at home to keep up to date with developments in the far-flung corners of the world, with the minimum of delay. The Cable and Wireless Telcom organization was instrumental in subverting the distance between the battlefront and the home front. This was achieved through the mobilization of groups of Company employees, placing them in uniform and exposing them to the risks of the front line: the same risks experienced by professional service personnel. This chapter develops the theme of the mobilization of the individual, by examining how a private company became directly involved with the war: sending uniformed personnel out to the front line to provide press, service and government communications.

Until 1943 Cable and Wireless personnel that found themselves inside a theatre of war were classed as civilians with no military status whatsoever. No state authority was responsible for providing them with accommodation, rations, clothing or transport. Company Personnel were required in the establishment and re-establishment of communications links in recently liberated territories, but they were unable to send employees forward with the fighting services, owing to their lack of status with regard to the Geneva and Hague Conventions: should a Company employee (without rank or uniform) be captured, they would be treated by the enemy as spies, outside the protection of international law, and subject the firing squad. An agreement signed between the British Government and Cable and Wireless in February 1944 known as The Telcom Charter addressed the

[450] DOC/CW/6/143 Telcom Charter: Preamble

circumstances and conditions of the Company Personnel when placed within the 'threatre of active operation'.

The analysis of Telcom presented explores the interlinkages between the Government and Cable and Wireless in 1943 and 1944; the change in the relationship between Company and State was necessitated by the development of the war. British reliance on cable communications required a more intense, formalised relationship between the two bodies. The development of Telcom can be seen as a response to the role of Cable and Wireless – its role, structure and origins in the North African Campaign, and its subsequent deployment into Italy. The practices of Telcom were not restricted to the European and North African theatres: Telcom also operated in the Far East and was staffed by Australians and New Zealanders. This case study is included because, unlike the European Telcom outfit, which was formed from Cable and Wireless's existing employees, the ANZAC Telcoms were recruited specifically for the role. This was achieved by targeting young men who had recently completed their education. Following the activities of the Telcom operations, particularly the 'Blue Trains' (mobile wireless stations that followed and occasionally overtook the front line forces into battle) allows us to understand the depth of the entanglement of the relationship between Cable and Wireless and the British Government in the final two years of the Second World War.

This chapter utilizes *The Thin Red Lines*, a popular history of the Telcom Organisation written by Charles Graves in 1946. It is used to provide the contextual background to the extant archival material. There are two reasons for this: first, Graves' account was written immediately after the war when the Telcom outfits were still operating overseas. Graves also had access to the primary material and company employees involved in the scheme. Second, the archival material that underpins this chapter was not filed into one central 'Telcom' file. As a result of Cable and Wireless' historic filing and curatorial practices, files pertaining to the Telcom Organisation were filed in their appropriate departmental files. For instance, the documents that detail the necessity and formation of Telcom were located in the Mediterranean Area files, whereas the meetings and transactions between Head Office and the government are dispersed through various departmental files – Foreign Office, Press Communications, and so

forth.. The fragmentary nature of the Telcom archive necessitated an exhaustive search of the archive to piece together the history of the Telcom Organisation; in this chapter, therefore, Graves provides additional contextual material to the archival files.

Founding stories: the origins of the Telcom Organisation

The founding of the Telcom Organisation emerged from a particular set of geopolitical circumstances in which Cable and Wireless staff based in North Africa found themselves in 1943. These circumstances radically altered the role of Company personnel operating in the theatre of war, as the following section will demonstrate.

The North African Campaign took place between 10th June 1940 and 13th May 1943, and the front moved backwards and forwards across the north of the African continent, from Morocco to Egypt as the fortunes of both Axis and Allies waxed and waned for three years. Following the successful landings of Operation Torch in November 1942, the Allies pushed Rommel and the Afrika Korps in a pincer movement towards the Tunisian coast; the Axis forces surrendered on the 13th May 1943 yielding 275,000 prisoners of war. The establishment of an Allied presence in North Africa allowed the strategists and planners to look northward, with the intention of landing in continental Europe at the earliest opportunity.

The invasion of Sicily, code named 'Husky' began on the night of 9-10th July 1943, and within a month the Allied forces had driven Axis air, land and naval forces from the island. A result of this success was the reopening of the Mediterranean's sea-lanes to Allied traffic, and the toppling of Mussolini. With a foothold at the toe of Italy, the next step was to move on to the mainland and push the German and crumbling Italian forces northwards. Operation Avalanche was launched on the 3rd September 1943, and throughout 1944 the Allied forces fought a long and bloody campaign throughout the length of Italy. By March 1945 they were successful and the country was in Allied hands. This, in turn, allowed the Allied planners to arrange the final movements of the war: the liberation of continental Europe and the final invasion of Germany.

This brief account of two of the most hard fought campaigns of the Second World War provides the geopolitical context to the foundation of the Telcom Orgnaisation. Once the Allied forces were established on the Italian mainland, the necessity for

effective and reliable communications became of prime importance, not only for military and strategic matters, but also for the conveyance of news and personal correspondence home. While the Service communications could keep up with the transmission of strategic information, there was insufficient extra capacity – in terms of wireless and cable bandwidth and personnel – to accommodate the flood of press reports. This was compounded by the actions of the German army, both as an occupying force and in retreat: in Paris, they had stripped Cable and Wireless offices of equipment – particularly the brass and copper fittings for scrap – and in retreat, had dismantled the communications network. As a result, the infrastructure to re-establish the pre-war communications networks was damaged beyond the quick repair of the advancing forces.

The origins of Telcom can be found in the days immediately following the invasion of Italy, and what began as an emergency measure in a time of war would go on to operate as a coherent communications outfit in different theatres of war until 1959. As the Allied forces began the long fight through Italy, the Allied Force Head Quarters (AFHQ) in Algiers became increasingly aware of the pressing need for efficient and reliable communications. The solution that emerged was a mobile wireless unit staffed by Cable and Wireless that would follow the fighting forces. On the 16th September 1943 they approached the company's Deputy Manager in the Mediterranean (Algiers) and suggest the scheme who immediately reported to Head Office in London:

> A.F.H.Q. Say the complete wireless station must be mobile. (a) Requirements comprise mobile sender and mobile receiving installation with two trucks each towing a power unit and loaded with essential spares and full terminal high-speed equipment with spares. (b) Wireless Engineer and Operators. (c) Supply of stationery etc. Understand equipment known by Air Force as Blue Train is what is required and may be available. Two power plants necessary as no local supply can be expected. Army will erect and maintain sender and ancillaries and they estimate thirty men required for operating and ancillary duties. In view great diffusion accommodation operators here to you consider feasible form operators pool at Malta where accommodation facilities appear to be improving from which could draw for disposal as and when required.[451]

This telegram contains the first usage of the phrase 'Blue Train', which would become almost synonymous with the Telcom Organisation itself. Originally conceived in North Africa by the RAF, the Blue Trains were mobile wireless outfits

[451] DOC/CW/1/501 Med Area 5: Decode of Telegram DM/Med Algiers to MD. FIL. Dated 16th September 1943.

that were used solely to call in air cover for advancing troops, and to direct fighters and bombers towards Axis targets: perhaps best conceived as a field telephone from the First World War, without the need for wires.

By the 1st of October, arrangements were in hand to provide three Engineers, one Supervisor and eight Operators for the new mobile station; they were expected to reach Algiers on of near the 26th October.[452] Along with the required staff, Cable and Wireless began to assemble the requisite equipment for the Blue Train: War Office support was promised for obtaining early deliveries of ancillary gear, and the RAF stated that they were prepared to leave their transmitter at the disposal of the Company, until such a time as it could be replaced.[453]

By the 26th November 1943, the mobile wireless station, generally now referred to as the Blue Train, is operational in Algiers, but is unable to move until a further fixed station arrives in the country:

> …This has been ready since the middle of October, but parts of it have not yet left this country. I should therefore be most glad if you could assist me by obtaining the necessary shipping space at the earliest possible moment. It may be that the date of the removal of A.F.H.Q. from Algiers has been postponed, but I am not aware of this. It is, as you will appreciate, vital that our wireless station at Algiers should be erected prior to the move.[454]

This letter from Wilshaw is illuminating because it demonstrates not only the strings that the Company was able to pull – with regard to securing priority shipping – but also how vital the mobile wireless station is perceived to be: it is vital that both stations are in operation before the whole of Allied Force Head Quarters can move forward into Italy. It is also important to remember at this point that the Telcom Organisation has not yet come into being: negotiations are still ongoing in London, so the Company men that have been dispatched to Algiers are technically civilians. Working conditions in the makeshift office is described by Graves in his analysis of the North Africa station as being 'Bedlam':

> The English men were doing the transmitting, and the Americans were typing off the recorder slip. In spite of their training at Western Union, they had no practical knowledge of their job. Time and again some earnest

[452] DOC/CW/1/501 Med Area 5: Memorandum from Staff Manager to General Manager 'Mobile Station Algiers', dated 1st October 1943.
[453] DOC/CW/1/501 Med Area 5: Note of a meeting of Sub-Committee "F" of the Wireless Telegraphy Board held at 143, Piccadilly.
[454] DOC/CW/1/501 Med Area 5: Excerpt of Letter from Sir Edward Wilshaw to Layman, dated 26th November 1943.

> soldier clerk would ask, 'Say, buddy, what's he mean he says 'K.TT. one agn et aa'?' Which translates as 'send that one again and all after'. Every word typed off the slip had to be checked by a man sitting next to the typer.[455]

Working conditions aside, it is the status of the men in Algiers that necessitated the formation of the Telcom Organisation. No provision had been made for the Company's men: they had to eat out of two halves of a borrowed billycan, and their food – which was also borrowed – was from the Royal Navy.[456] On occasion they were reduced to lifting pieces of bread from the table at Headquarters and bringing it home in their pockets. The men were also seldom off duty because they were continually being awakened in the small hours of the morning when the ink would not run in the siphon recorder.[457]

When the invasion of Sicily took place on the 10th June 1943, it necessitated sending a number of the Company's men from Algiers with the forward troops to Syracuse, Catania and Pozzallo: they wore civilian clothes, were given no official rations, and were liable to be shot at indiscriminately by both sides.[458] Nevertheless, they succeeding in restoring cable communications between Malta and Pozzallo in a few days, just in time to handle the thousands of messages concerned with the fall of Mussolini. The first Blue Train and its staff left Algiers for Naples in January 1944, with the staff going by air and the equipment being shipped by sea. Again, the Company men were travelling into a warzone with no legal protection, as the following Service Message demonstrates:

> O/L (15th, 11am) Your N/RN Authorities here require know if necessary authority and permission them enter Italy been arranged and by whom.
>
> Your L/L confidential difficulties appear continually arising regarding accommodation status entry our staff Italy which TELCOM presumably would overcome and therefore very desirable expedite if possible.[459]

Unlike previous duties undertaken by the fledgling Blue Train, the purpose of the move to Italy was not to handle operational messages, but rather was to enable the war correspondents at each successive advanced Press Camp to inform their readers all over the world of the latest battle developments.

---

[455] Graves, C *The Thin Red Lines*: 125
[456] Graves, C *The Thin Red Lines*: 125
[457] Graves, C *The Thin Red Lines*: 125
[458] Graves, C *The Thin Red Lines*: 128
[459] DOC/CW/1/501 Med Area 5: Decode of telegram from DM/Mediterranean to MD: FIL (17.01.1944)

The Telcom charter was put into place in February 1944 and it had an immediate effect in changing the outward appearance of the staff. Once the Blue Train had arrived in Italy, newly trained and uniformed staff were flown from the United Kingdom. This included Antony Norman Billson who recorded his memories of the journey in 1944:

> We were provided with uniform, army uniforms under the Telcom badge, then we flew out from Lyneham and it was in a Warwick, which is actually a passenger version of a Wellington bomber. We had a Polish pilot, and Australian navigator and the other was an Englishman. We stopped at various places on the way from engine trouble and the like. In fact I think when you left, because of security you couldn't tell anybody either where you were or where you were going so we had a post card the Company gave us which was put into a box at the last moment we possibly could so that they would know we had gone. We didn't actually arrive for three or four days, and there was some concern as to whether we had been lost or not.[460]

Over the next few weeks the Blue Train moved through Italy until it reached Capo di Monte, high above Naples:

> The first day was spent in laying out the site, and tempers were not improved the next morning when it was found that most of the marking stakes had been either flattened by lorries or uprooted by mischievous children. This called for a repetition of the previous day's work, and at times it was a moot point whether the team stood in greater danger of being knocked down by lorries or hit by stray bullets deliberately thrown into the many petrol fires by Italian children, whose chief amusement it was to do this. The masts were finally erected to the sound of gaudy oaths in unpleasant, slippery mud and heavy showers of rain. On February 26th, Cable and Wireless Naples was on the air and in contact with London for the benefit of War Correspondents.[461]

The result of this frantic work undertaken by the Cable and Wireless staff in trying and dangerous conditions was that the following morning, readers of newspapers throughout the world were able to read the latest dispatches and most up to date news of the war.

As with the other schemes mooted by the government that required the assistance of Cable and Wireless, the Company was all too keen to put their staff and equipment at the disposal of the British Government. What is unique about the Telcom Organisation was the inclusion of female Company employees – referred to wholesale in the archive and by Cable and Wireless in the press as 'Telcom Girls'.

---

460 [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010

461 Graves, C *The Thin Red Lines*: 144

The deployment of female telegraphists overseas had long been a point of contention between Company and employees before the 1940s, but the Second World War made the situation acute. The inclusion of women in the Telcom Organisation is reported by Sir Edward Wilshaw to be the responsibility of an unnamed employee that left a note in the Company 'Ideas Box', in which the employee systematically ridicules the oft-repeated justification for not sending the 'girls' overseas:

> The risk of a sea journey by the gentle sex during hostilities. But surely if the said gentle sex volunteered, that rule could be over-ridden? The Government raise no such objections when sending members of the ATS, WAAF and WRNS overseas. If they do experience any such chivalrous qualms they successfully stifle them and trust in God, the Navy and the buoyancy of the female form.
>
> Climate and unsuitable living accommodation. The former hasn't a leg to stand on and, as we don't labour under the delusion that our stations are situated in parts where white man, or woman, never trod, neither does the latter.
>
> The last reason is that of immorality which, we all agree, is even more ridiculous than the reasons in the preceding. It has been hinted to the accompaniment of sly winks, nods and nudges that the gentleman in charge of us all have shudderingly whispered through clenched teeth, that if any C&W females set foot in a C&W Station on foreign soil, it would immediately be a case of, never was so much done for so many by so few. Of course, the receiver of Ideas realizes that if a person is immorally inclined they would be so, whether they were in Sutton or Siberia, Ealing or Egypt; and that ordinary people do not, the moment they leave England, plunge immediately into outrageous orgies and excesses that would have filled Balzac with envy.[462]

The Company responded to this by forming units of 'Telcom Girls', who would follow the male Telcom's into theatres of war, staffing the re-established offices as the front line moves forward. As this chapter will demonstrate, the Telcom scheme represents for the first time the Company utilizing all of its resources to further the war effort; while there is still a division of gender – the women are not sent to the front line – they are, nonetheless, posted overseas into roles that would traditionally have been held by the male staff.

Billson, an Operator on the first Blue Train as it travelled through Italy detailed the outfit and working conditions in an interview conducted by the Porthcurno Telegraph Museum. He first recalls the travelling conditions as the Blue Train progressed through Italy:

[462] DOC/CW/1/501 Med Area 5: Suggestion from the Cable and Wireless 'Ideas' Box.

> Bomb holes were difficult. You don't want to stall – you have to keep moving. They were a little bit underpowered, we did have two vehicles that were four-wheel dive, but they weren't towing vehicles. Other than that they really went quite well. The drivers were very good and very well trained, for looking after the vehicles and the senior driver used to have an inspection every few weeks of all vehicles to makes sure they were in good order.
>
> I tended to travel with the transmitter van, the big articulated vehicle. Other than that, on the journey into Vienna I was travelling in the big Thorneycroft, which was handy because when we got there I slept underneath the vehicle.
>
> Only when we were in rough terrain, when we had to shovel gravel under the wheels to make sure they would grip and we didn't stall, or skid, or spin. Otherwise we just followed… there wasn't anything, no problems really. Everyone travelled in the vehicle, if there weren't enough seats you had to jump in the back of the baggage lorry and made yourself comfortable there.[463]

After eighteen hours of travelling through the mine-strewn landscape, the convoy arrived at Aurelia at around midnight where the transmitter site was to established:

> An air raid was proceeding two miles to north, and the guns and flashes of the Front Line could be plainly seen.[464]

By 10pm the following day the service was opened, and war correspondents were once again able to file their reports for transmission to London. Billson describes conditions in the Cable and Wireless camp:

> We went by road from Naples where we landed to Rome where we volunteered to go to the Blue Train then they sent us off to the Officers Shop to get bedding roll, camp bed, a camp bath, washbasin, bucket, groundsheet and that was our equipment for going into the tents. There were five of us to a tent – which leaked terribly badly. I got up one morning completely soaked; the only thing I could do was get dressed and go for a sharp walk to get warm.[465]

Exactly how the story went 'from Front Line to Front Page' is detailed in the *Zodiac* magazine. From a forward observation post, a war correspondent watches an Allied attack, and through 'a swirl of smoke' he sees the battle develop. Just behind the battle-line, the reporter writes his dispatch on a portable typewriter; this is then handed to the Cable and Wireless operator on-board the Blue Train. This is transmitted to the receiving room at Public Relations HQ at the base: the

---

[463] [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010

[464] Graves, C *The Thin Red Lines*: 147

[465] [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010

clearinghouse for all war stories, official communiqués, hand-outs and special stories. The correspondents story is then censored and carefully vetted for security before passing it to Cable and Wireless operators who punch it on to Morse Slip, which allows automatic high-speed transmission to the Central Telegraph Station, London, where it is passed by direct line to the correspondent's newspaper office in Fleet Street. This detailed breakdown of the route a war correspondent's story would have taken serves to highlight how vital Cable and Wireless were; not only were they instrumental – via the Blue Train – in getting the most recent reports out from the Front Line, but also in the transmission of the reports to London, and distribution to Fleet Street offices.

Billson notes that:

> We followed the WC and the idea was that we were several hours behind the main army, but it got so, people were moving so quickly towards the end that we, there was no marker, nobody put down a line, it was just where you were. We were ahead of the army, they caught us up after a while, what we would have done I don't know.[466]

Billson's recollections point to the justification for putting the Cable and Wireless staff in uniform: with the chaos of battle and the fluctuating front lines, on more than one occasion the Blue Train was in fact ahead of the advancing Allied forces. Had the communications convoy been stopped by the Axis in this situation, twenty-four men in civilian dress – in possession of high-power transmitting and receiving equipment – would, in the event of capture, have been treated as spies. The uniform provided the Company staff with the protection of the Geneva and Hague Conventions, which mitigated this particular threat.

Billson describes the working conditions on the first Blue Train as being much the same as any other cable office, except for being far more cramped:

> The vehicle was laid out in such a way that where it joined on to the articulated part of the tractor, the floor level went up and you couldn't stand up in that area, and the supervisor – George Timms – ex London man – he used to be able to switch the thing on and off with his foot, and send a short message with the Morse Key with his foot.[467]

Of the transmission of press messages to London, Billson recalls:

---

[466] [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010

[467] [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010

> In the van you would only have the punch-tape instruments, plus the transmitter itself. The transmitter is really quite a small business; the Great Northern transmitter was quite a neat little unit, and you put tape into it. It was usually running at a speed of about 80 wpm and of course some of the old senior staff would feed it at 80 wpm with no trouble. You put it in front of him, with the messages counted up, and he would just keep a loop of tape between himself and the transmitter, and one of them smoked a pipe and he would then accelerate a bit and form a nice big loop on the floor, then sit back and fill his pipe while it caught up. The old senior operators were very good.[468]

The messages themselves were almost entirely posted by war correspondents, except for the occasional messages between Cable and Wireless offices. Messages would arrive at the Blue Train by dispatch rider from the Press Camp as typed reports in plain language, where the words would be counted and split into groups of fifty; these would then be 'punched up' onto automatic transmission tape, and handed to the Senior Operator for transmission. Dispatches from the front, according to Billson, were generally between 100 and 150 words, unless there had been 'some big event', in which case they would be a lot longer.[469] On average, the Blue Train in Italy handled a dozen press messages a day, depending on current events; if there was a 'big push', you could get 'a whole load of messages, several in one day from the same person'.[470]

From this point, the first Blue Train proceeded to Austria, where it remained for the duration of the war as a static station at the service of the Press. The journey to Austria was again fraught with difficulty as Billson notes:

> We were trying to get to Vienna – that was our goal. At the Russian border they held us up for about ten or eleven hours. We were trying to get a pass to get through there, and of course by this time it was dark. We had been before that, while we were waiting time, we had been playing football in a field nearby, until after about two or three hours of football we were ordered out of there because it might be a minefield – rather late, of course, but it could have been a minefield.[471]

With the cessation of hostilities, the station was again moved – this time to a new theatre of war. With the Jewish insurrection in Palestine in 1949, the need for reliable and efficient press communications became pressing and the outfit – along

[468] [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010
[469] [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010
[470] [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010
[471] [Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010

with new Telcom staff – were moved to Jerusalem, before retreating over the border to Jordan as the crisis intensified. Jordan proved to be the final resting place of the Blue Train; it remained in the country with a full complement of wireless operators, providing the only means of communication with the outside world in Jordan. It performed this service until 1965, when the Jordanian government established its own wireless station; by way as a parting gift, Cable and Wireless donated the Blue Train – as a static station – to the Jordanian Royal Family. After this date, the whereabouts and fate of the first Cable and Wireless Mobile Station (Number 1) is unknown.

In examining the mobilization of industry during the Second World War, this thesis has revealed how a private communications company mobilised its staff to defend the lines of communications. The previous chapter examined the defence of the fixed cable heads through the raising of local defence forces comprised of Company staff. This chapter, however, has examined the ways in which Cable and Wireless personnel were placed in uniform to afford them the legal protection of the Hague and Geneva Conventions and sent – at great risk to themselves – to the front line to relay press and service messages. This work was not limited to one theatre of war, as the following section will demonstrate, but at the end of the Second World War, Telcom outfits were on the front lines in Europe and the Far East. The Telcom organization marks a difference in Cable and Wireless participation in the war: it can be seen as a break from the conventional work of a communications company. It is argued here that it was the sociopolitical relationships that existed between Company and State that allowed for the formation of the Telcom organization.

Telcom in the Far East

The preceding section has demonstrated how Cable and Wireless utilized its current employees in the Telcom scheme; the following section will demonstrate how the Company advertised for and recruited teenage boys from schools in Australia and New Zealand, specifically for work with Telcom in the Far East. Whilst the first Blue Train was coming on the air in North Africa, and later Italy, Cable and Wireless were training recruits to operate in the Far East. Whilst there were British supervisory staffs in the Far East, the majority of the operating personnel were drawn from and trained in Australia and New Zealand. In January 1944 the Company recruited some twenty-five teenage boys from Auckland

schools and began training them at the New Zealand Post Office Building in Ponsonby. As Colin Stubbs recalls:

> One little thing which I don't suppose anybody will remember now so I can probably say it, on our training school door we had a notice saying Royal NZ Airforce, now I couldn't fathom this, and for months we'd walk up the stairs at the Post Office …up the stairs through this door which said RNZA. I didn't think this was right, we were Cable and Wireless – starting my loyalty very young – so one day I mentioned this to one of my friends who wasn't in the company …he was an architect, so together we made up a sign saying Cable and Wireless. Being young and a bit tactless we didn't tell the Supervisor – Jock Beard – we were going to change it, so I got to work early and just changed it, covered up the RNZA and just changed it, and not a word was said. But in the morning later on they wanted to know who it was, so I owned up, and he wasn't at all pleased. Apparently it was some sort of cover we had for what we were doing, so the story goes, so I blew the cover of whatever it was. I gather no harm was done…[472]

Where Cable and Wireless could instruct the new recruits in Morse and the operation of the telegraph key, local colleges instructed other skills essential to being a wireless operator. The reason behind this was to ensure that the greatest number of recruits would be ready for service in the shortest possible time. Ray Connolly, one of the Telcom trainees, recalls

> In order to speed up the business of learning to type, and to use keyboard instruments etc., we were enrolled in two local 'Ladies Business Colleges', where no doubt we caused a few upsets in their routines. We attended for three hours per day for several months and enjoyed the attention of the younger instructors. As Mike Fulton so famously expressed it – 'remembered for large-bosomed women leaning over to show you what to do, which definitely put you off your asdfghjkl;…'[473]

Regardless of 'blown cover' and distractions in the Ladies Business Colleges, the New Zealand Telcom's completed their training and by May 1945 were in a position to be deployed overseas. The steady build-up of British, Australian and American forces against Japan by the end of 1944 had turned the recapture of Cable and Wireless stations in the Far East into an almost certainty, and as a result, the first 'Anzac' Telcom's were dispatched for Ceylon.

Towards the end of May, the first contingent arrived in Colombo harbour in an Army landing craft. Yet to be issued with the Telcom uniform, they were dressed in grey slacks, some khaki shorts, and others in blue, white and multi-coloured sports

---

[472] DOC/CW/5/309 Transcript of interview with Colin Stubbs; conducted by David Souden; 1994, transcript, DAT recording and cassette.
[473] DOC//5/121 'Some Memories of Telcom' enclosed w/letter from RP (Ray) Connolly, January 2012.

shirts and trousers. Uniforms were however issued two days later, and according to staff reporting to the *Zodiac*, this was punctuated by some of the most ludicrous sights for the Ordinance Department:

> Hearing that forty Anzacs had arrived, they immediately concluded that they were all fifteen-stoners, and the uniforms were apparently intended to fit 'OS' Colonials. The highlight of the day proved to be the sight of two New Zealanders walking around comfortably in one pair of pants…[474]

After witnessing this demonstration, the Ordinance Officer in charge commandeered all the camp tailors, and by working night and day secured some semblance to a fit, so that two days later the Anzac Telcom's were able to leave the camp for a temporary home some twelve miles further out from the city. The author of the *Zodiac* article signs off by stating:

> By the time this message appears, more Telcom units from Colombo will have taken over liberated Stations in the East. Once more the air will have become free Via Imperial.[475]

Despite this upbeat and optimistic report to the *Zodiac*, the subsequent journeys of both the Blue Train and Anzac Telcom staff were fraught and not without hardship. Shortly after their arrival in Ceylon, the Telcom unit were informed that they were to move again, and their ultimate destination would be Rangoon; not only would they be entering territory that was until recently – and conceivably still – held by pockets of Japanese resistance, but they would be landing on the beach with the first wave of assault troops.

The next morning, after 'a very scratch breakfast', the Telcom staff moved to the beach of embarkation. However, when they boarded the ship, they found that there was no proper accommodation for them, and as a result, had to sleep on deck:

> 'Food on the ship was excellent; but we had to sleep on the open deck for seven nights', writes Mr. Sageman, the Officer-in-Charge 'On the last five nights we were washed out by heavy rains which soaked us to the skin'.[476]

After a week on-board with no proper accommodation (although excellent food), the Anzac Telcom outfit was deposited in the neighborhood of Rangoon. Two and a half hours later, after a long walk to the Signals Unit camp where they were to establish their transmitter, the first press messages were transmitted from Burma.

---

[474] DOC/CW/12/336 Telcom Army is Taking Over in the East. *The Zodiac*: September-October 1945: 151
[475] DOC/CW/12/336 Telcom Army is Taking Over in the East: 152
[476] DOC/CW/12/113: Telcom in Burma: Public Relations Office dated 25th July 1945

Operating conditions in the Far East Blue Train are reminiscent of those in Italy: cramped, damp and hot, but with the added menace of mosquitos. Sageman recalled in a press release prepared by the Company that

> One has to sit sideways as the operating table is too low for one's knees to go under. The station is installed in the open and the tarpaulin roof is only 2 or 3 inches above one's head. You almost need a shoehorn to get in and out. The heat under these circumstances is such that 2 hours is more than enough for one man. During the day one hour is almost too much.[477]

Martin, a fellow Operator and one of the few British Telcom's in the unit further describes the conditions they were working under:

> Moist heat caused the team to adopt a stripped-to-the-waist style of dress. Monsoon rain, which lasts from the middle of May until the end of November, was responsible to the almost universal fashion of wearing gumboots. On two occasions swarms of flying insects, attracted by the instrument room lighting were responsible for early close downs. Snakes, particularly the three feet poisonous Johnny, were also an unpleasant part of the general background. Mosquitoes were there in plenty – vicious, hungry mosquitoes, but fortunately non-malarial. Sleeping on a camp bed surrounded by a carefully tucked-in mosquito net came to be regarded as normal, as did the evening bath from a two-gallon petrol tin of water.[478]

Despite the operating conditions, the station began accepting Press traffic immediately. This certainly improved the flow of Press communication, prior to the arrival of Telcom, these messages were flown out from the front line as and when space on the aircraft was available. By the first evening, some 3000 words had been transmitted to Colombo, from whence they were forwarded to London by direct automatic transmission. Ian Morrison was the *Times* special correspondent in the Far East, embedded with Mountbatten in Burma. While it is impossible to state with any certainty, it is likely that the Anzac Telcom outfit would have transmitted his reports on the 'Last Stages in Burma'. His reports, transmitted wirelessly from Rangoon to Colombo, thence by submarine cable to London, informed the waiting world of the latest news from the Far East. On the 21st May 1945, he reports:

> The mopping-up operations, which have been increasing in intensity day by day by day by day since the reoccupation of Rangoon, appear to constitute a campaign in themselves. Some idea of the task that lies ahead of the allied troops before the country is cleared of the last Japanese may be gathered from the fact that there are about 62,000 of the enemy's troops still to be dealt with. The rate at which this object is being

[477] DOC/CW/12/113: Telcom in Burma: Public Relations Office dated 25th July 1945
[478] With 'Telcom' in Burma: Alperton Man on Leave. Wembley Observer: November 1946

> accomplished is indicated by recent operations. In two days the IV Corps killed 575 Japanese and took 29 prisoners while the XXXIII Corps killed 525 and took six prisoners.[479]

These characteristically short reports – limited to around five hundred words per correspondent – demonstrate the vital role the Far East Telcom orgnaisation played. Aside from the service and diplomatic messages they transmitted, they allowed news from a theatre of war thousands of miles away to be relayed to readers at home to be published the same or following day.

The Telcom men in Burma slept alongside their transmitter; ready to be on hand when 'big news' broke. Their mosquito-netted bunks stood within a few feet of their link, and the link of the fighting men with the outside world:

> Telcom was right up forward with the troops, and leading the same kind of life as the men whose achievements they were instrumental in telling the world.[480]

During the first Japanese surrender ceremony at Government House, Rangoon, in August, Telcom cleared 83,000 words filed by thirty war correspondents in forty-eight hours. The Operators worked continuously for thirty-five hours clearing this volume of traffic. Soon after V.J. Day, when hundreds of released Prisoners of War arrived in Rangoon, the Telcom outfit dispatched free telegrams for them to relatives in all countries.[481] For the next twelve months, the Cable and Wireless mobile station was the only service for public telegrams to and from Burma, until the Posts and Telegraphs Department was able to restore the service which its own engineers had 'scorched' prior to evacuation.[482]

It is important to note at this point that the Burmese Telcom outfit was not the only one operating in the Far East; the so-called 'Press Ship' – in effect a floating telegraph office – moved in to Singapore harbour with the advancing Allied forces in September 1945. As soon as the ship moored off the Telok Ayar Basin mole, the Cable and Wireless flag was promptly raised, and J.D. Mackie – former Manager of the Singapore branch – went ashore to find his old office. As Graves recalls:

---

[479] *The Times*, Monday, May 21, 1945; pg. 3; Issue 50147; col D Last Stages In Burma Blows At Japanese Remnants *FROM OUR CORRESPONDENT.* Category: News
[480] Graves, C *The Thin Red Lines*: 160
[481] DOC/CW/12/356 Cable and Wireless Ltd Mobile Wireless in the Far East 1944-46: Extract from Burma Liberator, dated 'early 1946'.
[482] With 'Telcom' in Burma: Alperton Man on Leave.

> Here he found a Japanese Colonel sitting in his chair. Mr. Mackie comes from Aberdeen and with typical Scots brevity he jerked his thumb and said 'Oot.' The Colonel 'oot-ed' with great speed; Mackie then called his old Sikh watchman and told him to muster as many of the old Cable and Wireless staff as could be found. To his delight ninety out-of-a-hundred Chinese employees reappeared.[483]

Within twenty-four hours, the volume of traffic was such that the staffs of the Press Ship, along with the Chinese employees, were unable to cope with the bulk of filed reports. War correspondents were limited on the second day to reports of 250 words apiece, although this was doubled on the third day and restrictions removed altogether on the fourth, by which time the Press Ship was functioning as an established cable station. There are no documents in the Cable and Wireless archive that quantify the volume of messages transmitted by the Press Ship, however, Graves notes that by the fifth day, a net average of 2,000 words an hour was reached and over the next fortnight over half a million words had been transmitted.[484]

The former Cable and Wireless offices in Singapore were intact, but the instrument rooms had been ransacked. Over the same two weeks as the Press Ship transmitted half a million words, the Telcom staff also managed to restore communications. The first message transmitted from Singapore was sent by General Sir Miles Dempsey, General Officer Commanding British Forces in Malaya, and was to the Chairman of the Company:

> Upon the re-opening of telegraph facilities by your Company after many years of trial I send my happy greetings and express our deep appreciation of the rapidity with which your staff has re-established this important war link.[485]

Deploying Civilians on the Front Line

This chapter has demonstrated how Cable and Wireless moved beyond the status of Communications Company to form a quasi-military organisation that operated on the front line, advancing with and occasionally overtaking the Allied forces. Placing the Telcom staff in uniform afforded the civilian employees of the company the protection of the Hague and Geneva Conventions on the front line; the provision of honorary ranks and uniforms was utilized by the Press Corps

[483] Graves, C *The Thin Red Lines*: 162
[484] Graves, C *The Thin Red Lines*: 162
[485] Graves, C *The Thin Red Lines*: 162

throughout the war and the application to Cable and Wireless staff served the same purpose.

According to Smith and Higgins, by the end of the nineteenth century, war correspondents had become firmly established as part of every respectable newspaper's staff.[486] The Boer Wars, involving British soldiers and fought in the Transvaal, saw journalists reporting from the front line for the daily British papers. In setting out the laws of war, the First Hague Conventions of 1899 included the provision that newspaper correspondents captured by the opposing side have the right to be treated as prisoners of war, providing they were in possession of accreditation papers for the army they were following.[487] The traditions of war reporters and their relationships with the fighting forces came under scrutiny by the British government at the start of the First World War, as they sought to control the media's coverage of the conflict:

> After a chaotic first few months with reporters on all sides operating on an ad hoc system, Kitchener established a scheme that has parallels with contemporary practices of embedding, whereby five journalists from approved London-based newspapers were officially credited by the Allied forces to take up reporting from the front in 1915, paid directly by the War Office rather that by their newspapers. Each was also kitted out in a khaki uniform appropriate to the honorary rank of captain, and given a conducting officer, who was usually a soldier too old or otherwise unfit for active service, who would escort them on their story-finding missions. …Couriers were employed by the army to take journalists' daily dispatches for transmission to their editors either by messenger or telegraph, after they had been checked by former journalist and effective censor C.E. Montague.[488]

By the outbreak of the Second World War, technology had advanced and now radio and cinema became the media platforms for reporting war. As with the First World War, the British forces issued official accreditation to journalists, but rather than the War Office, the Ministry of Information's public relations department was the responsible agency.[489] The journalists became known collectively as 'warcos', a nickname that, according to Smith and Higgins, hints at their integration into military life at this time.[490] As with the First World War, censorship was rigidly enforced; this system was widely criticized by the warcos, who accused the

[486] Smith, A & Higgins, M Introduction: Reporting war – history, professionalism and technology *Journal of War and Culture Studies* (2012) V5 N2 pp.131-136: 132
[487] Smith, A & Higgins, M Introduction: Reporting war: 133
[488] Smith, A & Higgins, M Introduction: Reporting war: 133
[489] Smith, A & Higgins, M Introduction: Reporting war: 134
[490] Smith, A & Higgins, M Introduction: Reporting war: 134

censors of deliberately delaying their written reports and too rigidly enforcing censorship.

War correspondents embedded with the fighting forces relied on service communications, or the extant civilian network – assuming it hadn't been destroyed in the course of the fighting. During the Boer Wars, war correspondents were not embedded with any particular unit or organisation, but rather represented their newspapers on a largely independent basis. The Hague Convention of 1899 and the accreditation of journalists – which changed their status from camp followers to war correspondents – afforded the Warcos a degree of legal protection on the battlefield in the event of capture. This represents the first institutionalization of the war correspondent; with the advent of the First World War, and the radical shift in the nature of warfare, responsibility for the journalist was assumed by the War Office and Army personnel.

The speed of warfare during the Second World War and proliferation of war correspondents – no longer just five men from London newspapers – necessitated the change in not only the department responsible, but also the methods of communication. War correspondents during the 1939-45 conflict were filing reports in such volume that both the civilian and service communications networks were overwhelmed – the sheer volume of messages necessitated the Cable and Wireless Blue Train.

There are a number of parallels that can be drawn between the war correspondents and the Cable and Wireless employees serving on the front line. The Telcom organisation was formed on the same foundations as that of the war correspondents: by fulfilling the criteria of the Hague Convention, Cable and Wireless employees were placed under the control of the armed forces in a particular theatre; this allowed them access to messing facilities and rations. It also served to offer them protection in the event of capture: shifting their status from civilian non-entity on the battlefield, to non-combatant camp follower. The Blue Train outfit in Europe existing primarily for the transmission of press messages from the front line was itself a product of forty years of battlefield experience, legitimizing and legalizing the status of civilians on the front line. By placing the Cable and Wireless men and women in uniform their status shifted from

employees of a civilian communications company to that of a semi-paramilitary extension of the state.

Conclusion

As with all aspects of the strategic and tactical roles of Cable and Wireless during the Second World War, the company fulfilled a role on behalf of the British Government, where there was neither the resources, manpower or *techne* for the government to do it itself. As demonstrated in the preceding chapters, the government could have assumed control and operation of the network, but in each instance preferred to subsidise the Company financially, with equipment and by prioritizing Cable and Wireless work and shipping orders. This informal arrangement, of allowing a private firm to become a partial entity of the state is familiar in British history, as the examples of the East India Company and the Niger Protectorate have demonstrated. The Telcom organisation was the result of necessity: the devastation of the communications infrastructure following the Axis retreat meant that if reliable communications were to be maintained, they would have to be mobile and travel with the fighting forces. The speed of mechanized warfare during the Second World War reinforced the need for mobility: a static station some distance from the front line would be of little use for sending tactical information, or filing press reports.

It is through the Telcom organisation that the mobilization of the body during the Second World War – the mobilization of the individual employee – is demonstrated. The preceding chapters have examined large landscapes or individual stations – Ascension Island, Porthcurno – supplemented by the oral histories of employees. Chapter 7, *Messages from the Battlefield*, to a degree disregards the macro and focuses on the individuals and the ways in which governmental power disseminated through the company, over the airwaves and to the front line.

8. Securing the Network within Geopolitical Discourses

Portuguese Islands: Secrecy and Diplomacy

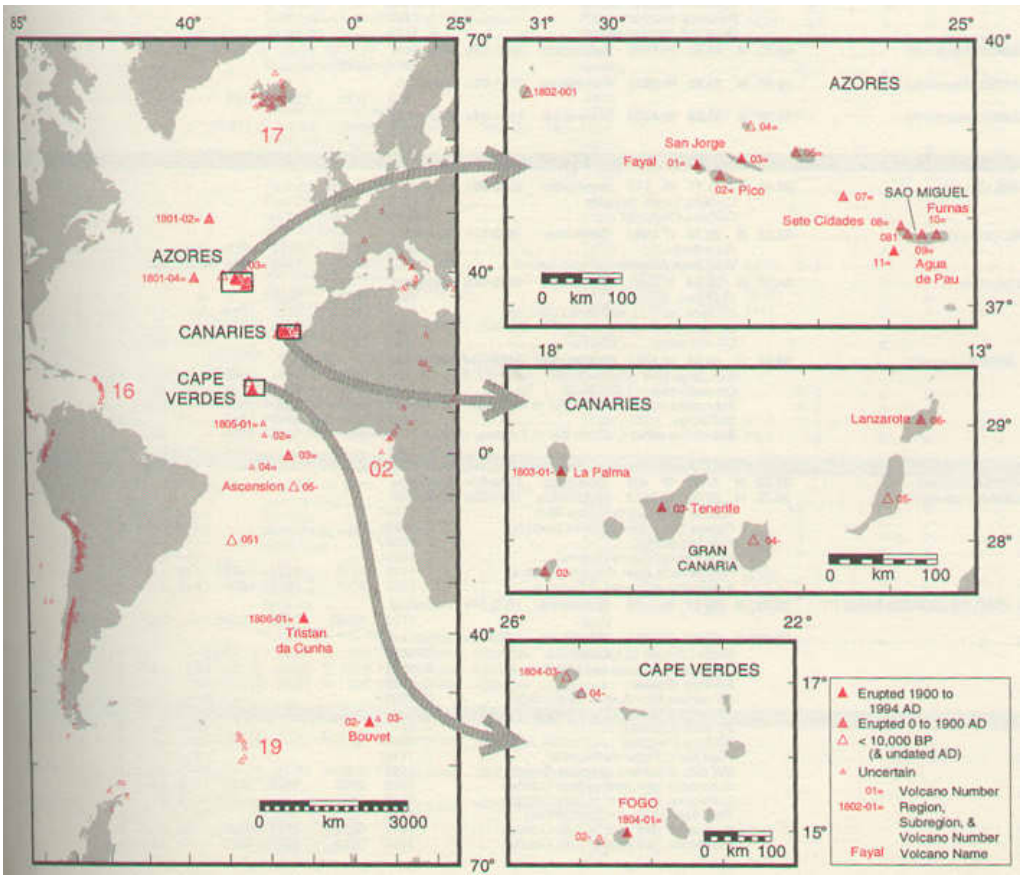


Figure 2: Geographically locating the Atlantic Islands: Azores and Cape Verde (Source: 'Volcanoes of the Atlantic Ocean on Stamps' http://www.iomoon.com/atlantic.html)

As it has been noted, an imperfectly understood aspect to the notion of total war is the mobilisation of industry. This chapter contributes to this area of enquiry by examining the ways in which a communications company – its employees and equipment – was mobilised during the Second World War, and how the communications industry was drawn into the machinery of war. Centrally this chapter develops, along with the notion of secrecy, the place of people and technology in wartime. This is framed within the larger geopolitical discourses of the Second World War, and the delicate balance of international relations that was navigated by the Allied powers.

Communications networks in wartime can confer distinct strategic and tactical advantages to those who control them, and during the Second World War the security of these networks was of vital concern to the British government. The preceding two chapters have demonstrated how Cable and Wireless' co-operated with the British Government to mobilise the overseas network to gather intelligence and, through its employees, to secure the network against attack by the Axis powers. This chapter develops the theme of securing the network by examining the Company's role in the 'Portuguese Islands Expedition', which sought to seize the Portuguese Atlantic islands from the neutral government of Salazar. The purpose of this undertaking was to deny the Axis powers the use of the islands, and to provide the Royal Navy with an alternative capital ship harbour to Gibraltar. Cable and Wireless's role in the scheme was to provide men and equipment to seize the offices of communications companies on the islands to prevent local staff and foreign supervisors from sabotaging the equipment and cables following the British invasion. It is important to note at the outset of this chapter that Cable and Wireless had a commercial presence on the Portuguese Islands before and during the Second World War, maintaining the submarine cable network on behalf of the British government. Cable and Wireless were not the only communication company represented on the islands: the Italian owned *Italcable*, the German *DAT* and American *AT&T* each maintained offices and administered cables on the neutral Portuguese islands.

The cause and effect of events – from the diplomatic wrangling in London, Berlin and Madrid, to the sabre-rattling of Franco in North Africa – are analysed through the archival material at Porthcurno and demonstrate how the Company was drawn into the major campaigns focused on the Iberian-owned Atlantic islands.

The Context of Cable and Wireless wartime role in the Azores and Cape Verde

The Azores the Cape Verde were sought after territory during the whole of the Second World War; control of the small island chain in the middle of the North Atlantic was the dream of both Axis and Allies alike. Churchill and Roosevelt wanted control of the Islands to plug the 'Azores Gap', a giant black hole in the middle of the North Atlantic where providing air cover for the Atlantic convoys was impossible. It was here that the U-boat fleet could hunt and sink merchantmen

sailing from America for the United Kingdom with impunity.[491] For Germany, the Azores represented a base for U-boat operations and as a site for the air bases needed for *Projekt Amerika* – the proposed Luftwaffe bombing campaign of the United States East Coast cities.[492] The stumbling block for both Axis and Allied schemes was the firm neutrality of Portugal. In the words of Prime Minister Salazar: "When an elephant sneezes, a mouse dies of pneumonia".[493]

The neutrality of Portugal throughout the war frustrated both the Axis and Allies: Portugal was bound to England through the Treaty of Eternal Friendship, signed in 1373, but equally was in no position to resist the German war machine. The result of this position was that Salazar opted to remain neutral, but on friendly terms with the British but at the same time trading tungsten with Germany – a metal necessary to harden steel and for lamp filaments.[494] According to Herz, Salazar remained steadfastly neutral until it was clear that Germany was not going to win the war.[495] Indeed, the British Government considered the Azores of such importance that in May 1940, the War Cabinet invited the Chiefs of Staff to consider making arrangements to seize the islands, to strengthen the intelligence service in Portugal and to mobilise the British communities in both mainland Portugal and the Atlantic islands.[496]

The Portuguese administration was suspicious of British intentions concerning the Azores; this had its origins in the placation of Hitler in the 1930s when it was reported that the British were intending to trade Portuguese possessions in Africa in exchange for 'peace in our time'. These reports were strenuously denied by Whitehall, but the possibility made Salazar suspicious of Churchill's intentions.[497] The suggested plan to mobilise the intelligence services and the preparations to

[491] Herz, N *Operation Alacrity: the Azures and the war in the Atlantic* Naval Institute Press (2003): 2
[492] Herz, N *Operation Alacrity*: 2
[493] Herz, N *Operation Alacrity*: 3
[494] Herz, N *Operation Alacrity*: 20
[495] Herz, N *Operation Alacrity*: 20
[496] Cabinet Archive cab/66/8/10 (former ref W.P.(40) 180) dated 29th May 1940 Portugal: Report by the Chiefs of Staff Committee
[497] Herz, N *Operation Alacrity*: 21

seize the Azores, had they been made known to the Portuguese at the time, may have radically altered the position of Salazar's government.[498]

There is a further aspect to the Portuguese islands that illuminate our understanding of British foreign policy during the Second World War and emphasise the place of these islands within the North Atlantic Theatre. This can be found in British insecurity around Gibraltar and the perceived Spanish threat. Gibraltar was, and still is, a strategically important British holding; lying at the entrance to the Mediterranean, it can effectively control shipping in and out to the Atlantic. During the Second World War its deep-water harbours, along with Scapa Flow, were the home of the British Atlantic Fleets. The loss of the Gibraltar harbours would have been a crippling blow to Allied supremacy, and with Franco's fascist Spain only a handful of miles away, Whitehall – and particularly Churchill – was anxious that these harbours be safeguarded, or failing this, alternative sites found. Indeed, on 24th July 1940, he posed the question 'what is to be done about the dangers of our ships lying under the Spanish howitzers at Gibraltar?'[499]

Balfour has argued that Churchill and his strategists concluded that an insurance policy was required against the loss of Gibraltar and its capital ship harbour.[500] A substantial amphibious assault force was assembled to allow instant retaliation, or active anticipation of an enemy attack on 'the Rock'. Balfour notes that

> At its peak of preparedness, by the late summer of 1941, the expeditionary force consisted of 24,000 troops, Britain's entire fleet of amphibious assault vessels, along with a naval escort comprising of one battleship, three aircraft carriers, three cruisers and nineteen destroyers.[501]

The object of the exercise was the capture of alternative capital ship bases to Gibraltar among the Iberian-owned Atlantic islands: the Portuguese Azores and Cape Verdes in 1940, when the British force was too weak to tackle Spain's better-defended islands, and the Spanish Canaries in 1941, when the expeditionary force had been built up to the strength necessary to take on this tougher target.

---

[498] Cabinet Archive cab/66/8/10 (former ref W.P.(40) 180) dated 29th May 1940 Portugal: Report by the Chiefs of Staff Committee
[499] Balfour, S *Spain and the Great Powers in the Twentieth Century* Routledge (1999): 193
[500] Balfour, S *Spain and the Great Powers*: 193
[501] Balfour, S *Spain and the Great Powers*: 193

Moving Cable and Wireless into the Azores theatre of war

The archives of Cable and Wireless, and associated holdings within Government archives at Kew, enables an analysis of how the Company was drawn into the major campaigns focused on the Iberian-owned Atlantic islands: Operations Brisk, Shrapnel and, ultimately, Alacrity.

The prospect of seizing the Atlantic islands is first mooted on the 29th May 1940, when the War Cabinet invited the Chiefs of Staff to consider the following points:

(a) That preparations should be made for seizing strategic points in the Cape Verde Islands and the Azores in the event of trouble;
(b) That the intelligence service in Portugal should be strengthened; and
(c) That steps should be taken to organise the British communities in Portugal both for intelligence purposes and also for combined action in the event of civil disturbances.[502]

This is duly undertaken, and the Chiefs of Staff begin to formulate a scheme for the seizure of the islands and the strengthening of the intelligence services. On the 27th June 1940, the Admiralty approached the Company and the Company is more than willing to help – as long as its concessional standing is not compromised in doing so.[503] This is a central point to the relationship between Company and State before and during the Second World War: Cable and Wireless were a fundamentally private company that, as Chapter 5 has demonstrated, was making considerable amounts of money through government contracts. Unusually for Cable and Wireless, the events are not documented by a clerk on headed paper, but are hand written by Denison-Pender, and the first page bears the following note in red ink –

> Throughout these discussions, only Mr E Wilshaw, Mr Denison-Pender, Mr Edwards and in part Mr Jacobs were aware of the project. No typewritten notes were kept and no typist or clerk were informed.
>
> Portuguese Islands: A brief record of the part played by Cable and Wireless Ltd in the expedition, compiled from conversations and a few short notes.[504]

---

[502] Cabinet Archive cab/66/8/10 (former ref W.P.(40) 180) dated 29th May 1940 Portugal: Report by the Chiefs of Staff Committee

[503] The concessional standing of the Company is referred to throughout the archival material; the concessions referred to are the legal agreements that allowed Cable and Wireless to land and operate submarine telegraph cables in the country under discussion. Should it be revealed to a foreign power that Cable and Wireless was undertaking work for the British Government that was outside the remit of a private communications company, it is conceivable that these rights would be withdrawn.

[504] DOC/CW/1/537 Portuguese Branches: summary document hand written by Denison-Pender in autumn 1941. The Company routinely produced typewritten summary reports of operations etc. undertaken during the War. What is unique about the Portuguese

The first phase of the 'Portuguese Islands Project' was the strengthening of the intelligence services on the islands. To that end the Company agreed to the secondment of one its ex-employees – a Mr [redacted] – to the intelligence services; [redacted] would then be despatched to the islands *as* a Cable and Wireless employee, in the pay of the Company – this pay would be reclaimed from the Government on a rolling account. Prior to his departure to the island of Fayal[505] [date not recorded], a simple code was arranged between this member of staff and the Admiralty. This code was to indicate from the Fayal end which beaches could be used and whether the plan was 'dangerous or simple'.[506] The code was only to be used if all other means of communication broke down, or were found unavailable. From the Cable and Wireless end, the code would only indicate the date on which the operation was to be carried out. The Oxford Dictionary definition of a spy is:

> *noun (pl.* ***spies****)* a person employed by a government or other organisation to secretly obtain information on an enemy or competitor.[507]

Within this definition, and through his employment by the intelligence services – by proxy of Cable and Wireless – it is clear that Mr [redacted] is a spy, utilising Company employment as both a cover to gain admittance to the island, to move around freely and to report back to the Foreign Office.

The discussions between government and Company were happening as the events in the Azores were becoming acute. As Balfour notes on the 13th July 1940, Franco issues the following reassurance to Salazar:

> That [he] would employ all his forces to protect Portugal from any action by Britain, which endangered Iberian independence.[508]

With this veiled threat issued, Churchill's fear of the loss of the capital ship harbours of Gibraltar is once again brought to the fore, as he said to his then Foreign Secretary, Lord Halifax on the 24th July – 'the dangers of our ships lying under the Spanish howitzers at Gibraltar – must we always wait until disaster has

---

Islands Expedition is the fact that this summary was handwritten by the Managing Director, as opposed to prepared by a clerk.

505 Also known as Faial, an island of the Central Group of the Azores. Volcanic in origin and considered the westernmost point of Europe.

506 DOC/CW/1/537 Portuguese Branches: summary.

507 OED Online http://0-www.oxfordreference.com.lib.exeter.ac.uk/view/10.1093/acref/9780199571123.001.0001/m_en_gb0805070?rskey=AphTQm&result=1 Accessed 29/07/2013

508 Balfour, S *Spain and the Great Powers*: 193

occurred?'[509] The communications between the government and Cable and Wireless at this time clearly indicate the work being undertaken by the military and a private company to secure British territorial control over the sovereign soil of a neutral, but historically allied country.

In mid-July 1940 Sir Edward Wilshaw received another visit from the Admiralty. The visiting Captain said that the Admiralty laid great stress on the maintenance of cable communications and pointed out that if a British landing was attempted, Portuguese Cable and Wireless staff sabotage the existing cable gear. He therefore requested that the Company should make available at short notice spare cable gear and English staff to re-install and repair the cables if necessary:[510]

> The Chairman agreed to this proposal that applied to both Fayal and St Vincent and in addition two colonial wireless sets were collected with the cable gear and kept readily available in two differently coloured consignments. The domestic staff were also earmarked.[511]

Preparations for the seizure of the Portuguese Islands by the British proceeded, with the Company providing every co-operation. Throughout July and August Cable and Wireless supplied considerable geographical and topographical information regarding Fayal, St. Vincent and St. Miguel to the offices of Naval Intelligence. It was around this time that the first breach in secrecy of the operation occurred; no date is given, but Denison-Pender records:

> At this stage the Director of Army Hygiene called to enquire as to the hospital facilities at Fayal and whether the island could accommodate – say – 200 casualties. In view of the secrecy of the matter this seemed an indiscreet enquiry (since it was made to the Company's doctor) and the Admiralty were informed. M.I.5 took the matter up and interviewed the Company. It was understood the enquiries made were satisfactory however.[512]

It is indicative of the Company's care to keep not only their collaboration, but also the scheme itself a secret, that a telephone call to the Company doctor concerning Fayal would necessitate a telephone call to MI5.

Throughout the summer months of 1940, limited headway is made with the scheme. The Cable and Wireless 'employee' now stationed at Fayal is filing regular reports to his Foreign Office paymasters, and the Expeditionary Force has been

[509] Balfour, S *Spain and the Great Powers*: 193
[510] DOC/CW/1/537 Portuguese Branches: summary.
[511] DOC/CW/1/537 Portuguese Branches: summary.
[512] DOC/CW/1/537 Portuguese Branches: summary.

assembled and is standing-by; part in Gibraltar and part in Scotland. Insofar as Fayal was concerned, Cable and Wireless earmarked six men from the UK based staff to take part in the operation – three for the Western Union and three for the Commercial offices on the island. It was decided in July 1940 that these men should be given temporary commissions in one of the fighting services. The service chosen was the Royal Marines and a Commander at the Admiralty produced the commissions; uniforms were selected for them at Moss Bros with the sartorial guidance of a Major in the Marines.[513] The men were told to be ready at short notice to leave for an unknown destination. At the end of August however, the project had been postponed and the men were taken off short notice.

Italian advances throughout North Africa in September 1940 further compromised the security of the British position at Gibraltar. Denison-Pender records that nothing more transpired until September 16th when the Company was informed that all the men on stand by in the UK should be ready to leave on September 19th. This date was cancelled, but the men kept on three days notice until the 25th September, when this was reduced to twenty-four hours. On 19th September, a Lieutenant Commander called Denison-Pender at Electra House and said he would collect the gear for St Vincent the following morning, and at the same time would leave the necessary railway warrants and instructions for the St Vincent personnel. The gear was duly collected on September 20th, and after the necessary arrangements had been made, the men left Euston for Glasgow, being due to report on October 2nd and sail that day:

> None of the staff knew their ultimate destination and only the Officers in charge knew the point of embarkation.[514]

One of the Company men that left Euston station was John Gage and Cable and Wireless, as part of their oral histories project, recorded his memories in 1991.[515] After returning from service at the Rodrigues Island branch in the Indian Ocean, Gage reported to head office at Electra House and was

[513] DOC/CW/1/537 Portuguese Branches: summary.
[514] DOC/CW/1/537 Portuguese Branches: summary.
[515] As noted in the Methodology Chapter Cable and Wireless convened the Oral Histories Project and Peter Young and David Souden conducted the interviews; excerpts from these interviews that details parts of the history of Cable and Wireless were published in 'Voices Over the Horizon'.

> …told to go on this hush-hush expedition to the destination unknown, you see. And we weren't allowed to breath a word to anybody – not to say – and we got rail tickets, passes, up to Glasgow. So on the appointed time we all – there were six of us I think – Gerald Edwards who was the Boss really, he had experience of cable repairs in South America, there was Body Barnes, Eastwood, Gilbride and myself and a Western bloke called Stevenson.[516]

While the Company, the Admiralty and the Government were maintaining the strictest security – as Gage refers to as hush-hush – somehow news of the plan leaked to the press, as the following short note in the Daily Mail demonstrates:

> 'Britain to Seize Atlantic Isles': Rome wireless last night reported that British forces are preparing to seize the Canary Islands (Spanish) and the Azores (Portuguese).[517]

This lack of security is further emphasised by a telegram received by Denison-Pender from the Manager of the St Vincent station on the 26th October 1940, in which he states:

> Z/LF Our Z/I Secret. For your information Governor volunteered me [the] following this week. His opinion Britain or United States will occupy Cape Verde's immediately sign Portugal involved. He not worried possibility parachutes with whom be able deal. Definitely anxious possibility air attack from Dakar our Office and fuel tanks. Wish emphasise view his position neutral country have never broached subject.[518]

Amidst the secrecy and the leaked information, the Cable and Wireless contingent made their way through the UK by train to their point of embarkation. Gage recalls of the journey:

> We went to get on the train on the way out and we were told on no account were we to say what we were doing. And Body Barnes was sitting over the place and he was in conversation with a fellow. I said, that fellow seemed very keen on talking to you. He said, he asked me where we were going. I said, of we're going up to Glasgow. I said, well what do you do, and he said, well I'm a traveller with rubber goods, so that shut him up. Anyhow we got to Glasgow that night and we were bombed, so the Germans obviously had some idea that there was something doing. Because the tropical kit had been issued you see to the, I think it was the 102nd Brigade of the Marines that we were going with.[519]

---

[516] DOC/CW/6/403 Transcript of interview with John Gage conducted by Peter Young on 29th January 1991. P43

[517] DOC/CW/1/537 Portuguese Branches: extract from the Daily Mail, dated 28th August 1940.

[518] DOC/CW/1/537 Portuguese Branches: decode of telegram from Manager, St Vincent to MD; dated 26th October 1940.

[519] DOC/CW/6/403 Transcript of interview with John Gage: 43

As the contingent moved to Glasgow, preparations were continuing in London for the seizure of the Atlantic Islands; by mid-November, the Admiralty request that the remaining equipment by packed into cases, and the cases were to be marked with a blue triangle with 'A.2' inside it.[520] This is done, and the equipment is collected and shipped to Glasgow for embarkation.

While the equipment is being collected in London, Gage and the rest of the expedition embarked the Danotta Castle, which he describes as a cruiser:

> Anyhow, we set sail, bad weather to start with and we all had to do submarine watch, and so on. We set sail for destination unknown, which turned out to be Freetown [Sierra Leone]. Meanwhile we had Portuguese interpreters on board in uniform. One of the Brazilian – he spoke Brazilian, a Brazilian Portuguese rather than straight Portuguese – another man I had heard of before. So we didn't know what on earth we were in for. I think this was called Operation Banjo. It was presumably to capture some Portuguese, either Cape Verde Islands – we never found out. And we arrived in Freetown harbour and of course we had an office there, and a great friend of mine was in the office, and we used to go ashore there.[521]

Between October and December 1940, the expedition has made the perilous journey by sea from Glasgow to Freetown in Sierra Leone in utmost secrecy – a secrecy that is almost shattered when the Manager at the Freetown branch announces *en clair* to Head Office not only that the men have arrived, but goes further to name a member of the expedition. Following the discussion in Chapter 5 above – the management of secrecy is a practice that needed continuous control. This breach is noted by Denison-Pender who sends a short message to reprimands the Manager of the Sierra Leone branch:

> CA/O Secret. Your BH/MS. Absolutely essential Byron and others whereabouts not disclosed. Neither you nor your staff must on any account refer to their presence either by mail or cable. Perturbed find you had already done so.[522]

The regulation of the Manager of the Sierra Leone branch is successful: no further messages referring to the expedition are dispatched.

By the close of 1940, the Portuguese Islands Expedition, complete with equipment, had arrived in Sierra Leone along with a contingent of Marines and is poised to

---

[520] DOC/CW/1/537 Portuguese Branches: note by Denison-Pender dated 26th November 1940.
[521] DOC/CW/6/403 Transcript of interview with John Gage: 43-44
[522] DOC/CW/1/537 Portuguese Branches: decode of telegram MD to Sierra Leone, dated 31st December 1940.

seize the Atlantic Islands. From the highest levels of Government in the War Cabinet to the Chairman's Office at Electra House, the scheme had been conducted in secrecy, with only hints escaping into the press and over the Company's cables. This is central to the notion of secrecy that has emerged within this research: perfect secrecy is a misnomer; there can be no such thing. Secrecy is contingent on assemblages of people behaving within a prescribed framework with the expressed purpose of obscuring knowledge. Conceived as a spider's web, those closest to the centre – both spatially and temporally – have the greatest force exerted on them: in this instance, Cable and Wireless employees in Head Office and Government officials in Whitehall. The further one moves from the centre, the weaker the abstract force that maintains secrecy becomes: fissures develop. In a spatial sense the manager at Sierra Leone demonstrates this; temporally, the oral histories of employees involved in the expedition demonstrate how secrecy can be perceived to lose its power over time. This is not to say that fissures in the notion of secrecy do not appear at the centre: the memo kept by the Managing Director demonstrates how secrecy can be maintained – by not employing a clerk – but also subverted in the writing of the document itself. Secrecy, in this context, is enforced by an exercise of power. When a breach begins to open, it is closed sharply under threat of punitive action: either through the Company's own disciplinary procedures, or under the threat of the Official Secret Act.

Within the archive, it seems certain that the New Year will see Cable and Wireless men taking part in an amphibious landing along with the Royal Marines to seize territory belonging to not just a neutral power, but one Great Britain's longest allies.

Waiting within/on the Theatre of War: Cable and Wireless 1940 - 1942

From being in a position of preparedness to seize the Atlantic Islands on New Years Eve 1940, the operation stalled, and was all but cancelled by the 18th January 1941, with no reason stated. The Admiralty contacted Cable and Wireless in London, stating the expedition was 'off' for the time being, and did the Company want the men in Sierra Leone retuned to London?[523] After some consternation it is decided that the cable gear would be returned to London, but the six men destined

[523] DOC/CW/1/537 Portuguese Branches: letter from Admiralty to Wilshaw concerning the men posted overseas, dated 20th January 1941.

for the Portuguese Islands should remain in East Africa and assume censorship duties at one of the Company's stations. As Gage recalls:

> And the expeditions were abandoned, and I was the only one who got home. All the others were shifted off to various places. Edwards remained in Gibraltar as a Manager, Barnes I think was sent to Accra, Eastwood was to – somewhere else. Anyhow I was the only one who got home.[524]

Both parties – for St Vincent and Fayal – should be considered disbanded, notes Denison-Pender, but that the Company would undertake to provide at four days notice the required six technical staff destined for Fayal.[525]

With the two parties disbanded, and the cable gear making the perilous sea crossing in reverse, the Company considered the matter closed. That is until the following letter is received by Denison-Pender at Electra House:

> Dear Mr. Denison-Pender,
>
> I am writing further to my letter G.S.(P)/973 of 14th February, 1941, in reference to the eight Cable and Wireless personnel you have very kindly seconded for some months.
>
> We now only need five bodies (three to be commissioned) with similar qualifications for the same duty at short notice, and the time limit for their arrival at a specified port in England or Scotland we can stretch to 72 hours.
>
> The question of the commissioning of Cable and Wireless personnel we can arrange at short notice, so any three out of the five individuals with the necessary qualifications will do.
>
> We would be very grateful if you could employ these five in the meantime to save us the expense.
>
> Yours sincerely.[526]

Denison-Pender replied, stating that the Company will disband the original party of eight men, and in their place will undertake to provide – at seventy-two hours notice – two men with similar qualifications. Of the three men who hold commissions, Denison-Pender is less accommodating; he stated that it is unlikely that the Company will be able to find suitable work for men of their qualifications in Great Britain, and, as a result, the War Office must bear the cost of their salaries. This again demonstrates the developing relationship between Cable and Wireless and the British Government: the Company are not simply putting their equipment

---

[524] DOC/CW/6/403 Transcript of interview with John Gage: 44
[525] DOC/CW/1/537 Portuguese Branches: summary
[526] DOC/CW/1/537 Portuguese Branches: letter from Major A. Godfrey at the War Office to Denison-Pender. Dated 27th February 1941.

and personnel in government service *gratis*, but rather negotiating every movement. This demonstrates the mobilisation of the communications industry, but within a business context. Unlike the state owned General Post Office, Cable and Wireless were still pursuing profit throughout the Second World War.

This arrangement seems to have been satisfactory with the War Office, and for a further two months Cable and Wireless hear nothing else of the abortive Portuguese Islands expedition. On the 24th April, however, Denison-Pender notes:

> Major Godfrey called in connection with the men earmarked for his services, and said that he required them to be ready to leave at very short notice from now on. These men comprised two for the one place and three for another, and he was unaware whether any technical staff would also be required.[527]

This is closely followed a telephone call from the War Office on the 28th April from a Major Guthrie, asking if the Company had 'any officer who could give him information about the Azores as to roads, buildings etc., and if we [Cable and Wireless] have any photographs of places there.'.[528] The men earmarked for the expedition remain on 'very short notice' until the 28th May, when Godfrey again writes to Denison-Pender, this time stating that:

> The party of five can now go back to five days notice so there will be no question of my personally getting hold of them – until and unless the odds are shortened again![529]

By the 8th August, the project once again seems to have been abandoned, as the note of a telephone conversation with Lieutenant Commander Turner states:

> Lt. Commander Turner telephoned to say that the project for which the special gear was required appeared to be definitely off for the moment, and that the ship which the gear had been stored was now being unloaded.
>
> I asked him whether he required this gear to be continue to be earmarked for the special job, since I doubted whether, once dispersed, it could be collected together again. Lt. Commander Turner said he did not think it was worth immobilising the apparatus, but that he was not quite certain on this point. I therefore left it open until the apparatus was actually delivered to us.[530]

---

[527] DOC/CW/1/537 Portuguese Branches: note of a conversation with Major Godfrey (War Office), on Thursday 24th April, 1941.
[528] DOC/CW/1/537 Portuguese Branches: Note to the Chairman, dated 28th April 1941.
[529] DOC/CW/1/537 Portuguese Branches: Letter from Major Godfrey to Denison-Pender, dated 28th May 1941.
[530] DOC/CW/1/537 Portuguese Branches: note of a telephone conversation with Lt. Commander Turner on Friday 8th August 1941.

This time, Operations Brisk and Shrapnel are shelved, and the Company's participation in the scheme comes to an end, until 1943 when the geopolitical situation requires an altogether different approach. What these two Operations do demonstrate, however, is way in which a private company is utilised by the British Government within a fast moving set of geopolitical circumstances. The events of 1940-42 highlight the ways in which the Government were reliant on Cable and Wireless' expertise and equipment, and in this way the agility of the Company is evident. Cable and Wireless were fundamentally risk-averse: each scheme and operation it took part in at government instigation was carefully examined and vetoed if it was possible that the Company's business interests could be adversely affected – the so called concessional standing.

Operating within the Theatre of War: Cable and Wireless 1943

The Company once again becomes involved with the British government scheme to seize the Azores in July 1943. By now, Cable and Wireless are no longer providing the staff to land with the military forces, but are called upon for their technical knowledge – and for providing what Denison-Pender refers to as 'very thin cover' for a member of the Government to go out to the Azores to 'inspect the equipment'. This landing on the Azores would be named Operation Alacrity, which responded to a geopolitical shift that made landing on the Azores not only feasible, but also practical.

January to July 1942 proved to be one of the most devastating periods for shipping in the Atlantic – particularly off the east coast of the United States. Officially called *Operation Paukenschlag* (Drumbeat) by the German High Command, it was known by the U-Boat captains as the 'happy time'.[531] It was estimated that four hundred cargo ships were sunk in this period off the coast of the United States, and this unheralded period of battle reinforced the need in both Washington and London to plug the Atlantic Gap. By mid-1942, the U-Boat offensive was centred solely on the United States and only six submarines remained on patrol in the eastern Atlantic – all near the Azores and well out of range of Allied land bases.

Throughout 1942 and into 1943, Franco remained convinced of the Axis ultimate victory, and continued to apply diplomatic pressure to Salazar in Portugal. Salazar, however, remained steadfastly neutral – preferring inaction, rather than risking

[531] Herz, N *Operation Alacrity:* 106

the aggression of the Axis or the Allies. He believed that if the Germans did not invade Portugal, then he might expect their supernumeraries, the Spaniards, to show up instead.[532] On 29th March high flying aircraft passed over the Azores: the planes were later identified by the Portuguese military as VLR Ju-92, gathering reconnaissance information needed for an operation against the islands. Although the nationality of the aircraft was never established, the fact that they were 'German motors' was enough to galvanise the Portuguese authorities on the islands, and the following edict was issued on 29th March:

1. All foreigners without exception are required to concentrate themselves on the football field of the local high school following any firing or signal of three shots fired by artillery.
2. All foreigners including consular officers found outside the concentration field one hour after the beginning of the concentration will be considered spies and will be executed.
3. Any foreigner who is unable to present himself in the concentration camp must consider himself a prisoner in the place where he is.[533]

While these dramatic instructions were never carried out, they do highlight the political friction on the islands, between the Axis and Allies, with Portugal in the middle, attempting to walk a path that placated both parties.

Throughout 1942 the U-Boat offensive in the Atlantic continued. During August and September the Wolf Packs located twenty-one of the sixty-three convoys that sailed and made sustained attacks on seven of them: forty-three ships were sunk. Towards the end of October, the number of U-Boats in the Atlantic reached over one hundred for the first time, and the total monthly sinking's exceeded half a million tons for the first time. The U-Boat menace had to be contained.

No action could be taken in the Azores through late 1942 and into early 1943, owing to the North Africa landings – known as Operation Torch. This amphibious assault tied up men and landing craft that would previously have been earmarked by Churchill for operations against the Atlantic islands. The success of Operation Torch, and the defeat of the *Afrika Korps* would relieve the pressure on Salazar, thus allowing him to act under the Treaty of Friendship.

---

[532] Herz, N *Operation Alacrity*: 109
[533] Herz, N *Operation Alacrity*: 110

As 1943 dawned, U-boat sinkings rose from 203,128 tons in January to 627, 377 in March, when U-boat strength had risen to 240 submarines. Herz notes:

> In March the greatest convoy battle of the war was fought when twenty U-boats attacked two convoys that had merged: a total of seventy-seven ships. Twenty-one ships totalling 141,000 tons were sunk with a loss of only one U-boat.[534]

With this unprecedented toll on shipping in the Atlantic and the successes in North Africa – the Mediterranean blockaded, Rommel cut off from resupply and Italian troops surrendering at the first sign of British or American infantry – the Allied Chiefs of Staff once again turned their attention to the Azores. If the war was to be won, the Atlantic-Gap, the 'happy hunting ground' had to be plugged. Churchill was inclined to tell the Portuguese authorities that if they did not accede to Allied demands for an airbase on the islands, then they would have no choice but to take them by force. The Foreign Office, however, held 'most strongly' that the seizure of the islands would be unjustifiable morally, and would have bad political and economic consequences. On 21st May, Admirals Pond and King stated that they were greatly in favour of an occupation, which might save a million tons of shipping and several thousand lives.[535] With pressure growing both in Whitehall and Washington for action over the Atlantic situation, the Lisbon conference was convened. The conference began on the 5th July 1943 and amid Portuguese reticence, ineffectual German spies and forthright British diplomacy, an agreement was reached, not, however, without the use of force on the British side of the negotiations. As Churchill noted on the 14th July:

> We have decided to insert the thin end of the wedge, and hope to despatch our occupation guests and some Hudson squadrons within a week. Mum's the word.[536]

While negotiations were grinding slowly, imperceptibly ahead in Lisbon, the Foreign Office was applying Churchill's 'thin end of the wedge', and again making enquiries at Cable and Wireless as to the situation on the Azores. As the following letter demonstrates, communications were still an issue for the Allies, and the state of the Portuguese cable network in the Atlantic islands was of prime interest:

> Dear Entwhistle,

---

[534] Herz, N *Operation Alacrity*: 132
[535] Woodward, L *British Foreign Policy in the Second World War* Her Majesty's Stationery Office, (1962): 383
[536] Herz, N *Operation Alacrity*: 176

> From time to time we get enquiries from our own or the Foreign Office intelligence people about neutral cables [those owned by other companies or countries that Cable and Wireless could access], as to which are still working. I've now been asked if I can tell them the up to date position regarding the Portuguese cables in the Azores: Fayal-Pico has been shown for some time on the Admiralty charts as 'abandoned' (although it's a curious one to have allowed to go), but Pico-San Jorge, Pico-Terceira and San Jorge-Graciosa appear to be working.
>
> I'd be very grateful if you could make a confidential enquiry from your Horta manager on the state of these four. I don't, of course, want any Portuguese authority to know that such an enquiry is being made: the Portuguese, though our oldest allies, are among our most sensitive acquaintances as well! – and they might imagine some nefarious design upon their cables' integrity.
>
> Yours Sincerely.[537]

Although the scheme is now taking place with the agreement and complicity of the Portuguese Government, the need for secrecy is still paramount. Just why the government needed to know the condition of these long disused cables is not clear from the surviving papers, but the subject of communications is again raised on the 30th August 1943, as the following note by Denison-Pender records:

> On Monday August 30th Sir Edwin Herbert of the P&TC telephoned and asked if I could see him. I went to see him at 11 a.m.
>
> He told me that he wished to enlist the Company's help in a matter of utmost secrecy and that in Sir Edward's absence he had approached me. As the operational plans were on a very high level, the names of all those to whom any information was given had to be listed. He said he had had my name put on the list but that he must ask me not to divulge anything to anyone, it being understood that the assistance he required did not make it necessary for anyone in the Company other than myself to know.
>
> The plan is that, with the connivance, though in a clandestine manner, of the Portuguese Government, we are very shortly going to seize part of the Azores. All plans were ready and Blair [the Manager] at Carcavellos had been informed since control of communications formed part of the plan. Sir Edwin however had two men in Lisbon, one of whom he wished to send to Fayal to have a final check up on communications at that end. To do this he needed 'cover' and there were only two ways (one) to send him as inspector of communications which was a bit thin or (two) to send him as an inspector of Cable and Wireless. He asked for our permission to do this. I told him we should have no objection whatsoever, since I understood the Portuguese Government was a party to the scheme and that our concessional position [the right for Cable and Wireless to operate on Portuguese Territory] could not be affected. He gave me this assurance and I therefore gave him authority on behalf of the Company to proceed.

[537] DOC/CW/1/537 Portuguese Branches: letter from Denison-Pender to Entwhistle dated 17th July 1943.

> The arrangement we made was that Blair should be told by the Embassy that we had agreed and that there was therefore no need for him to consult us. This was to avoid any risk of leakage through unnecessary telegrams etc.
>
> I told him we could not, of course, guarantee the 'cover' and that indeed it was a very thin one but he realised that and said it was the best that could be arranged. One of the two men in Lisbon is M. Lovell.[538]

This provision of cover is the Company's final involvement with the Government scheme to seize the Portuguese Islands. From the dark days of 1940, when Cable and Wireless men were granted temporary commissions with the Royal Marines and attached to an amphibious assault force, to 1943 when the tides had turned against Hitler and his allies throughout Europe and North Africa, the Company was on hand to offer its services with regard to communications on the islands.

After three years of false starts the British government eventually established an Allied presence on the Azores on Friday the 8th October 1943. The task force comprised of troopships, tankers and freighters, escorted by the aircraft carrier HMS Fencer, nine destroyers and four corvettes.[539] The aircraft from Fencer were used to provide air cover for the new base until an RAF squadron arrived some six weeks later.[540] In a final twist to the geopolitical and diplomatic wrangling that characterise the Portuguese Islands expedition, it was agreed between Churchill and Salazar that ships entering the Islands had to fly the British Flag and any aircraft had to display RAF Roundles; the purpose of this final move was to maintain the outward appearance of Portuguese neutrality, while allowing American ships and aircraft to operate from the islands.

Concluding Overseas Mobilisation

The involvement of Cable and Wireless in the Portuguese Islands expedition demonstrates a clear departure from the role of communications company; while the company's involvement in the scrutiny scheme and the transmission of government communications is quite within their prevue, providing staff and equipment and staff for a clandestine and belligerent act was not. While the role of the staff involved with the scheme was the maintenance of communications on the

---

[538] DOC/CW/1/537 Portuguese Branches: 'Most Secret' note by Denison-Pender dated 2nd September 1943.
[539] Recollection of Doug Birch, ex Fencer 17.07.2008. Recorded: http://www.worldnavalships.com/forums/showthread.php?t=2092 Accessed 10/06/2011
[540] Recollection of Doug Birch, ex Fencer 17.07.2008.

islands, the fact that they were in uniform and given temporary commissions in the Royal Marines radically altered their status. Through these employees governmental power was channeled: through the company to the individuals, and thus mobilizing the body.

Like Chapter 5 above, this chapter has examined one of the examples of secret work undertaken by Cable and Wireless during the Second World War. Where *Mobilising* Intelligence examined the clandestine gathering of intelligence from the overseas network, this chapter has examined the ways in which secrecy was created, maintained and reinforced within the broader geopolitical discourses of the Second World War. This chapter further analyses the entanglements between private business and the British government during conflict: effectively becoming an extension, or arm, of the government, providing both personnel and expertise. This is the only identified example in the archive where Cable and Wireless deviated from their conventional method of recording events and meetings; usually a typist or clerk was in the room minuting events, the subsequent record of which would be duplicated and circulated to the appropriate departments within the company. The Managing Director maintained the only record of the Company's involvement with the Portuguese Islands Expedition in a series handwritten loose-leaf pages. The extraordinary lengths that the Company went to in order to preserve the secrecy internally against disclosure again demonstrates the fragile nature of secrecy: information concerning the scheme somehow makes it into the pages of the Daily Mail, and the Director of Army Hygiene telephones the company enquiring about hospital capacity at Fayal – each of these disclosures broadens the number of people who know about the scheme. Nor is Cable and Wireless entirely secure: the Manager in Sierra Leone transmits a Service Message that would have passed through the hands of countless clerks and telegraphists (and not to mention that it was in all likelihood scrutinized as it crossed the network), announcing the secret arrival of the staff involved in the scheme.

The central theme to this research is the relationship between the British Government and a fundamentally private commercial enterprise. As the preceding chapter has demonstrated, and subsequent ones will continue to develop, this relationship was one of compromise. Legally, the British Government was empowered to seize the cable and wireless networks of the company at a time of

crisis: it is asserted here that the reason they did not was because they lacked both the manpower and the *techne* to run it. By allowing Cable and Wireless to remain in private hands, but with the legislative threat implied, the company would effectively be coerced into co-operation. This is just one reading of the empirical material that makes up the preceding section; another more generous approach would be that the company was acting out of patriotic duty – committing its all to the war effort. The final, and potentially more credible reason for company co-operation with the British government is the financial reward: Cable and Wireless were fundamentally a business, and with the extra traffic the war created – not to mention the government/secret traffic that the company transmitted – the increase in revenue was breathtaking. In short, the war was good for Cable and Wireless.

Where the telegraph cable has been likened to an Ariadne's thread that creates a link from the local to the global, there is another thread interwoven with the telegraph line: this is the thread of secrecy. It runs throughout the network and through the archive, spanning the temporal distance to the present day. While secrecy is a persistent theme in the archive, the wartime activities of Cable and Wireless and the research as a whole, it is most explicitly expressed and demonstrated in the work undertaken in preparation to seize the Portuguese Islands. Within the archive, this is the only wartime activity that departs from established procedure within the Company: ordinarily, clerks were present at meetings, reports typewritten and filed with various departments throughout the Company and an extensive paper trail is maintained. In this case however, the only notes are those handwritten by the Managing Director of Cable and Wireless, and an explicit note is included at the head of the first page, emphasizing the secrecy of the document. It is also written after the events detailed, and offers no reflection or personal commentary: it is simply a record of events. Had Denison-Pender not made the record and filed it in the archive, no record would remain of the company's involvement in the expedition.

The Portuguese Islands Expedition was arranged via the sociopolitical networks that existed between senior Head Office staff and representatives of the British Government, from the Admiralty, War Cabinet and Foreign Office, and knowledge of the scheme was constrained only to those who absolutely needed to know:

those identified in Denison-Pender's notes and the men who embarked the ship in Glasgow. It is because of the relationship between Cable and Wireless and the British Government, fostered in the pre-war years (and arguably enshrined in the foundation of the Company in 1928) that the Company was drawn into the secret war work of the British Government.

9. Securing the Overseas Cable Network on the Home Front

Porthcurno at War

Cable and Wireless did not have a strong presence within the domestic telegraph market within Britain prior to the Second World War. The corporate presence of Cable and Wireless had always been predominantly overseas: a service to be used when one had to contact those in other countries, along the vital service offered to business customers, as Peter Moulson recalls:

> Cable and Wireless was never a major operator in the UK. It was the external arm, the network that kept the empire together. Paradoxically, it had a data network like those that are being put together now in the modern world.[541]

Internal telegrams – that is to say, messages sent within the mainland United Kingdom – were handled exclusively by the General Post Office. For the majority of British telegraph service users then, the Post Office Inland telegram service would have been *the* provider of telegrams. It was only those who were sending messages overseas that would have cause to use the *via Imperial* service, or even set foot inside a Cable and Wireless office. With the outbreak of war and the dispersal of British forces overseas, the necessity for communication between those in the UK and those serving in the forces meant an increase in presence of the Company in the domestic market. The visibility of Cable and Wireless in the war resulted in increased government and company response to securing the technical operations of the Company at 'home'.

This chapter acts as a counterpoint to the mobilization of Ascension Island, where it was clear throughout the 1930s that arrangements were necessary for the protection of the station and the scrutiny of traffic at overseas stations in the event of war, the planning and response for provincial domestic stations was very different. My focus is on the Porthcurno Station for a number of reasons, not least because it was arguably the most important cable station in the United Kingdom. Also, like Ascension, the extant archival record for Porthcurno is one of the most complete in the Company archive. A further reason for examining the Porthcurno

[541] Souden, D *Voices of Change* Cable and Wireless Granta Editions 2001: 1

station is the vital role it played in the worldwide cable network; it was one of the vital nodal points at which many cables came together.

As a cable head, Porthcurno was the most important cable station in the United Kingdom allowing secure cable communications to flow throughout the Empire and between the Allied powers. An employee recalled:

> It was the route into the UK from the Empire. From the Americas it wasn't. Here in Penzance the Western Union had a cable station. There were connections via other ways via other companies into London, but we were the only British Company working for the Empire.[542]

Porthcurno was not only an important cable terminus, but the station also had sufficient wireless capacity to connect with other wireless stations around the world and in the United Kingdom. In the event of a catastrophic attack on the London Offices, including the Central Telegraph Station, Electra House or the emergency station in Ealing, Porthcurno would have become the central operating station of the Company. The ability to communicate via wireless also meant that, in the event that the landlines between Porthcurno and the outside world were disrupted, messages could still get out of the county and be disseminated to the wider world.

Porthcurno itself is a small village that grew up first around the Eastern and Associated and later the Cable and Wireless buildings. Before the Company established the cable station, only a farm occupied the site and the cliffs around it. Located in the far west of Cornwall, five miles from Lands End, Porthcurno lies at the bottom of a steep valley close to the sea – the gently shelving sandy beach providing the ideal ground for the shore-end of the submarine cables. The buildings that constitute the modern village are, on the whole, former Cable and Wireless employee buildings and infrastructure: for example, the Cable Station Inn was once the employees' theatre. From the outset of the war defensive steps were undertaken to protect the station from enemy attack, and analysis of this enables us to see the relationships between local defense forces, private companies and government officials. Through an analysis of letters between Government and Company, the oral histories of former employees and the rich photographic archive that provides a pictorial record of the changes that took place in the valley

[542] Oral Histories Project CD4: 2

between 1940 and 1945 we can address the measure of protection afforded at home to the imperial network.

The secrecy surrounding the Porthcurno station created a radically different space from that which preceded and surrounded it. From a business-centric community composed of Cable and Wireless employees, nestled in a valley in the far west of Cornwall, the Porthcurno valley became a secret landscape – a fundamentally other space. It is for this reason that a discussion of the notion of the heterotopia is necessary, as this provides theoretical leverage over the concept of the spaces that were created during the Second World War.

Protecting Porthcurno: remove the flagstaff and disguise the tennis courts

The origins of the defence of Porthcurno can by found in the September Crisis[543] of 1938; following the aggressive German diplomacy over the Sudetenland it seemed that another war in Europe would be inevitable. As a result of the diplomatic situation on the continent, it was the Cornish Constabulary that took steps to protect the cable station, as this Service Message to Head Office reports:

> At 2.20 this morning [incorrectly transmitted] a Police Sergeant accompanied by a constable arrived at the Office. The Sergeant requested an interview with me, and informed me that the Police had instructions to provide a 24 hour guard for the Cable Station and that this guard would eventually consist of three men, stationed at the Office, Engine House and Cable House.
>
> At his request I have furnished a list of all Members of the Staff here, and they are to be provided with permits, without which they will not be permitted to enter the Office building. He said we should take steps to be able to 'Black-out' in case of emergency.[544]

The September Crisis and the intervention of the Cornwall Constabulary jolted the Company into action over the defence of the vital cable link between the United Kingdom and the overseas empire. The first action of the Company is to open discussions with the Admiralty and Air Ministry to assess the threat to the station from both the air and sea; both services stated that the only real threat to

[543] The September Crisis of 1938 emerged from Allied efforts to appease Hitler in his ambitions to occupy Czechoslovakia/the Sudetenland. A conference on 22nd September between Chamberlain and Hitler broke without agreement and both the French and British government prepared for war. Mussolini convened a further conference; it was agreed between France, Germany, Britain and Italy that the Sudetenland would be ceded to the Germans immediately. The outcome was Chamberlain's 'Piece of Paper' speech.
[544] DOC/CW/1/545 Porthcurno Defence: Service Message from Bell, Porthcurno to MD, Head Office, dated 27th September 1938. From whom the instructions to provide constables at Porthcurno were issued is not made clear in the archive.

Porthcurno would be through sabotage by a raiding party landed by a U-boat. As a result, neither of the Services or the government (on the recommendation of the Ministries) deemed it necessary to provide Porthcurno with any defenses beyond the police presence.

The Superintendent of Porthcurno and Sir Edward Wilshaw were dissatisfied with this complacency and Cable and Wireless took independent action to assess the security of the station from air attack. In March 1939 the company CL Air Survey were commission to fly over Porthcurno and on the 27th issued their report:

> This Station is hard to recognize from the air, and does not constitute a defined target for aerial bombing. The reconnoitering pilot had to come to a low altitude before he was confident he had spotted the right place. Only by recognizing the large tennis courts could he feel sure that he had done so. The main building, flying a flag, stands out from the other buildings, which appear as dwellings from the air.
>
> Three attempts were made to photograph the Station from a high altitude, but each time the weather unfortunately prevented this. However, on one occasion the pilot was able to view the Station from 6,000 ft., and reports that he could see clearly only the main building and the tennis courts. Descending to below 2,000 ft. oblique photographs were taken which confirm his report.
>
> We recommend that the main building be coloured, in a similar manner to the Chelmsford Station, after which high altitude photographs should be taken, so that detailed camouflage, to be resorted to only in the event of war, can be recommended. Such camouflaging as covering up tracks, and altering the general view of the station from the air.[545]

Figure 3 is one of the photographs taken by the survey aircraft; the instrument room resplendent with the Company flag stands on the hillside above the pristine tennis courts, and it was the latter that identified the cable station as the correct target, which was visible up to 6,000 feet – considerably below the 18,000 feet operational altitude of heavy bombers. However, the threat of dive-bombers was still pressing. As a result of this report a meeting was convened at Electra House in London between representatives of the Imperial Communications Advisory Committee, Cable and Wireless and a Mr. Innes. The meeting was recorded as follows:

> The conversation was opened by Sir Campbell Stuart[546]. After introducing Mr. Innes he asked him to explain what he had in mind about Porthcurno.

[545] DOC/CW/1/545 Porthcurno Defence: CL Air Survey Report dated 27th March 1939.
[546] Of Canadian extraction was involved in communications and propaganda on behalf of the British Government during the war.

> Briefly it was that we should have an underground chamber cut into the rock and we should equip it with about 25% of the full equipment and that it should be sufficiently large to take the full equipment, which could be transferred when necessary. He thought also we might examine the question of putting some special wire netting over the windows of the existing station similar to that which they were furnishing, to prevent bombs &c. being thrown through windows.
>
> I raised the question of cost once or twice during the meeting, but each time Sir Campbell Stuart said it might be left for the time being – they were only examining what was the best thing to do. The financial part of it was a matter for the Treasury. I said if we had a bomb-proof chamber near or under the Station the existing artificial lines could be transferred there over a period of week-ends and so save ordering new ones. There were however no surplus instruments – they would have to be ordered.
>
> He (Mr. Innes) said he thought it would be necessary to do something about camouflage and he was concerned to know whether the line from the cable to the instrument was at any period exposed, namely, did it go overhead at any place or was it run up outside, because he feared sabotage more than damage from air or sea. The Air Ministry were of the opinion that there was more likely to be attack by sea planes than by bombers.[547]

Government support for the provision of a bombproof instrument room at Porthcurno was refused on the advice of the fighting services, all of which considered it unlikely that the station would be subject to attack by sea or air.[548] The costs of securing the Cable Station were a cause of concern to the Company: Cable and Wireless therefore approached the government for financial support. The government, however, were unwilling to make a contribution towards the approximate cost of £25,000, as the following report from the Imperial Communications Advisory Committee to Sir Edward Wilshaw summarizes:

> Porthcurno. I am advised that the risk of successful attack from sea or air is not considered sufficiently great to necessitate any special precautionary measures for the protection of the cable-heads at Porthcurno against such attack.
>
> This means that the Government would not consider itself justified in making a contribution towards the provision of a bomb-proof chamber and duplicate apparatus, as estimated under Scheme B to cost approximately £25,000.[549]

This is reported to the Porthcurno Branch in a letter from Wilshaw dated the 7th July 1939, in which he states that 'The Company does not feel that any further

[547] DOC/CW/1/545 Porthcurno Defence: Note of a Meeting at Electra House dated 3rd April 1939
[548] DOC/CW/1/545 Porthcurno Defence: Report by Imperial Communications Advisory Committee to Sir Edward Wilshaw, 15th May 1939
[549] DOC/CW/1/545 Porthcurno Defence: Report by Imperial Communications Advisory Committee to Sir Edward Wilshaw, 15th May 1939

action is necessary. In the event of an emergency arising you should, however, immediately remove the flagstaff, disguise the tennis courts and pile up sand around the cable hut…'.[550] For the next month the question of the defence of Porthcurno is left in abeyance; the Company was unwilling to finance the protection of the Station on their own, whilst the Government seemed oblivious to the vital nature of the Station with regard to the secure communications of the Empire.

As the geopolitical situation in Europe deteriorated through August of 1939, it was again the Cornwall Constabulary that took the initiative and again began providing protection for the station, in the form of a patrol that covered the Office, Engine House and Cable House, as of the 24th August.[551] With the outbreak of the Second World War on the 1st September, the only protection or defence precautions at Porthcurno were the unarmed guard provided by the Cornwall Constabulary. This situation was addressed on the 28th September, as the following letter from the Manager at Porthcurno reports to Head Office:

> We have to advise you that on Tuesday last, Lt.Col. Tangye, County Commandant of the Cornwall Special Constabulary, called at this Branch in the course of an inspection of police posts in Cornwall.
>
> They expressed the opinion that the small unarmed police guard here was inadequate, in view of the possibility of our building being shelled by an enemy submarine or of a demolition party being landed from a submarine. Col. Tangye said that he intended putting the matter before the Chief Constable of Cornwall, and that he would recommend the provision of a military guard here as was done in the last war. He advised us that the Western Union Company have recently had a military guard placed on their cables on Sennen beach.
>
> He also told us that he hoped to arrange that we should receive an air-raid warning from the police when necessary.[552]

However, regardless of the dispensation shown to the Western Union Company, Porthcurno remained under the protection of the Special Constables until June the following year, as this excerpt from an oral history interview shows:

> Originally when the war started guarding of the Cable Station was taken over by a local force of Police, reserve police. By the time I got there in

[550] DOC/CW/1/545 Porthcurno Defence: Letter from Wilshaw to Bell, Porthcurno, 7th July 1939
[551] DOC/CW/1/545 Porthcurno Defence: Service Message Porthcurno to MD, 25th August 1939.
[552] DOC/CW/1/545 Porthcurno Defence: Letter from Porthcurno to MD, 28th September 1939

> 1940 the troops had been moved back, this is after Dunkirk of course, there was quite a selection of troops had taken up occupation of the old quarters. Sentries were positioned, there was a sentry on duty at the door of the old telegraph office building.[553]

In the meantime, the Company undertook to camouflage the station at its own expense in October 1939; along with the Police patrol and 'telephoned through' air raid warning, these were the only defence precaution in operation at the branch at the outbreak of the war.

The first seven months of the Second World War were characterized by inactivity in Western Europe: this period was referred to as the Twilight War by Winston Churchill, *der Sitzkrieg* (the sitting war) in Germany and the Phoney War more generally. It is perhaps for this lack of movement and major operations between Axis and Allies that the defence of Porthcurno is not again mentioned in the archive until May 1940, when the Twilight War was drawing to a close and the Third Reich was on the cusp of attacking France on the 10th May. With the movement of German men and machinery towards the French border, the Ministry for Home Security was compelled to write to Sir Edward Wilshaw, stating that:

> I am directed to refer to the question of the necessity for the application of camouflage measures to your Landing Station at Porthcurno (Lands End), Cornwall.
>
> Officers of the Establishment have carried out inspections from the air of typical Landing Stations, and as a result the following decisions have been reached.
>
> (a) If they are white or conspicuously light in colour they should be painted a dark grey (colour card enclosed)
> (b) In all other cases, no action need by taken.[554]

The Ministry was apparently unaware that the Company had taken unilateral action to camouflage the station on the outbreak of war; the tennis courts however remained an identifiable feature. In response to this letter, Sir Edward Wilshaw again raises the vulnerability of the station and its importance to the Imperial cable network. With the war in Europe now raging, the Company was informed that Porthcurno was now considered a 'Class A Vulnerable Point', and that a force of Local Defence Volunteers should be formed.[555] In June 1940, Wilshaw again

[553] Oral Histories Project CD4: 3
[554] DOC/CW/1/545 Porthcurno Defence: Letter from Ministry of Home Security to Sir Edward Wilshaw, 1st May 1940
[555] DOC/CW/1/545 Porthcurno Defence: Summary Document, 25th June 1940

raises the importance of Porthcurno with the Government and requests a military guard to be provided; this time his request is successful and the guard arrives on 7th July, as this Service Message records:

> G/XS Two hundred soldiers arriving tonight and ?eight hundred more will be in district. Survey also made by another authority for probable placing of four anti-aircraft artillery.[556]

As Porthcurno is classed as a Class A Vulnerable Point and the military guard is supplied, the Government also agrees to fund the provision of the bombproof Operating room at the branch, as an employee recalls:

> Porthcurno was important enough to be moved underground into the tunnels to protect against bombing. It was important enough to put something called a flame barrage on the beach; I think it was one of only three anywhere in the British Isles. So that if a German raiding party tried to land on the beach you could press a button and the beach would become a sheet of fire.[557]

On the 25th June a new working account is opened at Head Office called 'Porthcurno Emergency Account' and all expenditure in connection with the defence of Porthcurno is to be charged to this account. On the same day, a Mr. Leslie Smith of the Engineering Department of Cable and Wireless is instructed to proceed to Porthcurno to undertake the scheme at once.[558] This sudden activity is the result of a meeting between Lord Lloyd and Wilshaw on the 24th June, and a subsequent letter on the 25th, which stated:

> I told you that at their meeting yesterday, the Imperial Communications Committee considered it to be a matter of first urgency that steps should be taken to afford protection to the Cable Station at Porthcurno and to provide such supplicate apparatus as may be necessary on the general lines set out in the enclosed paper.
>
> The Treasury have undertaken to pay two thirds of the cost of the whole scheme on the understanding that your Company will bear the remaining third. It is understood that the cost of the scheme will be of the order of £25,000 - £30,000 but that it may be less and that it will be executed as economically as possible. This letter does not purport to settle the details of this arrangement, in regard to which the Treasury will no doubt be writing direct to your company.
>
> You told me that your Company would be agreeable to this arrangement, and you undertook that work should be put in hand straight away. I was

[556] DOC/CW/1/545 Porthcurno Defence: Service Message from Porthcurno to MD RUSH, 7th July 1940
[557] Oral Histories Project CD4: 2
[558] DOC/CW/1/545 Porthcurno Defence: Memo General Manager to Engineer-in-Chief, 25th June 1940

> indeed glad to have your ready assurance on this very important matter, and I know that I can rely on you to see that the Company push on the work with all speed.[559]

With the Battle of France ending with the rout of the Allied forces at Dunkirk and the threat of invasion now just across the water, the change in attitude of the British Government with regard to protecting the cable heads at Porthcurno is readily explainable. The scheme that the Treasury had agreed to bear two thirds of was the provision of an underground office, which consisted of two tunnels cut into the hillside behind the existing Instrument Room. The engineer dispatched to Porthcurno on the 25th June furnished Head Office with estimates the following day; these suggested the excavation of a rock chamber, transfer of A/L (Artificial Lines) and duplex equipment, supply of additional relay sets and a small emergency power plant for ten circuits to London at a cost of £17,000 – considerably below the original £25,000-£30,000.[560]

However, as construction began, the layout and the cost of the tunnels changed until the 12th October the third and final layout of the tunnels was sent to Head Office. Tunnel Number 1 – the Instrument Room – was to be 150 feet long, while Tunnel Number 2 – which would contain the Offices and Plant would be 139 feet in length. The latter was shortened due to 'bad rock' at the surface end, which necessitated lengthening of the 'grip' or entrance passage.[561] Owing to the 'doubtful seams' in the rock, it was necessary to line the walls and ceilings of the tunnels with concrete averaging two feet thick; the volume of water that penetrated the tunnels required that it was necessary to erect a building with walls and a roof inside the tunnels themselves.[562] These unforeseen geological and hydrological factors increased the construction time and cost, however, HM Office of Works also required a number of amendments to the original scheme. These included:

a. An emergency staircase at the Eastern (or deepest) end of the tunnels. This necessitated a tunnel 6ft wide, 8ft high and 130ft long (Approx. cost £3,500).

---

[559] DOC/CW/1/545 Porthcurno Defence: Letter from Lord Lloyd to Sir Edward Wilshaw dated 25th June 1940
[560] DOC/CW/1/545 Porthcurno Defence: Summary Report on Porthcurno dated 17th November 1941
[561] DOC/CW/1/545 Porthcurno Defence: Summary Report on Porthcurno dated 17th November 1941
[562] DOC/CW/1/545 Porthcurno Defence: Summary Report on Porthcurno dated 17th November 1941

b. Heavy blast doors at entrances (Cost £600).
c. Considerable increase in thickness and extent of reinforced concrete burster slab over the two entrances.[563]

The final total for the construction of the tunnels was £21,000 – of which the Government paid £14,000 and the Company made up the final £7,000. On the construction of the tunnels:

> They started building the tunnels and in the front of the building it was a terrible mess; there was a little light railway to take the stuff they were digging out of the tunnels and that was tipping around the front of the building and dumped to make that large extension. Miners from St Just were employed and the contractor was Edward Nuttall. Effectively in the St Just area they had a lot of tin miners who were adept at that sort of work and were recruited to do the job and work carried on twenty-four hours a day. The tennis courts had several portable compressors spread around them and these were connected up with a steel pipe, a vacuum pipe which meant that the pneumatic drills that were being used were all fed from the compressors that were actually on the tennis courts.[564]

As of the 17th November 1940, the Tunnel Offices accommodated – in addition to the ten cable circuits – the receiving side and circuit working of two wireless circuits, three duplex Teleprinter circuits for working with Bristol, three additional simplex cable circuits for possible diverted sections, two PQ (Brest) cable circuits and Air ventilation plant. Owing to the constant temperature and humidity in the tunnels, it was found that the cable equipment performed more efficiently underground than in the overground Instrument Room, and it is for this reason operations were moved into the tunnels as soon as they became habitable:

> On the first night of that night duty we had one circuit in the tunnel. The cable was Gib 4 what the terminal was I'm not sure, it was probably Malta. The following night we had three and by the end of the week we had the lot in there, the whole cables were moved in in one week. That was only the operating side, the Artifical Lines and things like that had been moved in previous. The actual first time I worked in the tunnel was the night they moved the first cable into the tunnel. I was scheduled to work on the Sunday night and I worked with a young engineer and I was more company than help to him. I do remember it was bitterly cold, I don't think we even had doors on the tunnel at that time. We might have had a door on Tunnel 1 – the instrument room one – but I'm sure the whole end of the other tunnel, the engine room and toilets, that end was open to the weather. Initially we only had the wooden door which is still there, and then bomb proof door was put up and then eventually the anti-commando door was put on.[565]

---

[563] DOC/CW/1/545 Porthcurno Defence: Summary Report on Porthcurno dated 17th November 1941
[564] Oral Histories Project CD4: 4
[565] Oral Histories Project CD4: 4

A report from Wilshaw to the Secretary for the Colonies, Lord Lloyd, dated the 6th August 1940 details the situation at the Station while the tunnels were under construction. In the report Wilshaw highlights three concerns: first, the progress of blasting the two tunnels 130' into the rock has been delayed owing to the geological strata. One was progressing satisfactorily, whereas the other is held up for forty tons of cement, which they are unable to get delivered. Second:

> It is the general consensus of opinion down there [in Porthcurno] that, at least until these tunnels are completed and the instruments and apparatus installed therein, aircraft should be kept away. They have no anti-aircraft guns, only Brens. This seems to be a matter of considerable urgency if the station is to be protected in the meantime. I understand that only a few days ago enemy airplanes came over and dropped bombs at St. Just, which is only a few miles away, and our people, rightly or wrongly, think they mistook St. Just for St. Porthcurno.[566]

Finally, Wilshaw suggests that the valley should be closed to the public; he states that there were still a considerable number of people who motor down to the small beach. He notes that the valley was closed in the last war, and passes would be issued at the discretion of the Military Authorities to tradesmen who have to come in, contractors, representatives, workmen and residents.[567] This letter from Company to Government again reinforces and demonstrates the relationship that existed between the two. Not only did the government provide two thirds of the finances for the project and a military guard, but the government also prioritized the scheme to ensure that there was no shortage of equipment, materials or manpower, as this letter from Lord Lloyd demonstrates:

> I am writing this letter in order to assist you in obtaining all possible priority for the work now to be undertaken for the protection of Porthcurno Cable Station. This work is regarded by the Government as of most urgent national importance and I hope that in the carrying out of it, in obtaining of materials, the use of road and rail transport, and the employment of personnel, your Company may have the same priority and facilities as if it were a Government Department. Should you have any difficulties, please refer immediately to me by telephone.[568]

The result of this priority was that at a time of total war with the demand on manpower and resources being stretched to the limit, the protection of Porthcurno

---

[566] DOC/CW/1/545 Porthcurno Defence: Report from Sir Edward Wilshaw to Lord Lloyd, Secretary for the Colonies dated 6th August 1940

[567] DOC/CW/1/545 Porthcurno Defence: Report from Sir Edward Wilshaw to Lord Lloyd, Secretary for the Colonies dated 6th August 1940

[568] DOC/CW/1/545 Porthcurno Defence: Letter from Lord Lloyd, Colonial Office to Sir Edward Wilshaw, dated 2nd July 1940

was considered to be of such importance that it took precedence over all other projects in the district.

Aside from the provision of materials, manpower and transport, Lord Lloyd also took steps to address the other concerns in Wilshaw's letter, namely the provision of anti-aircraft weapons and the closure of the valley. A letter from Porthcurno to Head Office on the 3rd October reports that:

> In connection with the provision of anti-aircraft defence for this Branch, whether by coincidence or by the direct influence of Lord Lloyd …several Lewis guns have been installed.[569]

However, the Superintendent goes on to report that:

> Recently seven pieces of anti-aircraft 'apparatus' of a new type to deal with dive-bombers, together with their crews, under the command of Lieutenant Allistone, have been sent to increase the defences. It is proposed to mount one piece, weighing 5 cwt., actually on the roof of the Office building, in order to aim in a direct line at a bomber making a dive at this target. We are of the opinion that the roof of the building is sufficiently strong to take this load, especially if mounted immediately above one of the supporting pillars. It is understood that there is no recoil to the apparatus.
>
> Mr. Allistone, who was, I believe, a Major in the last war, seems to be a very keen and efficient Officer. He is desperate however, in that, although the 'apparatus' is ready on concrete emplacements, in spite of constant representations to his normal authorities, he cannot obtain the requisite ammunition. Enemy aircraft have been very active round this district lately, apparently dropping bombs at random, although Penzance Railway Station was attacked yesterday morning and considerable damage done.
>
> Mr. Allistone thinks it pitiful that we might be attacked here at any moment, without being able to bring the new 'apparatus' into action for lack of ammunition, and has asked me if I could use any influence with the appropriate authorities to speed things up.[570]

This lack of ammunition seems typical of the scramble to prepare following the end of the Twilight War, with the construction of pillboxes around the coast – the earliest of which were reinforced with scrap metal. The relationship between Company and Government is also evident in the defence of Porthcurno: whenever supplies, manpower or transport were in short supply Cable and Wireless were able to exercise 'influence with the appropriate authorities' to speed things up:

---

[569] DOC/CW/1/545 Porthcurno Defence: Letter from Porthcurno to Head Office, dated 3rd October 1940

[570] DOC/CW/1/545 Porthcurno Defence: Letter from Porthcurno to Head Office, dated 3rd October 1940

demonstrating the familiar, reciprocal relationship of power between the two parties.

With the construction of the tunnels, the provision of anti-aircraft cover and a military guard, there was only one recommendation of the Company that was not immediately enacted: this was the closure of the valley to members of the public as the Superintendent suggested in September 1938. On the 8th October 1940 the valley was closed to everyone who was not carrying an identity pass, issued by the military authorities complete with a photograph; it was in connection to these photographs that the Superintendent of Porthcurno wrote to Head Office:

> In view of the defences in operation to protect this Branch, the district of Porthcurno is now restricted, and those who live, or who have business in the area, must now have a Pass bearing the photograph of the owner. The cost of the photograph (in duplicate) is 1/6d. per person.
>
> May I respectfully ask if the Company will bear the cost of such photographs where our own Staff and their dependents are concerned? The total cost is estimated at something less than £3.0.0., but full particulars would be given later if required.[571]

The Company did indeed pay for the photographs, and the resulting passes meant that the whole Porthcurno district was closed to the public. As [name] recalls:

> Just below the post office there was a road block in place for a long time manned by soldiers with a Bren gun and you had to have a pass to come down. The whole area was really sealed off with barbed wire and there were a couple of pillboxes on the cliffs which were manned by soldiers, and of course pillboxes on the cliffs which were also manned, so it was really quite a closed area.[572]

The effect the construction of the tunnels had on the landscape around the old Instrument Room is apparent in an aerial plot taken by the RAF in 1941, which was subsequently annotated by the Superintendent at Porthcurno and forwarded – in the conventional post – to Head Office. This can be seen in Figure 2, with the key to the annotations as follows: A = Aerial Mast Fencing, C = Bomb Craters, E = Former Emplacements, G = Garages, O = Old Instrument Room, T = Tennis Courts, Q = Old Quarters and 'The two arrows mean O are self explanatory' – in other words they indicate the tunnel entrances.[573]

---

[571] DOC/CW/1/545 Porthcurno Defence: Letter from Porthcurno to Head Office dated 8th October 1940
[572] Oral Histories Project CD4: 3
[573] DOC/CW/1/545 Porthcurno Defence: Key affixed to air plot dated 19th September 1941

While the far west of Cornwall was never a target for the Luftwaffe, it was on the return route of the heavy bombers making raids over Plymouth and South Wales. In order to lighten the aircraft and thus preserve fuel, German aircrews would discharge unused munitions at random over British soil. Figure 4 shows the near misses the station received from returning German bombers; the three craters on the extreme right of the frame have fallen perilously close to the cable hut – immediately above craters. Both Figures 2 and 3 demonstrate how the tennis courts stood out in the landscape – it seems that in 1941 no attempt had been made to camouflage them; this plot, provided by the RAF, was also taken from an altitude similar to the operational height of enemy bombers. The positions marked 'E' are the former sites of anti-aircraft batteries; from the number and distribution, this physical evidence in the landscape demonstrates the change in attitude of the British government with regard to the defence of the station. From a *laissez-faire* approach followed throughout the September Crisis of 1938 and the Twilight War of September 1939–June 1940, the flurry of activity at Porthcurno is etched into the landscape through the rapid deployment and subsequent relocation of anti-aircraft weapons.

When the 1941 plot is compared to the aerial view taken pre-war, the activity around the station in the construction of the tunnels has led to the establishment of a myriad of paths and roadways around the Instrument Room – the result of which, along with the spoil from the excavation is to highlight the station in the landscape. When these two plots are examined, it seems that the tennis courts are not the only identifying factor on the ground.

The stationing of almost a thousand troops in the district and immediate area, the designation of Porthcurno as a Class A Vulnerable Point and the positioning of sentries around the Cable and Wireless complex made the valley essentially impregnable to those who had no business being there. It also changed the atmosphere for the Company staff at the station: routine tasks such as adjusting equipment took on an altogether different complexion, as this oral history account suggests:

> I was only a young lad when I went there and started work. It was wartime and this was part of it and it was only when everything was over you look back on it and thought oh my gosh yes – I used to walk on night duty across to the transmitter room to check the transmitter and you'd say to the sentry as you went out 'all being well I'll be back in twenty minutes' and

> you think 'would he remember?' Or perhaps you weren't back in twenty minutes; perhaps you were a bit longer, what was the situation? I mean there were a number of times we walked back and in actual fact walked back to a Tommy gun in your ribs. That happened to me two or three times. I know that there was another occasions when I had to go up into the fields which were to change a feeder to use the transmitter to another destination, we had to put it on a different aerial, I had to go up in the middle of the night in the dark and we weren't allowed to show lights and that sort of thing. It wasn't a very happy feeling up there knowing that there were sentries all around in various places that didn't know I was there. It's frightening when you walk into a Tommy gun stuck in your ribs for a second or two.[574]

Porthcurno and Secrecy

The notion of secrecy was as pervasive at Porthcurno as it was through all of the Company's wartime operations and establishments. At Porthcurno this secrecy left the telegraph wire and extended into the landscape beyond the walls of the Office, through the closure of the beach and village. Where Ascension Island was a 'company island', Porthcurno could be said to be a 'company landscape'; in concert with the military and the government, Cable and Wireless were able to establish a defended secret enclave around the shore end of its international cable network in the United Kingdom. It is in the oral histories of the Porthcurno station that, for the first time, the staff perspective of handling wartime messages can be heard:

> When you signed the secrets act it was made very very clear to you that anything that came to you in your lifetime in this business was not to be divulged. You didn't do it. It was wartime, everybody was engaged, we were engaged in communications that was what we did and I suppose we understood that was it. We knew we were sworn to secrecy we left everything behind when we went home.[575]

This employee not only acknowledges the secret and sensitive nature of much of the wartime work of the Company, but also defines the nature of traffic that passed through the station. This ranges from local traffic, which was either business or personal, national messages which were forwarded:

> One thing we did used to do at PK was handle the local traffic from overseas to Cornwall. That we used to get coming in to us telegraphically but to distribute it around Cornwall, if the person receiving it was on the telephone we would telephone them and give them the message over the phone and then we would post a confirmation copy to them by first class post the following morning. And the local industrial firms, like the mining engineer construction works in Camborne, Holman Brothers, dealing with overseas and we were getting personal messages for people that we phoned to them, and they said thanks very much, and then you forget all

[574] Oral Histories Project CD4: 3
[575] Oral Histories Project CD4: 4

> about it. You knew these things were private, were personal and you didn't discuss it, not even with your wife or workmates. Unfortunately sometimes they were very sad, I think the happier ones were the main. The thing is they were an every-day-thing. Some people might have enjoyed the idea that they knew a little bit of gossip perhaps about someone, but if you couldn't divulge it, it wasn't gossip was it?[576]

He also recalled the government and press traffic that passed through the station during the war:

> All government stuff was encoded, we didn't know what was in that at all. But there were private messages which would be from commercial companies dealing with overseas orders, which were in plain language, and we could understand them. One thing that used to be a pet thing that some would do if they had the chance, you might find for instance that when things were quiet in the night sometimes you'd get a press report that would be in plain language. You'd get a press report, which would be something that would be in the papers the next day. Generally speaking the press reports were originating in this country and going abroad, rather than the other way round. You could get the news up a bit, news wasn't so available as it is now; we used to have restricted news bulletins but nothing the amount like it is these days.[577]

The government traffic was always transmitted under the strictest cipher arrangements – with the only exception in the archive being in 1940 when the government codes and ciphers were compromised by the German war machine overrunning embassies in continental Europe. During the time diplomatic messages from Spain, Portugal and Latin America were transmitted by the diplomats from Cable and Wireless Offices in the Company's private code. As it has already been noted, Cable and Wireless were the only Company in mainland Britain and in the wider Empire that were allowed to continue transmitting in code – remarkably these coded messages weren't subject to the censor's pen.

Press messages, however, were transmitted *en clair* but paraphrased into cablese to save on the overall cost of an individual message. It stands to reason that the first people in mainland Britain that would receive news of the war would be the Cable and Wireless employees decoding messages at the terminal stations. This again informs the notion of Cable and Wireless acting as an intelligence-gathering network – apart from acting as a conduit for official or clandestine intelligence on behalf of the government, the network transmitted and received the unofficial intelligence of press traffic and corporate information. Fundamentally the network enabled the work of the censorship department.

---

[576] Oral Histories Project CD4: 4
[577] Oral Histories Project CD4: 4

The cable station at Porthcurno was not an isolated secret enclave in an otherwise agricultural landscape; as the manager reported to Head Office:

> On Wednesday I received a phone call from the Clerk-of-Works at Skewjack to say that a Contractor would visit here the same morning, in connection with general work to be carried out on our programme. The visit did not materialize.
>
> I may mention that at Skewjack, about a mile and a half from here in a direct line, extensive operations are being carried out, I believe on Radio Location installation. Four lofty lattice-work masts have been erected as well as two wooden towers of the Eiffel shape. These latter make a very conspicuous landmark.[578]

This letter is revealing for two reasons: first it illustrates the defended and militarized landscape surrounding Porthcurno and second it demonstrates a complete lack of security. Not only was radar one of the most secret operations of the war – the name and function of the masts remained unknown until the post-war period – but also the fact the station manager discusses the location and function of the masts at Skewjack in the conventional post. This letter was not delivered by a courier, but went with the Post Office, was opened by a clerk at Electra House, passed through the hands of secretaries before finally ending up in Sir Edward Wilshaw's hands. The letter also appears to have escaped the gaze of the censor. While the government and company were busy creating a landscape of secrecy in which secret work could be undertaken, the manager of the station was allowing real military secrets to evade the censor and to potentially leak outside to those who had no business knowing. There were two radar stations around Porthcurno: RAF Skewjack and RAF Land's End. The former, with its 'Eiffel' style towers would have been a clear landmark for enemy aircraft, whereas the latter was a discrete installation, the purpose of which was to locate and track low flying aircraft and U-boats. These two vital installations along with the broad, flat, invasion-ready beach at Sennen Cove, also perhaps account for the thousand or so troops that were stationed in the Porthcurno district, and billeted at the station.

During the Second World War Porthcurno can be broadly defined as a heterotopia of ritual or purification – in the same way that Boedeltje defines the borders of the European Union.[579] In order to gain access one must have permission or apply to

[578] DOC/CW/1/545 Porthcurno Defence: letter from Manager, PK to Head Office dated 28th February 1942: Defence of Branch
[579] Boedeltje F The Other Spaces of Europe: 7

certain protocols. This is clear in the archival material and oral histories, which describe the closure of the valley to 'day trippers who motor down',[580] and the effective sealing off of the valley from the outside world. In order to pass the armed road block 'just below the post office', one would have to produce a permit issued by either the government or the Cable and Wireless superintendent: in this way the criteria for a heterotopia of ritual is fulfilled. The roadblock was the only permeable barrier in to Porthcurno: the beach itself was protected by a flame barrage and the cliff paths guarded by sentries in Pillboxes – there was no ritual that could be performed to gain access via these routes. It is also arguable that the Porthcurno valley was also a heterotopia of crisis: it was indeed a separate, defined space, that was designed to host a vital communications node and the armed forces tasked with defending it in a hermetically sealed environment. In every sense of the word, Porthcurno became a counter-site; with the Cable and Wireless complex and the defended valley standing in an ambivalent, though oppositional relation to society's mainstream.

Porthcurno qualifies as a heterotopia, as a fundamentally different, other space. The valley was embedded within a broader militarized landscape – pillboxes further along the cliffs, and the nearby radar site of RAF Skewjack – and in the country as a whole there were and are areas of the landscape closed to the public for military reasons. At Porthcurno, however, the difference is both in the scale and quantity of manpower and material that were poured into such a relatively small environment. From a simple technical perspective the site is unique – as the domestic terminus of the international submarine cable network – but the scale of defence and mobilization that took place during the early years of the Second World War heighten this impression of uniqueness.

Conclusion

This chapter has examined the mobilization of Cable and Wireless in a domestic UK context, by detailing the activities and defence precautions at the Porthcurno Branch; this acts as a counterpoint to the overseas mobilization chapter, and several stark differences in governmental and company attitudes towards domestic and overseas branches become apparent.

[580] DOC/CW/1/??? Porthcurno Defence: Report from Sir Edward Wilshaw to Lord Lloyd, Secretary for the Colonies dated 6th August 1940

Where preparations were made for the overseas scrutiny scheme and the defence of the overseas network in the years preceding the Second World War – motivated by the British Government's acknowledgement of the vital nature of the submarine cable network – the defence of the domestic network (and the most important cable head in the United Kingdom) was left in abeyance until the end of the Twilight War, in mid 1940. The reason for this reluctance to provide for the domestic network centre upon the Treasury: acting on information provided by the Admiralty and Air Ministry, it was concluded that the likelihood of attack was remote – and therefore no defence precautions were necessary. Instead, the defence of the station was left to the Cornwall Constabulary, who provided constables to patrol the cable hut.

The situation at Porthcurno only changes when it becomes apparent that the Axis powers are within striking distance of the United Kingdom – the end of the so-called Phoney War in Europe; when this change of mentality occurs the response is swift. The provision of the underground tunnels and the military presence in the valley is the first phase in the creation of the heterotopia in Porthcurno: one of ritual where one had to perform certain gestures to be allowed access. The notion of the heterotopia is of value because it demonstrates how the Second World War necessitated the creation of other spaces – secret spaces that were closed to the outside.

The domestic mobilization of Cable and Wireless – in this instance the Porthcurno Branch – also demonstrates how the Company was involved in the creation of military landscapes during the Second World War. Pearson maintains that there can be no doubt that preparing for war in he twentieth century had a profound impact on landscapes.[581] Military disruption of the landscape in warfare is pernicious because it spills over both the spatial and temporal boundaries of the attack, and because its impact assails combatants and non-combatants alike.[582] Military defence landscapes, according to Tivers are iconic in nature; there exist specific icons which symbolize for us (or symbolized for our forebears) military defence and which have a meaning which goes much further than their own

[581] Pearson, C Researching Militarized Landscapes: a literature review on war and the militarization of the environment *Landscape Research* Vol. 37 No. 1 (2012) pp115-133: 118

[582] Pearson, C Researching Militarized Landscapes: 124

presence.[583] Defensive features have been physically constructed throughout history and many remain in the landscape today. Tivers maintains that some of these have acquired an iconic significance as well as a purely practical one; examples might include Hadrian's Wall, prehistoric hill forts, pillboxes and barracks. These icons may have different representations at different times; for example, the remains of medieval castles have become heritage features.[584] This is the case at Porthcurno: the defensive features embedded in the landscape during the Second World War – the pillboxes and the tunnels – have since become sites of heritage.

Military defence landscapes, like all landscapes are representational; they may be used to reinforce ideology with little direct relationship to any actual threat. Even the word defence itself is representational: defence legitimizes military power in the industrialized world. It is the concept through which governments justify maintaining armed forces in peacetime or using them in conflict.[585] Once militarised landscapes allow us to walk where those who once belonged were men of science and war: secluded men, men protecting information.[586] The following chapter examines the final aspect to the mobilization of the Company during the War: the mobilization of the individual employee.

Elements of the British landscape were transformed through the Second World War with a military presence in the form of the soldiers, airfields, radar stations, pillboxes and various other installations and emplacements. The closure of the road and valley as a whole at Porthcurno is just one example of the measures of control exercised on the civilian population as a preventative measure against a German invasion; the older road surfaces around Newlyn and Penzance still show where the tank traps and road blocks would have slotted into the ground to hinder an advancing enemy.

The loss of the Porthcurno station – the terminal station in the United Kingdom – would have been disastrous to the All-Red Routes; while there was redundancy elsewhere, the Porthcurno terminus was irreplaceable. Why it took the British

[583] Tivers, J 'The home of the British Army': the iconic construction of military defence landscapes *Landscape Research* Vol. 24 No. 3 (1999) pp.303-319: 303
[584] Tivers, J 'The home of the British Army': 309
[585] Tivers, J 'The home of the British Army': 317
[586] Davis, S Military landscapes and secret science: the case of Orford Ness *Cultural Geographies* (2008) Vol. 15 pp.143-149: 143

government six months of warfare to realize this is unclear: the communications advantage offered by the secure cable network was perhaps the *only* advantage the Allies had going into the Second World War. It is in this context that the defence of Porthcurno should be considered: as an essential node in the communications network of the British Empire and the Allied powers, the defence of which became a priority for the British government, and remained as such until the end of the war when the troops were recalled, the road block removed and the valley again opened for day trippers to motor down.

At the end of the Second World War and the gradual demobilization of space, Porthcurno returned to its pre-war neutral configuration: day-trippers could again motor down and visit the beach. The heterotopia of ritual that had blossomed from Eastern House to include the entire valley had retreated back to the Cable and Wireless building complex: it has remained thus for the intervening years, with the uniqueness, the otherness of the site being eroded.[587]

[587] During the latter part of the twentieth century, the heterotopic nature of the site could be questioned – was it in any way different to any other private business site? In all likelihood probably not, until the early 1990s and the establishment of the telegraph museum and archive: at this point the Cable and Wireless technical college made its transition to a heterotopia of time. Today, Eastern House and the Second World War tunnels enclose and house in one place objects from all times and modes – from the 1850s to the present day fiber-optic exhibit – creating a counter-site of difference and memory.

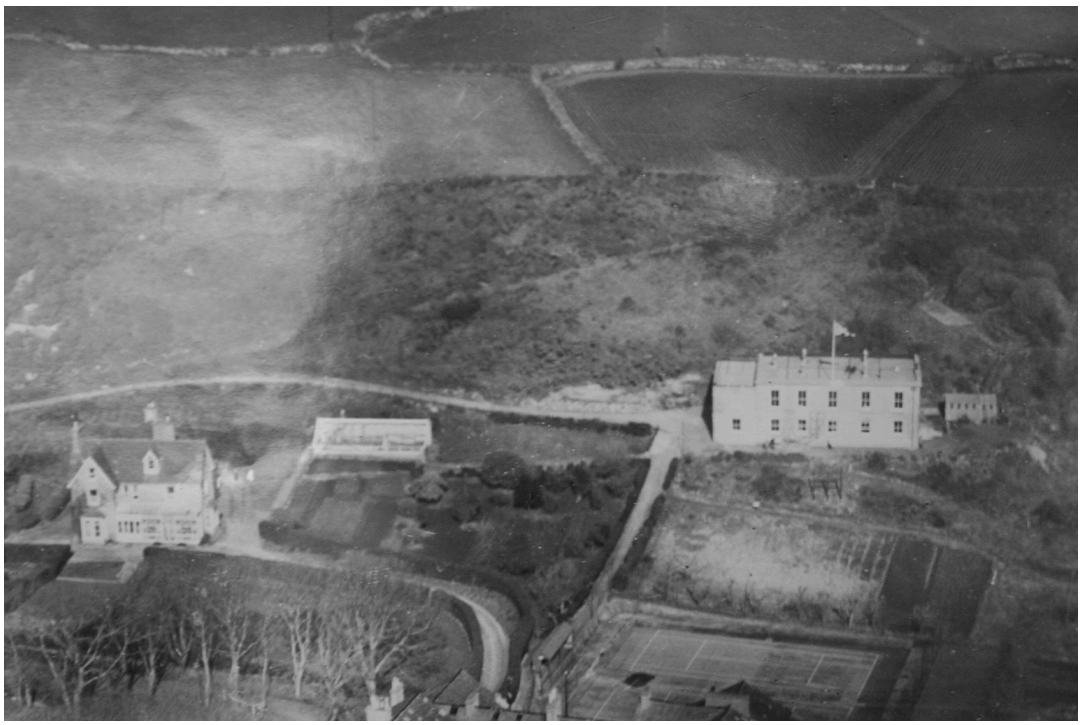


Figure 3 Aerial View of the Instrument Room (Pre-War)

Figure 4 Aerial Plot of Porthcurno taken by the RAF in 1941 identifying key features of the station and the surrounding area. Note the three bomb craters in the far right of the frame.

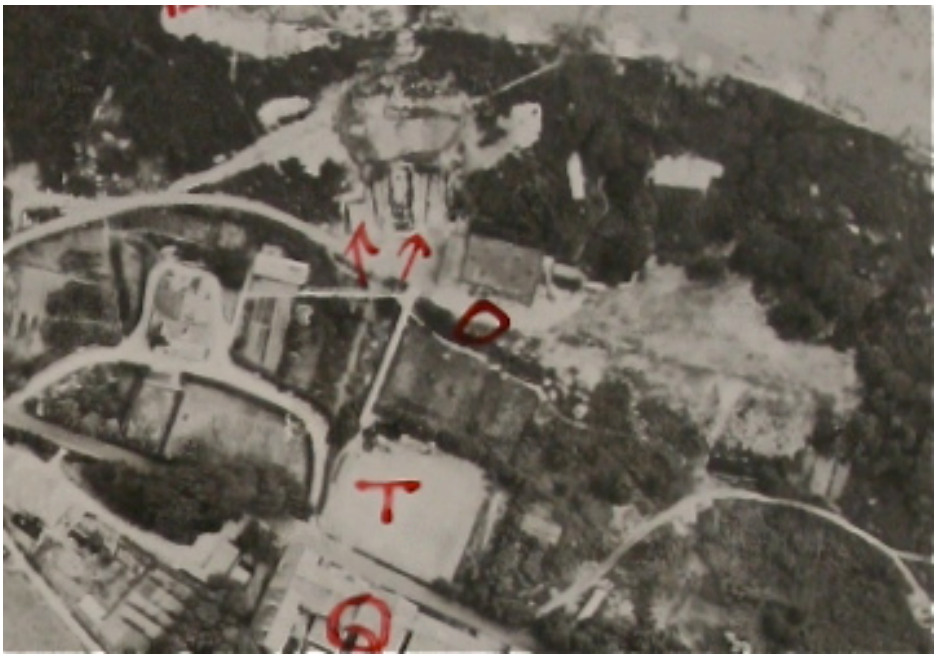


Figure 5 Enhanced detail of the aerial plot: the scarring to the landscape to the right of the Instrument Room is the spoil removed during the tunnel excavation. This spoil was initially moved by hand, but was later transported by light railway.

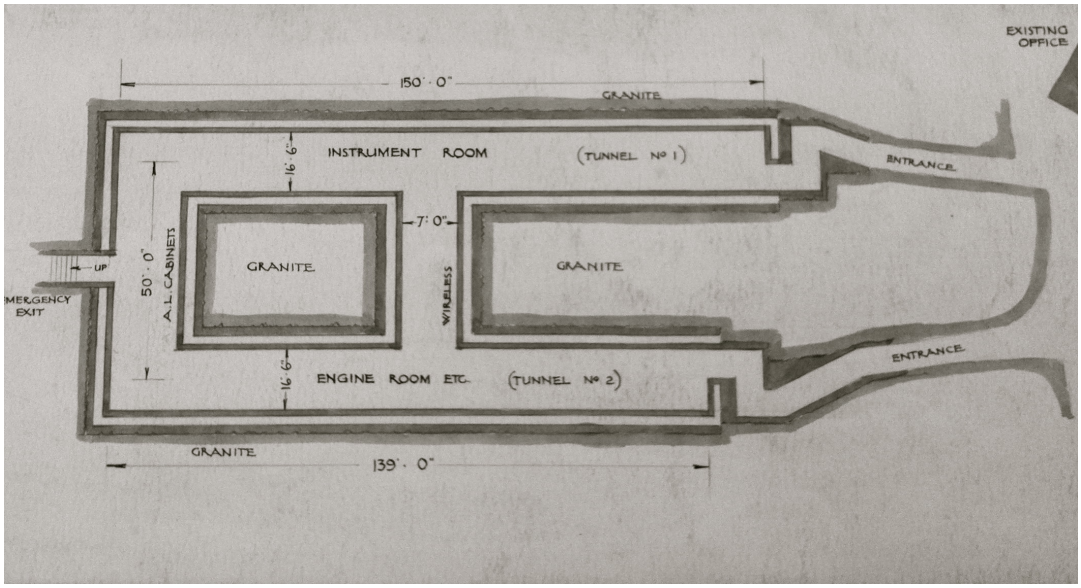


Figure 5 Engineer-in-Chief's drawing of the final tunnel layout.

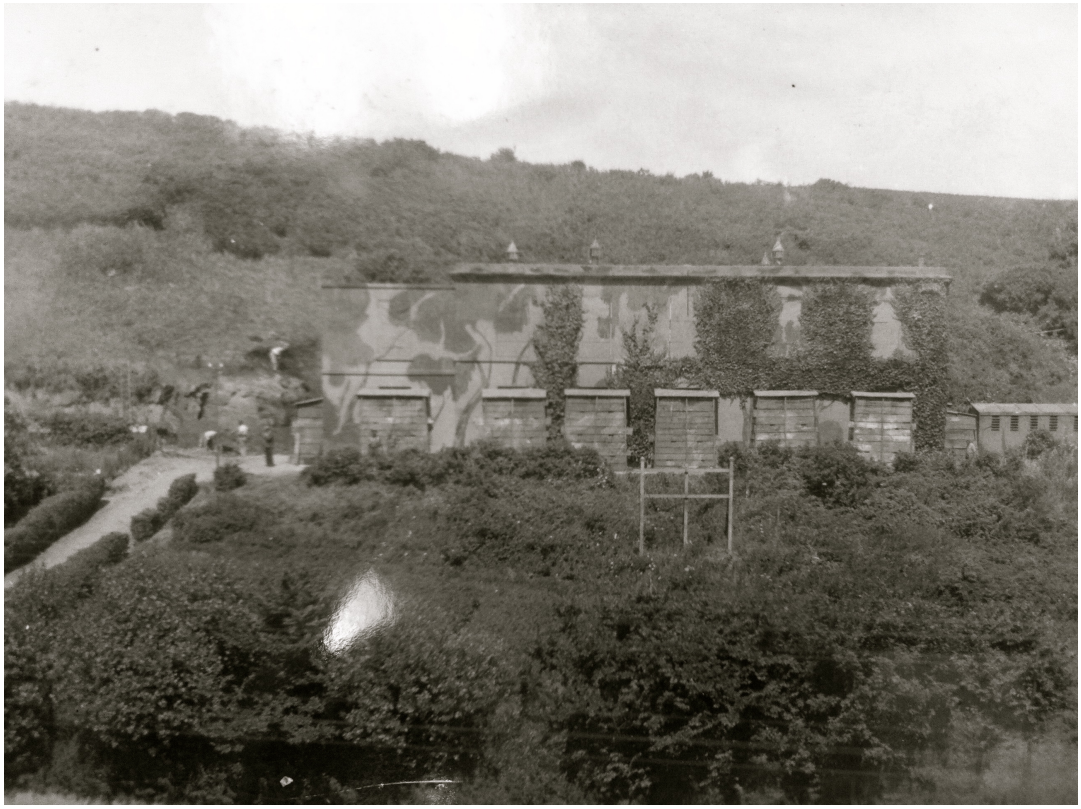


Figure 6 The Instrument Room before the construction of the tunnels. Note the painted camouflage and the blast protection on the ground floor windows.

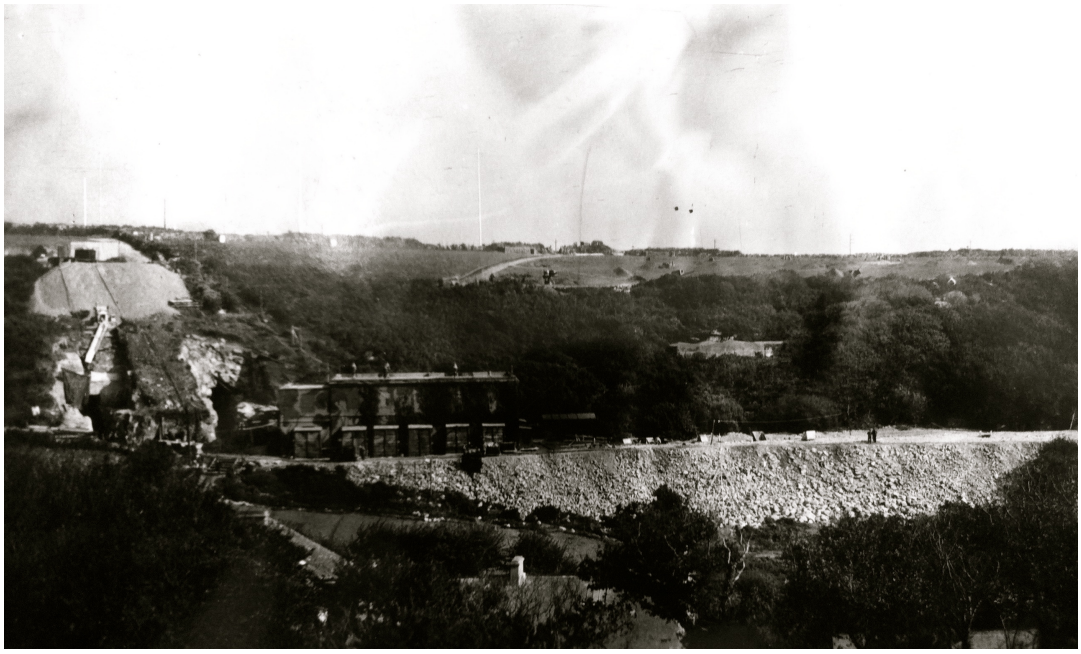


Figure 7 View of Instrument Room: tunnel construction to the left of the frame; spoil tip extending across to the right

Figure 8 View of old Instrument Room, completed tunnels and wireless installation on hilltop behind station.

Figure 9 Entrance to Tunnel 2 - the engine room and plant.

Figure 10 View of newly completed Instrument Room (Tunnel 1).

Figure 12 Gas, blast and Commando proof door at entrance to tunnels.

Figure 11 Entrance to Tunnel 2, sentry on twenty-four hour guard.

10. Representing Communications: Company narratives of wartime service

Victory in a total war,[588] such as the Second World War, is dependent on the scale of resources that could be mobilised.[589] According to Ollerenshaw, in the analysis of the war in Europe between 1939 and 1945 the question of industrial mobilization is fundamental, but remains imperfectly understood.[590] Indeed, he notes:

> Military history …in which armies and navies come and go, commanded by greater or lesser figures deciding momentous historical issues but which say nothing of real productive forces which alone give events meaning or, indeed, make them possible.[591]

The popular narratives of the Second World War – centering around individual people, iconic battles and heroic exploits – are exactly what Ollerenshaw is describing; the infrastructure of industry and communication that made the continuation of the conflict possible is absent from the official histories. In analyzing wartime industrial mobilization it is necessary to consider large firms, atypical but not always the most visible to governments and historians.[592] Ollerenshaw notes that in the politically sensitive and jealous world or war contracts, mobilization of industry required people with big-business experience who were 'above party' to act as a link between private industry and government. How this was achieved, he states, remains a seriously neglected aspect of the war economy.[593] By examining the relationship between Cable and Wireless and the British Government with regard to the mobilization of both domestic and overseas stations, this neglected aspect of the war economy can be revealed: while Cable

[588] A total war is a military conflict in which the contenders are willing to make any sacrifice in lives and other resources to obtain a complete victory, as distinguished from limited war. Throughout history, limitations on the scope of warfare have been more economic and social than political. Simple territorial aggrandizement has not, for the most part, brought about total commitments to war. The modern concept of total war can be traced to the writings of the 19th-century Prussian military strategist Carl von Calausewitz. For a fuller discussion of the notion of total war see Imlay, T *Total War* Journal of Strategic Studies Vol.30 No.3 (2007) pp.547-570

[589] Broadberry, S Howlett, P Blood, Sweat and Tears: British Mobilisation for World War II in Chickering, R (eds.), *A World at Total War: Global Conflict and the Politics of Destruction, 1939-1945*, Cambridge University Press (2010): 2

[590] Ollerenshaw, P *War,* Industrial Mobilisation and Society in Northern Ireland, 1939-1945 *Contemporary European History* Volume 16 Issue 2, (2007), pp.169-197

[591] Ollerenshaw, P War, Industrial Mobilisation and Society: 170

[592] Ollerenshaw, P War, Industrial Mobilisation and Society: 182

[593] Ollerenshaw, P War, Industrial Mobilisation and Society: 182

and Wireless were legislatively bound to provide communications for the British Empire, under threat of seizure of control by the Government, it was the personal relationships and individuals that Ollerenshaw describes as 'above party' that were responsible for the successful mobilization of the communications industry.

As a result of this apparent obscurity in the general public consciousness, Cable and Wireless ran a series of campaigns in the national press announcing, advertising and, to an extent, justifying their wartime work. This public narrative is of value because it provides a point of comparison between the unpublicised war work of the Company that this thesis examines and the internal narrative that Cable and Wireless generated through staff publications.

Cable and Wireless actively managed the presentation of its war work to the general public and to the company's staff during and after the Second World War. The Company's internal and external narratives of war work can be found in adverts and company statements that appeared in the national press and the in-house staff journal the *Zodiac*. These narratives lend another lens through which we can address the strategic and tactical role of the Company during the Second World War. Placing the 'secret' work of the Company presented in chapters 5, 6 and 7, alongside the carefully crafted public and company representation of the war world, reveals the way in which private companies were also entangled in the management and regulation of the public, alongside their employees. From the archival material it becomes apparent that commercial enterprise during the Second World War also sought to capitalize on their role in the war effort.

According to Woodward-Smith, the most successful adverts, which are primarily aimed at influencing the viewer, are a combination of text and images.[594] In successful advertising, textual and graphic elements combine together to form a type of discourse which has the power to provoke feelings and actions, shape values, expectations and life-styles, and which is addressed to a particular audience. Woodward-Smith asserts that the visual and verbal can be compared to a hammer and a nail:

[594] Woodward-Smith, E The Verbal and the Visual in Advertising Language: a Cross-cultural Analysis in eds. Homem, R *Relational Designs in Literature and the Arts: Page and Stage, Canvas and Screen* Radopi (2012) pp.210

> …Both have to work together. The best hammer in the world is useless if the hammer misses the nail. And the best nail in the world is useless unless there is a hammer to hammer the nail in. The visual is the hammer. It is difficult to build a strong, powerful worldwide brand without a strong, shocking, dynamic visual. It could be argued that images alone have very little communicative value.[595]

There are three types of adverts, defined by Jones, used by Cable and Wireless during the Second World War.[596] These are 'brag' adverts that do not seek to sell a product or service, but rather to maintain brand awareness in the business and public consciousness. 'Official communications', which again do not seek to sell a service, but to discourage the use of the network. These adverts also serve the purpose of demonstrating the war-work undertaken by the Company to the public. The final class of advert utilized by the Company was the 'double-barreled', which served the function of the 'brag' class of advert, but also sought to sell the products and services offered by the company.

Representations of Cable and Wireless: external narratives of war service

Cable and Wireless places its communications to the general public in prominent newspaper publications. The use of the popular press by Cable and Wireless during the Second World War demonstrates how a communications company *communicated* itself to the general population. The choice of publications is also no accident, as Bingham notes:

> The circulation of national newspapers doubled between the wars, so that by 1939 some two-thirds of the population regularly saw a daily paper, and almost everyone saw at least one Sunday newspaper. Although newsprint rationing severely restricted the size of newspapers during the Second World War, sales continued to rise: the Daily Express, the most popular daily, sold more than two and half million copies per day, while the News of the World sold over four million copies of every issue. Each copy sold was usually seen by at least three people, often as a result of being passed around the family.[597]

By placing adverts in all the popular titles – from the *Times* to the *Daily Express* – the Company was effectively ensuring that their contribution to the war effort was reaching as wider audience as possible. Through a series of themed adverts and statements issued to the press, the exact nature of the work could remain unclear, but the value of the work was demonstrated to the public. These adverts also

---

[595] Woodward-Smith, E The Verbal and the Visual in Advertising Language*: 212*

[596] Jones, JB *All-Out for Victory! Magazine advertising and the World War II Home Front* (2009) Brandeis University Press.

[597] Bingham, A The British Popular Press and Venereal Disease during the Second World War *The Historical Journal* Volume 48 Number 4 (2005) pp.1055-1076: 1057

served to communicate the wartime work of the company to the general public and also to issue instructions in times of crisis – for instance, to deter people from sending telegrams at times when the system was under strain from government or press traffic.[598] Cable and Wireless' wartime adverts included written and pictorial illustration: familiar wartime tropes (such as battleships and battlefields) were used to catch the eye of the reader and accompanying text conveyed information about the Company's war work.

Lee observes that there is a distinct lack of studies that examine businesses seeking to advertise services rather than commodities.[599] The vast majority of the histories of advertising focuses on the selling of products, and linked with this, the notion that advertising was a means for firstly selling surplus goods then later for creating the demand for these goods during the twentieth century.[600] With regard to Cable and Wireless' pre-war and wartime advertising campaigns, Lee observes that there was a shift from classified to display adverts.[601] There is an important distinction, highlighted by Fletcher, between classified advertisements, which people actively look for, and display advertising, which go looking for people.[602]

Comprehensive analysis across the spectrum of Cable and Wireless's communications strategy is beyond the scope of this thesis,[603] but a focus on the wartime external narratives of Cable and Wireless enables us to understand how a private communications company, whose employees were working in a reserved occupation, communicated their war work to the general public.[604] John Bush Jones analysis of American wartime industrial adverts suggests there are three distinct categories of content:

> "All-Out" ads, which sought to raise and sustain morale, stimulate civilian support for the war, and promote home front unity, without making a sales pitch for specific products or services; "Double-Barreled" ads, which used

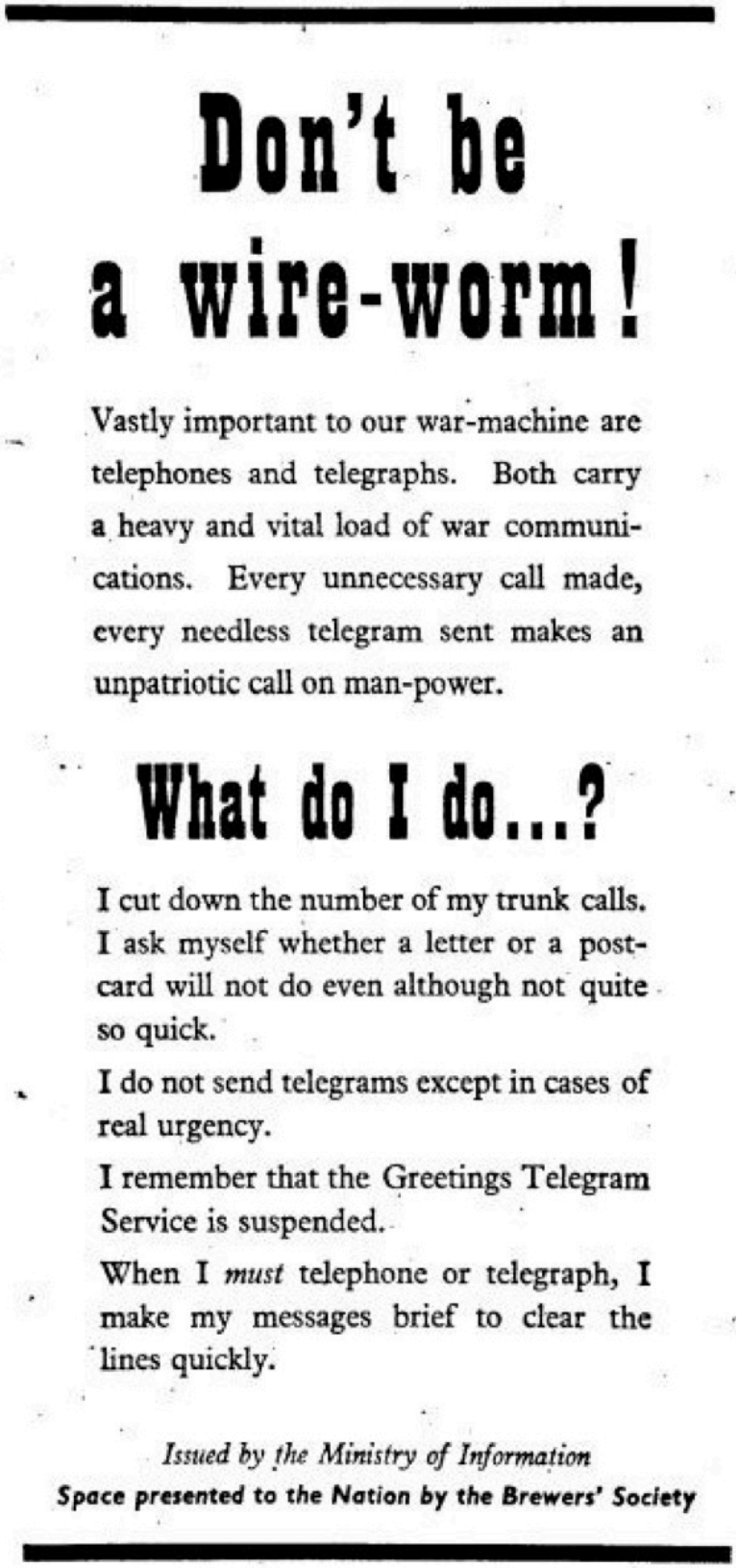
[598] Both the General Post Office and Cable and Wireless embarked on campaigns of reducing or limiting cable usage; however it was only Cable and Wireless that engaged with the public by detailing the war work being undertaken.
[599] Lee, J *Visual Culture in the Making of Cable and Wireless' Corporate Identity* Upcoming (2014): Advertising: 7
[600] Lee, J *Visual Culture in the Making of Cable and Wireless*: 7
[601] Lee, J *Visual Culture in the Making of Cable and Wireless*: 7
[602] Fletcher, W.*Powers of Persuasion: the inside story of British Advertising 1951-2000* Oxford University Press (2008): 7
[603] An in-depth study of the corporate/public image of Cable and Wireless can be found in the Porthcurno-Exeter CDA holder Jenny Lee.
[604] Jones, JB All-Out for Victory!

> wartime rhetoric not only to mobilise the home front but also to market goods; and "Brag" ads, which served industries largely as a means of self-promotion by providing them with an opportunity to publicize their wartime contributions while "keeping brand consciousness alive both in the business community and amongst the public.[605]

The themes of Cable and Wireless adverts in newspapers such as The Times varied from announcing new services, further reductions in rates and issuing public advice on the use of the telegraph network. This can be seen to be at odds with the advertising campaigns of the General Post Office, which, throughout the war issued notices to the press against general use of the domestic telegraph network. The following two adverts from 1943 demonstrate the approach of the General Post Office in appealing to the general public's sense of wartime citizenship in reducing their use of the service:

Figure 14 The Times, Tuesday, May 18, 1943; pg. 3; Issue 49548; col F GPO Category: Display Advertising

[605] Jones, JB All-Out for Victory: 65



Don't be a wire-worm!

Vastly important to our war-machine are telephones and telegraphs. Both carry a heavy and vital load of war communications. Every unnecessary call made, every needless telegram sent makes an unpatriotic call on man-power.

What do I do...?

I cut down the number of my trunk calls. I ask myself whether a letter or a post-card will not do even although not quite so quick.

I do not send telegrams except in cases of real urgency.

I remember that the Greetings Telegram Service is suspended.

When I *must* telephone or telegraph, I make my messages brief to clear the lines quickly.

Issued by the Ministry of Information

Space presented to the Nation by the Brewers' Society

Figure 15 The Times, Tuesday, Dec 21, 1943; pg. 3; Issue 49734; col A The Ministry Of Information Category: Display Advertising

These 'official communications' from offices of the state were designed to reduce the use of the telegraph service – particularly the cable network – because all government traffic was transmitted via the secure cables. By limiting the public use of the cable and telephone networks, government and services traffic could be transmitted and received with the minimum of delay. In contrast to this approach, Cable and Wireless primarily utilized an approach that can be identified as a purely informational ad from Jones' typology. Such advertisements simply displayed a company's participation in the war effort, while keeping its name and/or its products before the business community and the public.[606] These adverts served to reinforce the vital nature of Cable and Wireless' war work and in Cable and Wireless case attempts were made to reinforce this message through the use of serialised advertisements that related to each other thematically or in some other way. Serialised adverts commonly used art and copy to produce a sequence of ads produced by a single company that appeared over weeks and months either in one publication or several.[607]

According to Jones, Second World War advertisements were selling patriotism and promise first, their products second. What the reader or customer needed to be sold on, or at least informed about, was how they could express that patriotism through tangible and specific ways of participating in the war effort.[608] The myriad messages aimed at the home front in war ads had one intention in common – the same intention as advertising has always had – to encourage the reader to do something. Also, the advertising industry had an objective it hoped to achieve by implementing that intention. The purpose of some advertising parading as war ads was, at its worst, little more than product promotion of the self-aggrandizement of various manufacturing firms.[609]

The majority of the adverts placed by the company were 'brag' adverts: specifically designed to keep the company's brand alive in the business and general public conscious.[610] There is another discrete strand of advertising utilized by the Company that Jones does not account for, which is shared by both Cable and

[606] Jones, JB All-Out for Victory: 5
[607] Jones, JB All-Out for Victory: 13
[608] Jones, JB All-Out for Victory: 35
[609] Jones, JB All-Out for Victory: 33
[610] Jones, JB All-Out for Victory: 35

Wireless and the GPO: these take the form of official communications – adverts encouraging people to telegraph less at busy times. The strategic nature of the cables and the fact that all government traffic was transmitted this way, meant that if the public could be encouraged to send a letter through the conventional post, this would be preferable and could be perceived as contributing to the war effort (in much the same way as 'make do and mend' and 'dig for victory'). It is the relationship between Cable and Wireless and the British Government that make these adverts unique; the Company was, to all intents and purposes, acting as the communications office of the government and in this regard no longer functioned as a private 'for profit' business: encouraging people not to use their services is at odds to both business and the purpose of advertising. However, by encouraging the public not to use its services, the Company is freeing up bandwidth and manpower for the use of the British and Allied governments – a significant source of revenue for the Company during the Second World War.

An advertising campaign orchestrated by Cable and Wireless – known as the Battle of Communications – appeared in the Times from April to August 1944. These adverts form part apology for the unavoidable delay in non-government messages, and part aggrandizement of the Company – fostering public support of the communications company by aligning itself with the armed forces, through the use of words such as battle. What is also interesting in these adverts is the open way in which Cable and Wireless define their strategic and tactical importance: announcing to the world that all government messages go via cable – and not only via any cable, but the cables of the Company. Coupled with the statistic that two million words pass through the Central Telegraph Station every day, Cable and Wireless are not only reinforcing their position to the general public, but also making themselves an easy and important target for the Nazi war machine as the following two examples demonstrate:

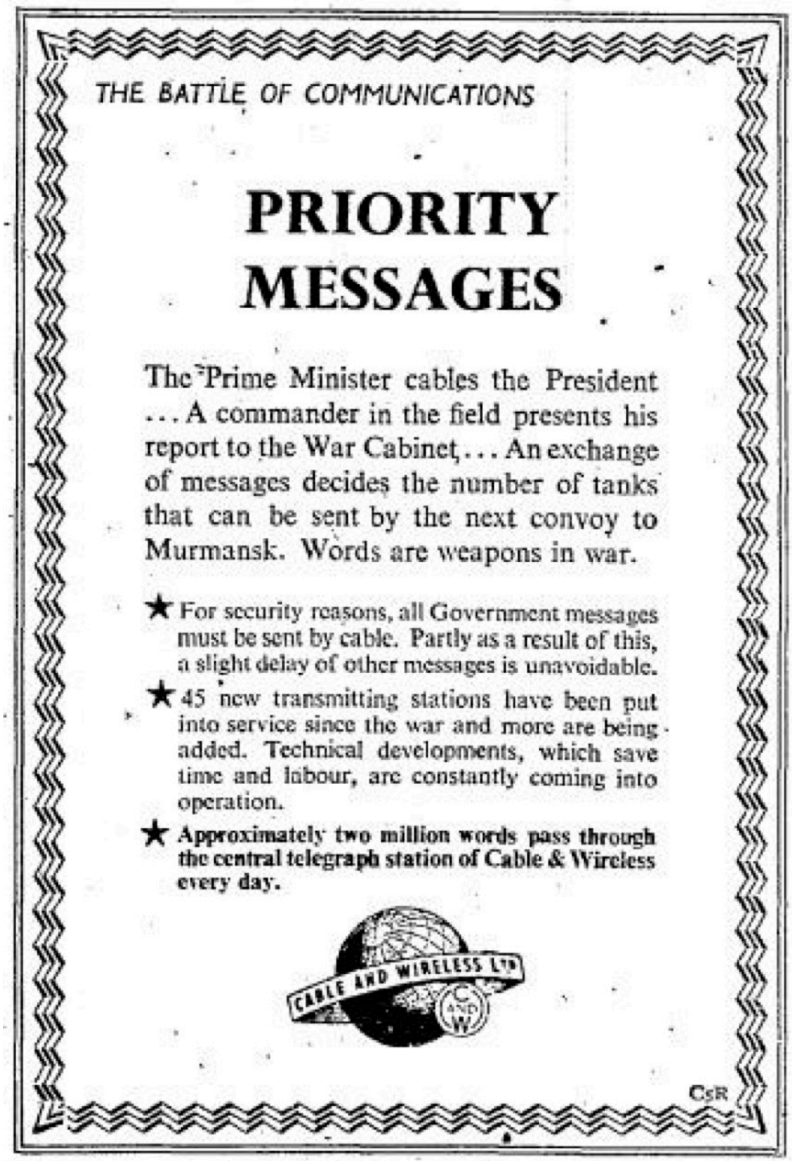


Figure 16 The Times, Monday, Apr 24, 1944; pg. 3; Issue 49838; col F Cable And Wireless Ltd Category: Display Advertising

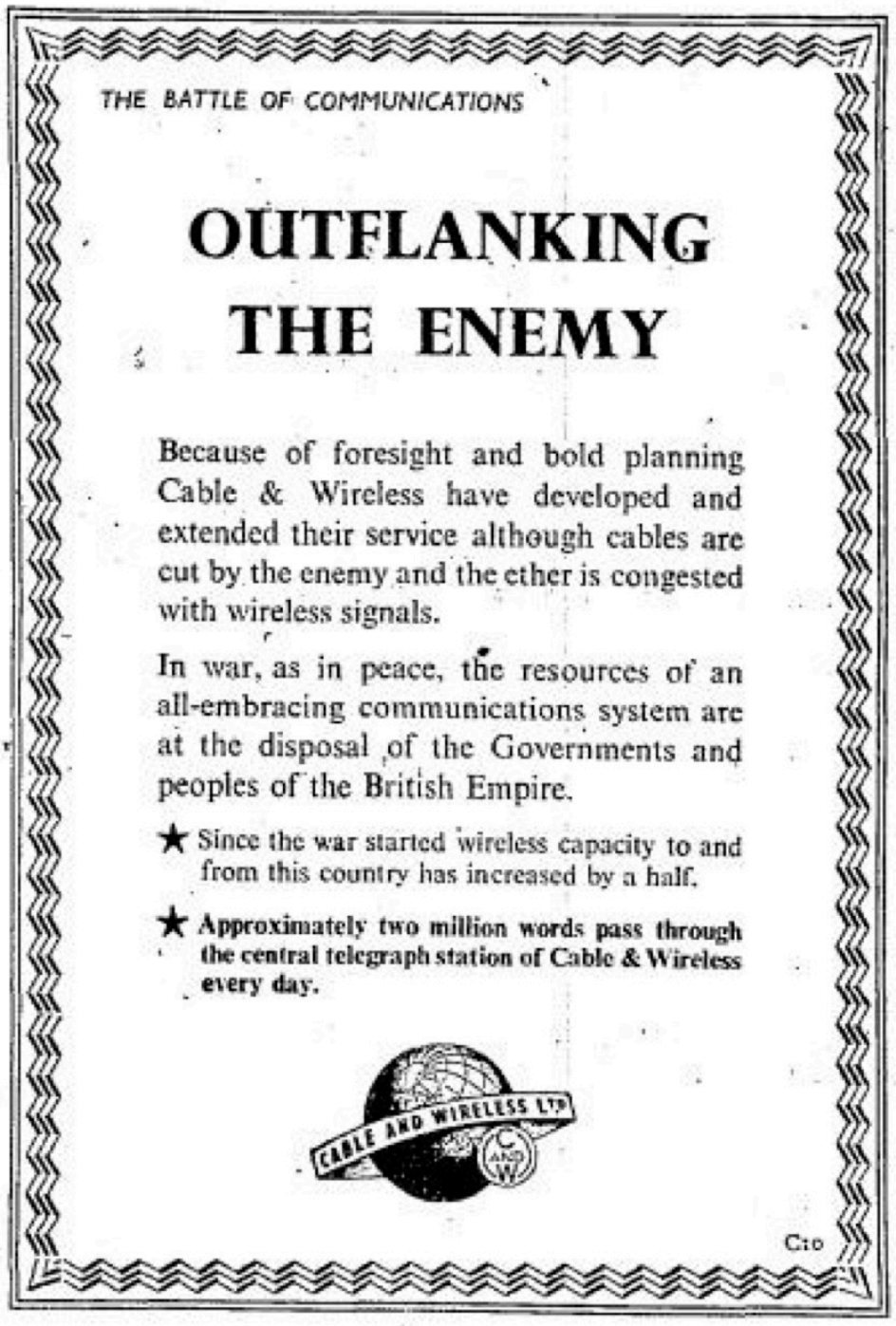


Figure 17 ***The Times*****, Friday, Jun 09, 1944; pg. 7; Issue 49878; col F Cables And Wireless Ltd. Category: Display Advertising**

The Battle of Communications was the first serial advertising campaign undertaken by the Company during the Second World War. The layout, typeface and themes are coherent across adverts – which do not seek to sell the Company's products or services, rather, as Jones has observed, these adverts are little more than self-aggrandizement of the communications company, selling patriotism and promise.[611] By allying themselves with the armed forces, the war and war/military rhetoric in the form of the *battle* of communications, the Company is positioning themselves as *the* patriotic service to use. The Company can also be seen to ally themselves with the British Government, presenting themselves as the faithful servants of the state and the people of the British Empire.

Another class of advert employed by the Company in the national press utilized war rhetoric to mobilise the home front, whilst at the same time, to reinforce brand awareness with the public and business community. These adverts do not sell a service, they simply demonstrate the war work undertaken by the Company. Two such examples are:

[611] Jones, JB All-Out for Victory!: 64

Figure 18 Cable and Wireless Ltd.*Illustrated London News* (London, England), Saturday, July 22, 1944; pg. 111; Issue 5492 (137 words) Category: Display Advertising

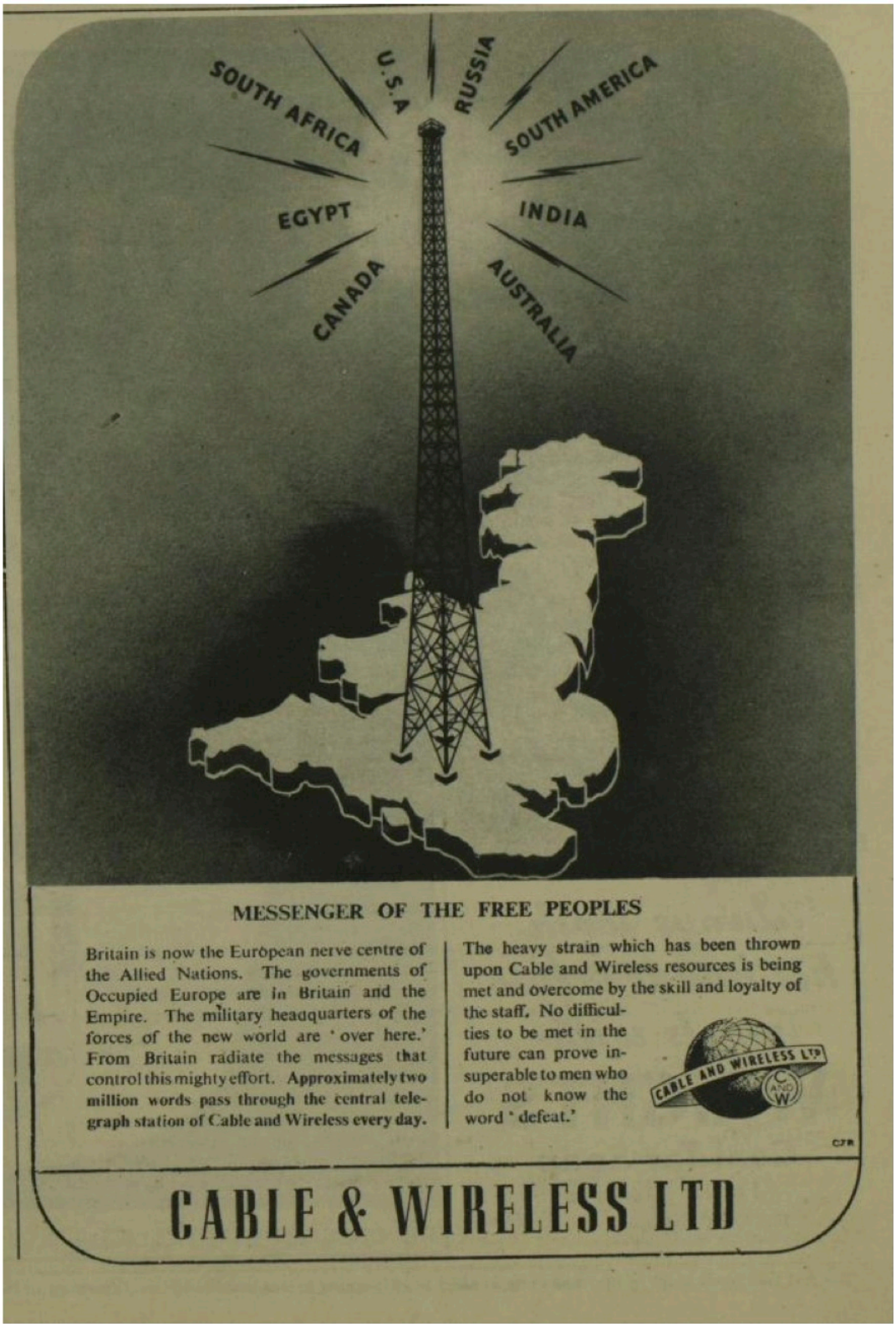
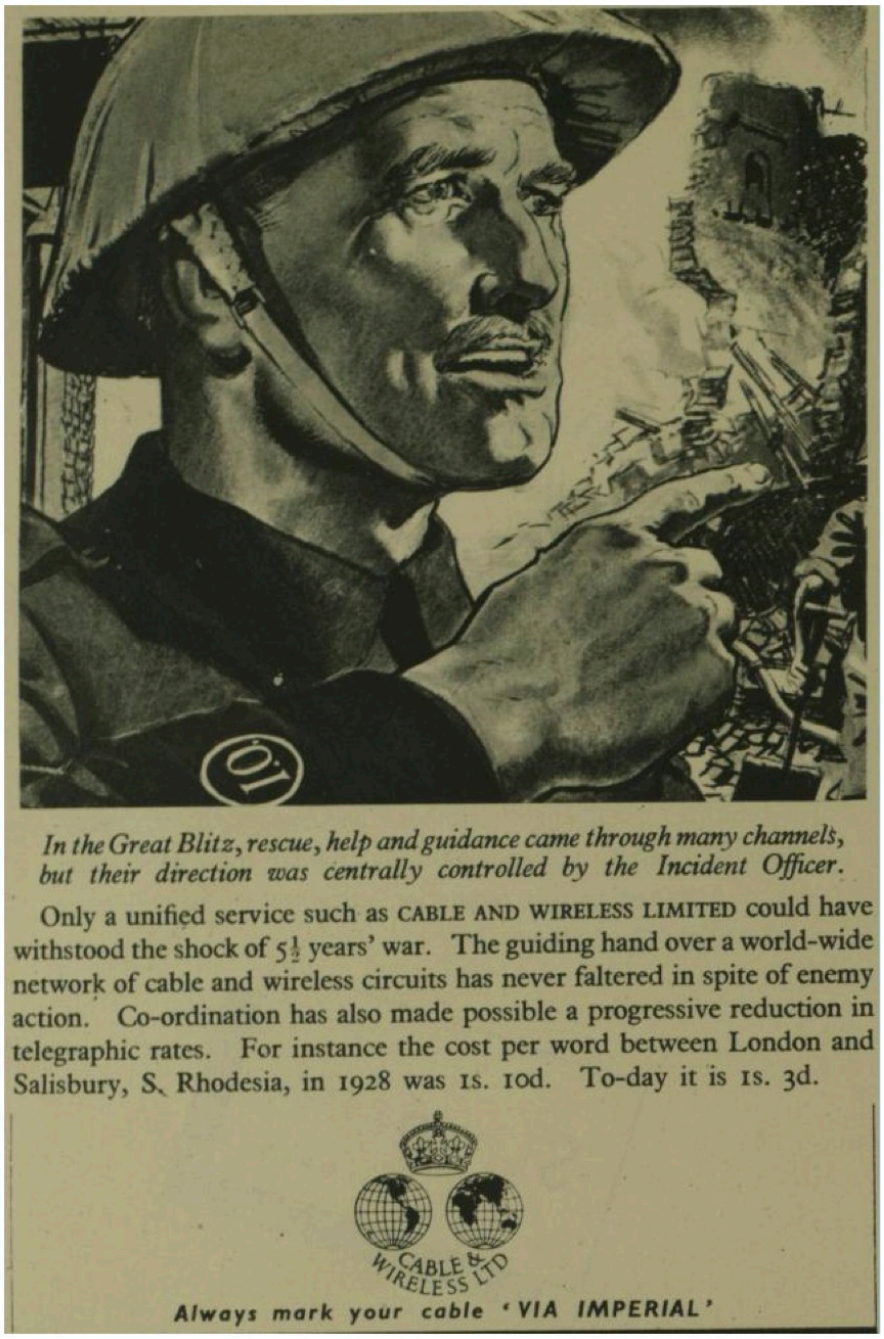


Figure 19 Cable & Wireless Ltd.*Illustrated London News* (London, England), Saturday, August 05, 1944; pg. 167; Issue 5494 (117 words)
Category: Display Advertising

These adverts build upon the campaign of the *Battle of Communications*: utilizing the company's logo and typeface. With this series of adverts, the text is now coupled with an image to create the most effective advert for the printed media. The first of this new series of adverts utilizes an image that would have been familiar to the domestic readers of the newspaper – that of the bombed out building. The image also demonstrates patriotic motifs and making the best of a bad situation: even though the cable office is in disarray, complete with blown out windows, the telegraph clerks are still hard at work. The second image utilizes modernist imagery – a stylized representation of the wireless mast – broadcasting from the United Kingdom, from an area approximately centred over London. The words surrounding the mast identify wireless circuits that span the globe and identify (at a glance) to the reader the places that can be contacted via wireless. This information is reiterated in the text at the bottom of the advert. In this new serial advert, the familiar statement that 'two million words pass daily through the Central Telegraph Office' has been carried over, creating a familiarity between the old campaign and the new.

In a similar vain to the proceeding adverts, the following two again use war rhetoric and familiar themes catch readers' attention, but this time do sell a service offered by the company. These adverts sell patriotism first and the product second; rather than familiar images of bomb damaged building, this new campaign has a victorious element. The first uses the Incident Officer as an analogy for Cable and Wireless: rescue, help and guidance during the Blitz came through many channels but one man centrally controlled direction. In this analogy, Cable and Wireless is the Incident Officer of the British Empire, the central point through which information was transmitted throughout the world. The same is true for the second advert: from the bridge of the battleship, the direction and velocity of fire is controlled, and hence, *the battle was won here*. Cable and Wireless is that central point of control – that which all information passed through and was disseminated from.



In the Great Blitz, rescue, help and guidance came through many channels, but their direction was centrally controlled by the Incident Officer.

Only a unified service such as CABLE AND WIRELESS LIMITED could have withstood the shock of 5½ years' war. The guiding hand over a world-wide network of cable and wireless circuits has never faltered in spite of enemy action. Co-ordination has also made possible a progressive reduction in telegraphic rates. For instance the cost per word between London and Salisbury, S. Rhodesia, in 1928 was 1s. 10d. To-day it is 1s. 3d.

CABLE & WIRELESS LTD

Always mark your cable 'VIA IMPERIAL'

Figure 20 Cable & Wireless Ltd. *Illustrated London News* (London, England), Saturday, June 02, 1945; pg. 600; Issue 5537 (104 words) Category: Display Advertising

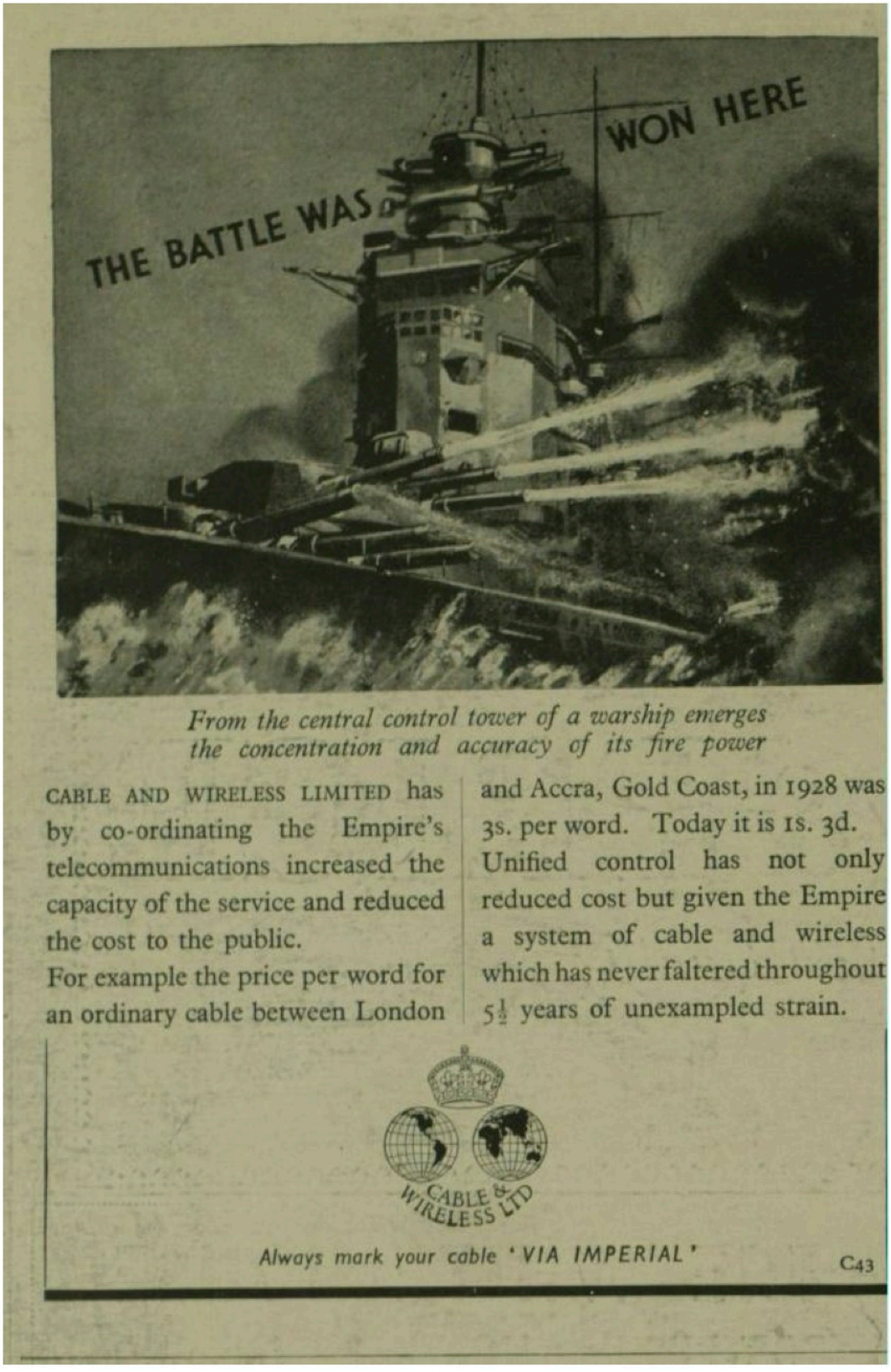


Figure 21 Cable & Wireless Ltd. *Illustrated London News* (London, England), Saturday, July 28, 1945; pg. 2; Issue 5545 (109 words) Category: Display Advertising

These adverts deviate from Cable and Wireless previous serial adverts; they accord to Jones' definition of 'brag ads', with no product as such to sell, these ads simply displayed the Company's participation in the war effort, and kept its name in the public and business consciousness. With victory in Europe achieved these adverts (figures 1 and 2) sell the service and bring home to their consumers the reduced cost of the service. The same is true for the final wartime advert of the Company, one that was not serialized, and returned to the text-based format:

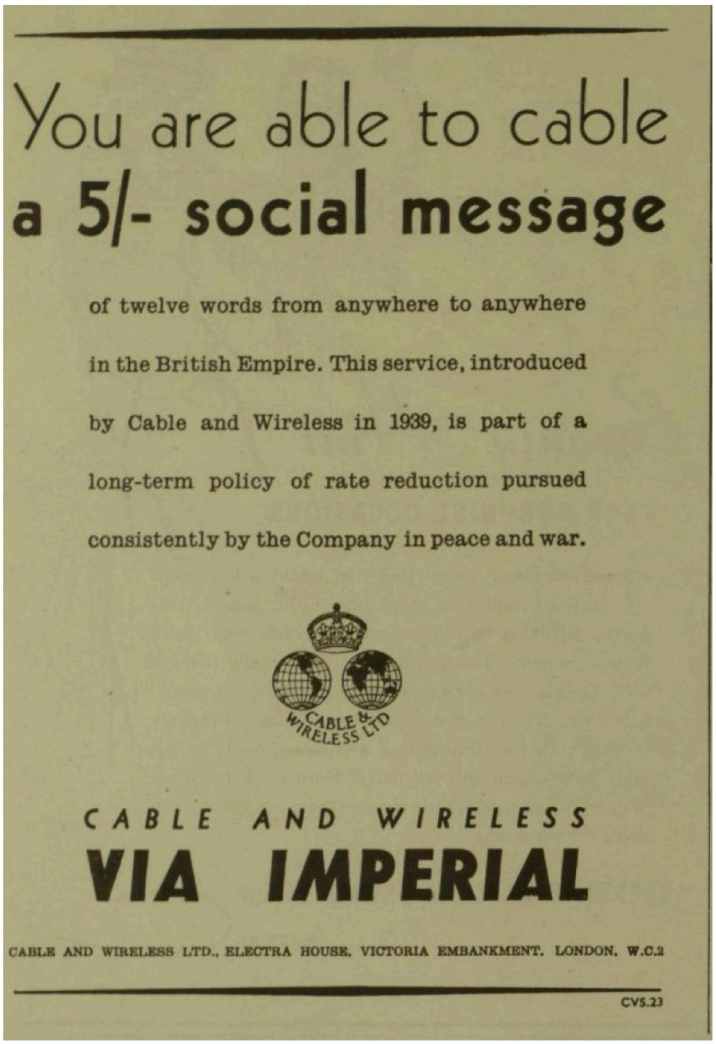


Figure 22 Cable and Wireless Via Imperial. *Illustrated London News* (London, England), Saturday, November 24, 1945; pg. 588; Issue 5562 Category: Display Advertising

With the end of the war in Europe on 8th May 1945, Cable and Wireless began an all-out campaign in the Times, detailing the war-work of the Company, the

maintenance of communications in war and the technical developments that made news reporting from the front possible. A number of Cable and Wireless advertising campaigns fall under the category of 'double-barreled'; 'The Message Went Through' and 'Messenger of the Free Peoples' are clear examples of this. The use of war rhetoric, coupled with the rate cuts per word provided by the company serves not only to advertise the services offered, but to demonstrate the mobilization of the Company on the Home Front during the war.

This section has allowed a glimpse into a neglected aspect of the war economy – the links between industry and government. It is clear from the inclusion of Sir Edward Wilshaw in the Ministry of Information that he was one of the above-party characters that fostered the relationship between the British Government and the communications company.

Describing War Service to the Public

Cable and Wireless' post war (June 1945) advertising campaign took the form of textual accounts. This section draws on three separate reports, one from the Porthcurno archive in the form of the original press release, the second from the Times, a revised published version of the above entitled 'A Nerve System of Empire: how communications were kept going' and finally the verbatim speech of Sir Edward Wilshaw to the staff of the Company, again printed in the Times. Sir Edward Wilshaw opens his address with the following remarks:

> With the end of the war in Europe it is now possible for me to give a somewhat fuller account of the activities of the company than has been possible in recent years. There are still many stories which cannot be told, but in the following brief review I can, I hope, show you some part of the contribution which your company has made to the common victory.[612]

It is interesting to note that almost seventy years after Sir Edward Wilshaw made this speech, there are still many stories that cannot be told, which have been obscured in Official Secrecy. It is this strategic nature of cable communications that Wilshaw draws attention to:

> Its [the Company] first duty has been to maintain both cable and wireless communications. This has been no easy task and never has the strategic value of our cables been more heavily tested. We have continued to operate all cable and wireless services from the heart of London. It was

[612] The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F Company Meeting Cable And Wireless (The Operating Company), Maintenance Of Communications In War, Many Technical Developments, Sir Edward Wilshaw's Survey Category: Business and Finance

> clear at the outset that London would become a target for the enemy, but it was clearly our duty to remain near the seat of Government and to maintain services from the capital and for the press. [613]

From establishing the importance of the metropolitan aspect to the Company's operations, Wilshaw moves on to examine the overseas challenges faced by Cable and Wireless as Italy and the Japanese entered the war:

> It was not only at our stations that we faced enemy attack. On Italy's entry to the war, all the cables west of Malta were cut by the Italians. From then until the defeat of Italy all cable messages to and from the armies east of Malta had to be routed via the South Atlantic, Capetown, and northwards up the East African coast and the Red Sea – almost as if to travel from London to Land's End, one had to go via John O'Groats.
>
> In the Far East the Japanese, on their entry into the war, overran all our cable and wireless stations in that area, including, of course, Singapore, which served us in peace-time as a main base for telegrams to the Far East and Australia, and as a cable manufacturing depot. The loss included our best and fastest route to Australia and New Zealand. Again the West African route to Capetown had to carry a large share of the traffic thus necessarily diverted, while the long route via the Atlantic, Canada and the Pacific was called in to relieve the strain.[614]

One of the most revealing parts of Sir Edward Wilshaw's speech can be found in his discussion concerning the expansion of traffic; the stark numbers comparing pre-war and wartime traffic statistics detail just how much extra work the company undertook:

> In the face of all these difficulties the Company's system has had to carry during the war an incomparably higher volume of traffic than in the pre-war days. Government traffic, which comprised 12,000,000 words in 1938, reached a total of 266,000,000 words in 1944. Press traffic rose similarly from 29,000,000 words to 139,000,000, while the total number of words in social telegrams increased from 3,000,000 to 49,000,000. The total traffic carried in 1938 comprised 231,000,000 words, against no fewer than 705,000,000 words in 1944, an increase of nearly 500,000,000 words, against which must be set a loss of many of our cable routes through enemy action and the calling up of over 700 skilled staff.[615]

While these statistics sound very grand, their significance only really becomes apparent when they are displayed in a graphical way, as the following figure demonstrates:

---

[613] The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F
[614] The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F
[615] The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F

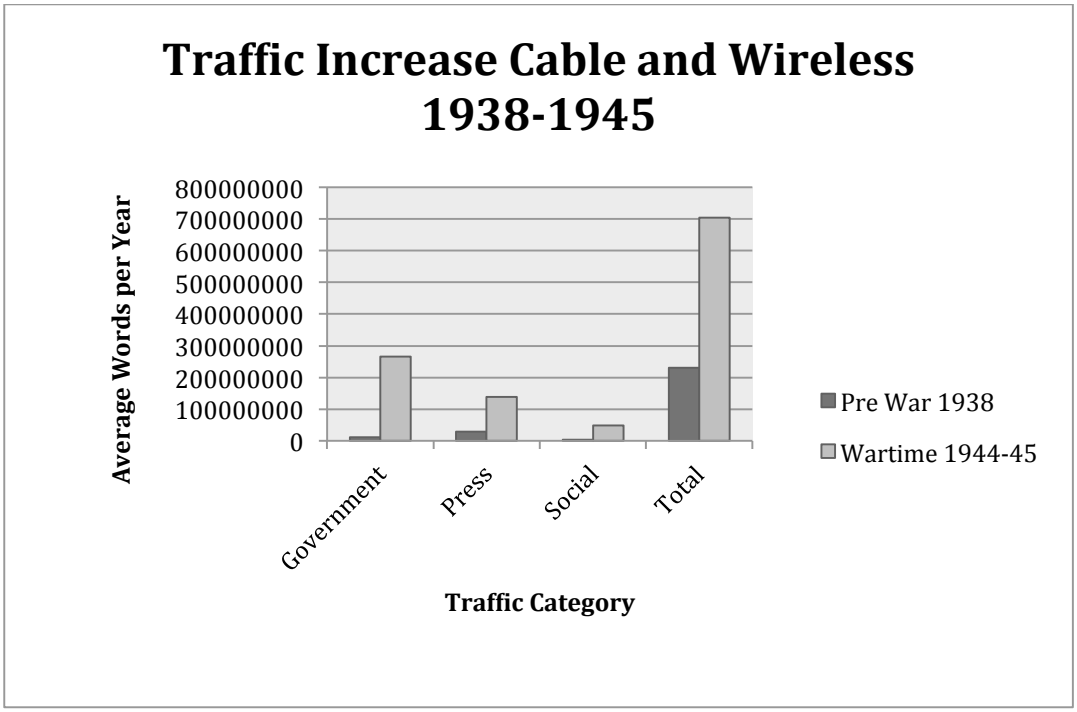


Figure 23 Traffic Increase 1938-1945

Aside from the increase in traffic and work undertaken on behalf of the government by the Company, Cable and Wireless, through Sir Edward Wilshaw impress throughout their press releases the technical advancements they have made throughout the war. Aside from opening new wireless circuits and laying alternative cable routes for government traffic, Cable and Wireless were responsible, in part, for the development of the phototelegraph circuits. Wilshaw notes that before the war, Cable and Wireless, in co-operation with overseas administrations, operated three phototelegraph circuits, handling no more than about one hundred pictures per month.[616] In May 1941, when the Central Telegraph Station was destroyed by incendiaries, the whole of the photograph apparatus were lost:

> Replacements were gathered from many quarters. Within three months the services were again available. Today, the Company operate eleven direct phototelegraph circuits, between London and New York, Montreal, Buenos Aires, Capetown, Melbourne, Colombo, Bombay, Moscow, Stockholm, Berne, Cairo and (connecting with a mobile unit) Italy. In addition to these direct services, the Company operate a picture broadcast service which is received by many overseas terminals. In all, Cable and Wireless Ltd. handle today an average of approximately 2,000 photographs and facsimile documents a month. The services have not only enable newspapers all over the world to present their readers with war

[616] The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F

> photographs; they have also allowed Allies to exchange innumerable plans and documents by wireless, thus easing the difficulties of coordinating supplies and policies. Since the summer of 1944, the Company have handled all pictures emanating from or destined to the Ministry of Information free of charge.[617]

This description of the wartime work of the Company falls into the same category as a number of the adverts – that is the reinforcing of the Company's brand and the use of war rhetoric.

The rhetoric employed by Cable and Wireless throughout the Second World War utilizes both images and language that would have been familiar to the newspaper readership and the general public. In particular, the idea of continued working in adverse conditions: the incident controller on the London streets, and telegraph clerks working in a bombed out office. Scenes of destruction were common in the major urban centres of the UK, and by allying themselves with such images, Cable and Wireless can be seen to be undertaking its work for the good of the country in trying conditions – reinforced by the statement that 'the message got through'. By alluding directly to battles – through the use of the battleship image – the Company can also be seen to be configuring itself as the *other* fighting service: the Battle for Communications typifies this.

While it is conjecture, one factor that may have contributed to the increase in press notices towards the end of the War was the imminent threat of nationalization. By establishing the Company as thoroughly British and privately owned, Cable and Wireless may have been building a position from which they could resist any move to nationalize at the cessation of hostilities.

In the final statements to the press, and with a degree of hindsight, it is almost as if Sir Edward Wilshaw and the Press Office were presenting a case for the continued private status of the Company after the war.

Internal Narratives: the *Zodiac*

The internal narratives of the Second World War that Cable and Wireless disseminated amongst its employees through the staff journal – the *Zodiac provide a counterpoint to the external representation of the Company's war time activities*. The Zodiac was published monthly and was comprised of an editorial, reports from branches, adverts and staff transfer and furlough lists. The journal acted as a point

[617] The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F

of contact between Head Office staff and employees of the Company scattered at the numerous overseas stations. During wartime the journal offered a point of connection to the 'domestic' sphere to overseas staff who were largely unable to transfer or return home. The journal was not only an arena in which staff could communicate with each other, but it also behaved as a mouthpiece for Head Office – allowing them to communicate directly with the staff. The first instance of such a communication can be found in May 1939 under the title of 'The Crisis', in which Head Office state:

> While the Operating and Technical Staff of Cable and Wireless Limited are on the list of Reserved Occupations, owing to the importance of maintaining communications in the event of a National emergency, the Company is affording every encouragement to other members of the Staff eligible to undertake other forms of National Service. Additional leave is given to those enrolling in the Territorial Army, while Staff at both the Administrative and Operating Headquarters of the Company have been trained for duty as A.R.P. Wardens and in First Aid work.[618]

Throughout the Second World War, Head Office issued a variety of notices and announcements to the staff through the medium of the *Zodiac*. Other official uses of the periodical were to announce the status of members of staff on the front line: those that were interned by Axis powers or killed while in the Services. Towards the end of the war the journal was also used to announce to the staff the work that the Company had been undertaking throughout the conflict in the pursuance of efficient communications. One thing that is made immediately clear in the November 1939 editorial of the *Zodiac* is that the war is explicitly off-topic, either for editorial content or branch reports:

> Now, the war is one subject which we wish to avoid, because (a) it is not the *Zodiac*'s "pigeon"; (b) it is the tom-tiddler's ground of so many experts, and (c) everyone is writing about it everywhere and every day. It must be admitted that the war is a great theme, completely absorbing, and all pervading. So dominating, in fact, that any thought that does not include it melts on contact like a snow-flake falling on the Dutch-oven of a baked-potato man. It is a case of either the war – or nothing! Well, let us write about nothing – or next to nothing; that's the sort of Pegasus for our paddock![619]

This is not, however, a subject that the *Zodiac* could avoid permanently, and by the following month the first reports from provincial stations are coming in and the Editor publishes a light hearted letter from Edinburgh:

---

[618] The *Zodiac*, May 1939. Volume 31 Number 370, P349: Cable and Wireless Communication to the Staff: The Crisis.
[619] The *Zodiac*, November 1939. Volume 32 Number 376, Editorial.

> The War Comes to Edinburgh: A month or two before the war broke out we read that Hitler had prohibited jokes against the Scots, as those of that nationality were the most upright and honourable people in the British Isles, also the most Germanic. The Scottish Press replied that the joke was on Hitler, as most of the jokes were of Scottish manufacture and enjoyed by their originators; in fact, the Press ridiculed Mr. Hitler instead of saying "Thanks, kind Adolf, for the compliment."
>
> Hitler is now spiteful, or is it that he wishes to free this "most Germanic of the British races: from the whip of that naughty, naughty man, Churchill, and his wicked gang? Anyway, whatever the reason, Hitler seems to have chosen Scotland as the favourite target for his raiders.[620]

While editorial and general content initially forbade serious reporting of the war, light-hearted pieces did appear, as the Edinburgh report demonstrates. However, this was published in the very early days of the Twilight War. The Edinburgh report is one of the few examples from stations that discuss the war until 1943 when the Allied forces were on the offensive. It is possible that the editorial ban on the war, coupled with the censorship of the journal and the need for secrecy resulted in a complete lack of discussion of any aspect of mobilization until half way through the conflict.[621]

Co-operation between the Government and Company is alluded to in press releases by Cable and Wireless and accounts in the national press; this relationship is also detailed within the *Zodiac*, through official announcements by the Company and by accounts compiled by the editor. The first such instance of these official reports can be found in the December issue of the publication:

> A Service message dated 24th October, 1939, the text of which we reproduce herewith, was sent by the Chairman of Cable and Wireless Limited to Company's Branches and Ships: -
>
> I am sure you will all be pleased to learn that Government have paid your Company a further compliment by inviting me to join the Ministry of Information Advisory Council. I have accepted in honorary capacity and attended first meeting the morning. – Wilshaw.[622]

While the private papers of the Chairman and Managing Director clearly detail the close relationship between individuals at the top of the Company and the government, this is the first wartime reference in the *Zodiac* to this relationship. While Wilshaw's capacity on the council is honorary, he is effectively in charge of

---

[620] The *Zodiac*, December 1939. Volume 32 Number 337, P.146: War Comes to Edinburgh.
[621] The editor, C. Holroyd Doveton, was responsible for the editorial content of the journal, his only constraint was the wartime censorship conditions.
[622] The *Zodiac*, December 1939. Volume 32 Number 337, P.146: Sir Edward Wilshaw accepts invitation to join Ministry of Information.

the largest cable and wireless networks in the world, and as such, would have been of immense value to the Ministry of Information. In addition to the work detailed in chapter 5, 6, and 7, the Company utilize the network on behalf of the Ministry for the dissemination of information overseas, for example Managers of overseas branches completed surveys on local conditions for the Ministry.[623] This is a clear instance of the 'above party' individuals liaising between business and government in order to mobilise industry in the pursuance of total war.

Intelligence: Staff Movements, Defended Stations and Additional Duties

One immediate difference between the pre-war and wartime *Zodiac* was the nature of the reports from overseas stations and the absence of the staff transfer and furlough lists – a familiar sight on the last page of the journal that allowed the staff to keep track of former colleagues as they moved around the international network. The reason for these changes is necessary during wartime: increased censorship and the need to keep ship movements secret meant that this staple of the *Zodiac* could not be included for the duration of the conflict. As the Editor notes:

> There is going to be a more rigorous censorship under the Chief Postal Censor than there was in the last war, a result only to be expected in days when means of communication are so much more numerous and practically instantaneous. Doubtless many of our Correspondents at the Foreign Branches will be so busy that they will not find the usual leisure of their monthly letter; that remains to be seen. Half an hour a month may still be looked upon as a fair ration for the *Zodiac*'s news!
>
> We shall hold on tenaciously to what we can, as, in many ways the *Zodiac* will be an even more valuable link between separated Branch Staffs during the war than it was in the piping times of Peace, and as soon as the war is over we shall build up all over again the New Model *Zodiac* on the foundations so successfully laid by the sporting responses from everyone to our Secretary's letter of November 7th, 1938, and carried on right up to the time when war broke out.
>
> One of the saddest blows the Censorship has dealt us is to suspend the Staff Transfers and Furloughs List; but all signposts on the Seven Seas in any shape or form must be blacked out, and, therefore, no references to our ships of their positions can be printed either. The Intelligence Service becomes of greater importance in each new war.[624]

This is a vital point that has been followed throughout the research: the Intelligence Service becomes of greater importance with each new war. Even in

[623] DOC/CW/1/514 Ministry of Information 1: Letters between the Ministry of Information, Head Office and Overseas Branch Managers, dated between 1942-44.
[624] The *Zodiac*, October 1939, Volume 32 Number 375, Editorial: The War-Time *Zodiac* Travels Light

1939 the importance of intelligence in warfare was acknowledged by the private communications company; whether the general staff were aware of the involvement of Cable and Wireless in the gathering and dissemination is unclear, but this editorial suggests that the knowledge of some complicity was if not general, then selectively known.

While the furlough and transfer lists were removed from the *Zodiac*, the journal adopted a new wartime role; this was the reporting of the status of overseas staff that had been either killed or were missing in action. The most common report featured in the journal was the internment of employees in Axis camps:

> D. Jankinson and G.J.E. Lawson, both of the London Station, who were reported Missing after the final attack on Calais, are believed to be prisoners of war in Germany. Jankinson was a private in the 7th Royal West Kents and Lawson was a Lance Corporal in the London Divisional Signals. G.J. Lawson, who had been posted as Missing after the gallant defence of Calais, is a Prisoner of War in Germany.
>
> Killed in Air Raid: T.C.K. Brunning, one of the younger members of the Staff Department, who was in the RAF, was killed during an air raid, on 31st August, 1940.[625]

Nowhere was this more evident than in the case of the Far East stations; when the Germans swept across continental Europe, Cable and Wireless staff had the opportunity to escape in advance of the Blitzkrieg. In the Far East stations – Shanghai, for instance – the Japanese attack was so swift that evacuation was simply not an option. The lack of Red Cross presence and the Japanese reluctance to disseminate information regarding prisoners made it impossible to gain intelligence of Company employees. As the *Zodiac* notes:

> There has been much natural anxiety regarding our colleagues in the Far East since the Japanese invasion and occupation of many points in that area at which there are cable stations. The isolation of this area from any neutral sources of information, and the absence, to date, of the facilities usually accorded to the Red Cross, has made it impossible hitherto to give any reliable news regarding them, but some news is now beginning to arrive from various sources, and what has so far been received is given below.
>
> At Shanghai, D. Mitchell, F.S. Coote, A.G. Hill, E.A. Miles (and probably Mrs. Miles), F.M. Mansell and B. Storey, are reported to be well. It is understood that they are interned.[626]

---

[625] The *Zodiac*, October 1940, Volume 33 Number 387, Editorial: The War – Reported Missing, now believed Prisoners of War.
[626] The *Zodiac*, December 1939. Volume 334 Number 406: Staff in the Far East

Another example of internment, this time at the hands of the Germans, and again highlighting the importance of intelligence can be seen in the following example:

> We regret to report that G.W. Roynon was taken prisoner of war by a German submarine while travelling home on leave from St. Vincent, Cape Verde. He was en route to Lisbon on a Portuguese steamer, which was intercepted, and he was taken prisoner as a British subject of military age. According to a message published in the Yorkshire Evening News from its Special Correspondent in Lisbon, H.J. Greenwall, this was an unlucky mishap for Roynon, as the Germans mistook his vessel for its sister ship on which seven of our staff, five of them of military age, were travelling, of which they had knowledge from agents ashore.[627]

While the Transfers and Furlough lists are removed from the journal, the capture and internment of overseas staff is passed by the censor and published.

The extent and nature of Cable and Wireless' mobilization was kept out of both the national press and the *Zodiac* until the tide of war had shifted in favour of the Allies and, to an extent the censorship of the journal was relaxed. The full nature of the mobilization, however, remains unpublished; what the *Zodiac* does report is brief:

> Many outposts which were open before the war only during normal business hours have provided 24-hour services during the war. In Ascension and elsewhere they have co-operated with the War Office to provide garrisons and guns and have organized their own Defence Force.
>
> The 10,000 staff have worked without stint to ensure that the system has been at the service of the Empire in her task of fighting, with her Allies, to ensure the restoration to the world of the four freedoms – including the freedom of communication.[628]

The Company also utilized a positive 'brag' approach within the *Zodiac*. Rather than using display adverts, the Company produced a textual account of 'notes on the Company's wartime activities'. This has been reproduced in full overleaf.[629]

While the purpose of 'brag' adverts in the national press was to reinforce brand awareness with the business community and the general public, its use in the *Zodiac* seems somehow misplaced. The purpose of this article, it seems, is to communicate to all parts of the Company, both domestically and overseas, the work that has been undertaken during wartime conditions. Given that the journal was censored throughout the war and Service Message afforded secure communications between branches, it is not unreasonable to suppose that staff

[627] The *Zodiac*, May 1944: G.W. Roynon Captured by U-boat: 117
[628] The *Zodiac*, May 1944: Defending the Stations: 105
[629] The *Zodiac*, January 1943, Volume 35 Number 412: 70: Notes on Wartime Activities of Cable and Wireless Limited.

stationed at, say, Accra, for the duration of the war would have no idea what the rest of the Company as a whole or network was doing. It would seem then, that this account of wartime activity, while remaining within the confines of censorship serves the purpose of communicating communications to the staff of the company.

CABLE AND WIRELESS LIMITED.

Notes on Wartime Activities of Cable and Wireless Limited.

The main duty of Cable and Wireless Limited is to carry traffic handed to it in the quickest and most efficient manner to all parts of the world.

Other services are also required of the Company, which is not possible to elaborate, but which involve constant collaboration with the Fighting Services and other Government Departments.

Some facts can, however, be made public which show the extent to which the resources of the Company have been strained since the outbreak of war.

First, the volume of traffic has increased enormously. Although commercial traffic may have decreased slightly, there has been a very large increase in the number and length of Government messages. Press traffic has increased from approximately 25,000,000 words in 1938 to approximately 92,000,000 in 1942.

A new category of cheap rate messages for the Forces has resulted in another approximately 60,000,000 words per annum being handled.

It is noteworthy that these two last categories of traffic are carried at low rates introduced since the war; in the case of Press traffic there is a rate of 1d. per word within the Empire, and in the case of E.F.M.'s (Expeditionary Force Messages) a rate of 2s. 6d. for three standard texts with a free address and signature.

Also worthy of mention in the category of new services is the free service introduced for children evacuated overseas under Government auspices, and the circular telegrams sent to various destinations on behalf of the Admiralty and other Ministries.

Secondly, the means of carrying traffic have been, in spite of constant efforts, seriously depleted. Before the war, Cable and Wireless Limited owned and operated a cable system comprising 160,000 miles. Enemy action has resulted in some important main line cable beings interrupted, with consequent congestion of other routes, for it will be appreciated that, with their greater secrecy, cables must be used for many important Government and other telegrams. This curtailment of cable routes has thrown additional burdens on the wireless circuits, and the essential requirements of the Services for wireless apparatus makes the delivery of much needed apparatus for the Company's own requirements a slow process.

In spite of this, a great deal has been done and many difficulties surmounted.

Fifty-two wireless installations have been erected in various parts of the Empire and a few important foreign places, and many new circuits have been opened. It is also interesting to point out that in some places where one circuit was sufficient to carry the traffic before the war, additional circuits are now needed. In the case of Cairo, for instance, seven circuits are now sometimes employed where one circuit was used previously. In Great Britain alone the carrying capacity of the wireless plant has been increased by 45 per cent. since the war.

Other projects are in hand for increasing wireless capacity, amongst which is a scheme of installing wireless relay stations in different parts of the world for use when the daily or nightly fade renders the use of the direct wireless route to Australia impracticable.

Picture services have been opened with several new places since the war, notably with Russia and Egypt, and a further extension of these services is well under way.

The cable system, though curtailed, is being maintained so far as cable ships can still be used. These ships require Naval escort when on cable repairs, and are also used for other purposes, so that their availability is not so great as in pre-war days. Moreover the stock of cable for repairs must be carefully husbanded, since most of the world's stock of gutta percha, which forms one of its integral components, is in the hands of the Japanese.

Another point which merits consideration is the involved collection and delivery arrangements which have to be made at the terminal stations. The London Office alone has 59 private telegraph circuits to the various Ministries, Press Agencies, etc., which, in spite of staff shortage, are kept manned day and night.

Thirdly, the other inherent difficulties of war-time working are experienced. Offices and plant have been destroyed by enemy action, but, in spite of this, continuous service has been maintained, and in major interruptions the public has not even known that working has been switched from one building to another—an amazing feat when we realize the intricacies of modern telegraph working. Even the Picture service was re-established in a few weeks, although the highly specialised apparatus required for this service was totally destroyed. In many places the staff, both at home, abroad and afloat, have had to carry on in the face of aerial or land attack, and never have they faltered. The last news of many occupied places has come by the hands of cable and wireless operators who have stayed to the end, and of whose fate in some cases nothing even yet is known.

Although staff have had to be released for the Forces and new inexperienced female temporary staff trained to take the place of men who have been in the Company's service since they joined as messenger boys, the resolution with which this problem has been tackled, and the long hours worked by the remaining staff, have surmounted all difficulties.

Plant and apparatus of all kinds is difficult to obtain, but owing to the foresight which led to large orders being placed a long time ago, a steady flow of new apparatus is reaching the Company. Traffic loads vary considerably; in fact more than a million telegrams with the Forces were handled during the last Christmas Season, and more are expected this year. The co-operation of the Censors is excellent, but censorship problems must arise and complicate the handling of traffic. Some delay may arise, not only by reason of the length of time required to censor a message, but by the introduction of new machinery into a highly geared organisation, and by the rules which, for security reasons, entail the carrying of many types of messages by cable instead of by the more readily available wireless routes.

Finally, it only remains to be said that Cable and Wireless Limited is determined to continue its policy of continued expansion and development, and in the ever-changing world conditions to give its users a progressively faster and more efficient service at ever lower rates. Its avowed object is to maintain a service which will as before, keep London the communications centre, not only of the British Empire, but of the world, and will thus enable the Government, the commercial houses, the public and the Press to continue to enjoy the superiority they have had so long.

Births.

GROVES.—On 7th December, 1942, to Peggy (*nee* Francis) wife of Lieut. Eric J. H. Groves, R.N.V.R., ex Chief Accountant's Department, Head Office, a son, Robert James.

CHURCH.—To Iris, wife of Hugh T. V. Church, at Capetown, on October 15th, 1942, a son, Nigel Campbell.

Marriage.

BELCHER—PEACOCK.—On August 8th at St. George's Cathedral, Capetown, Raymond Belcher (Marine Staff) to Edna Iris, daughter of Captain and Mrs. J. A. Peacock of Capetown.

Killed on Active Service.

BISHOP.—On November 7th, 1942, Captain J. F Bishop, Royal Corps of Signals (late of Western Telegraph Company), on Active Service in the Middle East, husband of "Nip" (*nee* Allingham). Present address: "Montana," The Creek, Sunbury-on-Thames.

Notes on Wartime Conditions

Articles about the conditions for the staff at Head Office, provincial and overseas stations are markedly absent throughout the Second World War. It is only towards the end of the conflict that tales of daring-do begin to be published – how individual stations fooled the Nazis or the Japanese and continued working. There were, however, branches that were in locations that saw a lot of action during the war, and as a result, conditions there were known not only within the Company but amongst the general public as well. One such example is Malta, which was under siege by the German and Italian air forces and navies between June 1940 and November 1942. The Axis aim was to bomb, blockade and starve the island into submission, because control of Malta would be vital to the African campaigns of the Axis powers. Reported conditions on Malta, though contained through censorship, were dire, prompting the Manager and Staff of the London branches to send the following message:

> To Manager and Staff Malta:
>
> With feelings of sympathy and admiration our thoughts have been with you during the last few weeks. We send you our warmest greetings and best wishes. For some of us Malta was our first overseas home and will always be remembered with deep affection. Good luck to you all.

To which they received the following reply:

> To Manager and Staff, London:
>
> Your inspiring message and kindly thoughts deeply appreciated. We warmly reciprocate your greetings and best wishes. Good luck all. Thank you old Maltaites for your kindly remembrance.[630]

This exchange is published in the April 1942 issue and demonstrates the familial nature that Cable and Wireless fostered amongst its employees. During the Blitz on London, Head Office staff had the following exchange with New Zealand telegraphists, which was also printed in the *Zodiac*:

> Cable and Wireless telegraphists stationed in London receive the congratulations and good wishes of their colleagues abroad as the continue to "carry on" during the Blitzkrieg of intensive day and night air raids.
>
> Rotorua, New Zealand:
>
> We salute you for your highest courage, determination, grit which inspiration everyone. Telegraphists.

[630] The *Zodiac*, April 23rd 1942: 138: Greetings to Gallant Malta

London to New Zealand:

Warmest thanks your message. We carry on.[631]

It seems from these excerpts that the Company, through the *Zodiac* were attempting to foster a spirit of 'in it togetherness' amongst both the domestic and overseas staff. Taken with the other cited articles from the journal, the overwhelming narrative fostered by Cable and Wireless amongst its staff during the war was one of reinforcement: reinforcing the essential nature of the service and the work that was being undertaken as part of the larger mobilization in the pursuance of the war and serving the government and the British Empire.

Conclusion

This chapter has sought to examine the domestic mobilization of Cable and Wireless during the Second World War as the company became an overseas service. Its market presence in the United Kingdom was fundamentally limited; to send a telegram domestically one would have visited a Post Office counter. It was only when a message had to be transmitted overseas that one would mark the slip 'via Imperial'. While the company maintained offices in London and in the provinces they were not the only purveyor of this service – one could just as easily utilize the Western Union or Great Northern Telegraph Company offices for overseas communications. Where Cable and Wireless were unique however, was their entirely British ownership and the comprehensive nature of the network, coupled with the fact that they were constantly reducing rates from profits at the behest of the government – this was the advantage they offered over competing firms.

By looking at the internal and external narratives of the Company at war, this chapter as also sought to examine how Cable and Wireless portrayed its war work to the general public and staff alike. The use of advertising space in the daily press, and the type of adverts utilized are telling: on the whole they are not selling the cable service, they are brag adverts, published with the intention of keeping the corporate brand in the public and business consciousness. Where a service is being sold, it is done so with the rhetoric of war; on occasion, as the Company acts as an unofficial agent of government, there is a deliberate push to reduce public use of the telegraph service – quite at odds to the point of private enterprise.

[631] The *Zodiac*, November 1940 Volume 55 Number 588: P.83: Well wishes from New Zealand.

The internal narrative of the Company at war, as examined through the *Zodiac* is one of contrasts. From the outset the topic of 'the war' is forbidden from the editorial and pages of the journal; only lighthearted pieces are permitted. There are two reasons for this: first, as the editor notes, it is not the *Zodiac's* 'pigeon', and second, the censorship and control of information that the journal was subjected to. Reports from overseas branches detailing war work, or war conditions, published in a journal that could be picked up by an enemy agent and used for intelligence purposes would be unthinkable, hence the rather banal reports from branches for much of the war – that is until the tide had turned against the Axis powers. After this watershed in mid-late 1943, accounts of war operations begin to appear and personal stories of internment and life in occupied territories are published.

11. Conclusion

There are still many stories, which cannot be told, but in the following brief review I can, I hope, show you some part of the contribution that your company has made to the common victory.[632]

These words, spoken by Sir Edward Wilshaw in July 1945, are as true now as they were sixty-eight years ago. The stories that could not be told in 1945 remained enfolded in stiff brown-card binders, buried in the archive of Cable and Wireless as it moved around the country, before arriving at Porthcurno in 1991. Some of these stories can be explored, others continue to be subject to controls of secrecy. This thesis has examined the stories, the narratives and discourses of Cable and Wireless at war – the contribution that the company made towards the Allied victory. In the exploration of the surviving archival material of the war time experience of Cable and Wireless, three discrete themes can be seen to emerge in the documents, taking prominence in some and fading into the background in others: electronic space and power; secrets and space; and communications and war. Each will be discussed in this concluding chapter, reflecting on the archival material, and defining the contributions that this thesis has sought to make to geographic knowledge.

Recent geographical discussions of the relational concept of space opens up the possibilities of examining both the literal spaces of Second World War mobilization, as well as the electronic spaces that Cable and Wireless created and maintained, on behalf of the British Government. It is through these electronic spaces that the government was able to exercise its power across the globe, fundamentally enabled by the infrastructure of Cable and Wireless. The relationship between state and private company was one of symbiosis: the government needed secure and efficient communications, while the company sought to maintain its independence and profitable status. As the term *symbiosis* implies, this relationship was mutually beneficial to both parties.

Secrecy has been a persistent theme throughout this thesis' archival research and analysis; it has manifest in secret documents and secret war work, and has created spaces of secrecy. These range from the mundane – locked filing cabinets, locked doors – to the more abstract: blank spaces in documents and subjects that cannot

[632] The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F Company Meeting Cable And Wireless (The Operating Company), Maintenance Of Communications In War.

be spoken of or shared, under threat of prosecution under the Official Secrets Act. This thesis has examined the way in which secrecy operates and its fundamental fragility: it is contingent on individuals doing 'the right thing', toeing the party line, and subscribing to an abstract concept – a concept defined by hazy boundaries. Secrecy is the control of information and the control of individuals; it creates closed social networks within closed spaces. Secrecy in a number of these contexts is about exclusion.

The role of communications in wartime – both strategic and tactical – is central to this thesis: the use of a private communications company's network, infrastructure and staff by the state. This has been explored through the archival material and highlighted by examining the ways in which the British Government traditionally conducted itself overseas, by allowing private entities like the East India and the Royal Nigeria Companies to control vast areas of territory and trade wealth *on behalf* of the state, that is until these private interests began to act in such a way that threatened British interests directly. This did not happen with Cable and Wireless; after years of dedicated service to the British Empire – particularly during the Second World War – the company was nationalised and enfolded within the state apparatus with the GPO.

Faster communications afforded information a tactical advantage, whereas the actual physical, secure cable network conferred a strategic advantage to the British Government. The annihilation of space by time, a persistent trope in the study of (tele)communications, is evident during the case study of Cable and Wireless during the Second World War. From providing a secure means of transmitting time-sensitive intelligence from overseas stations to the London-based War Ministries, to facilitating the transmission of press messages so that readers could have access to up-to-date reports of the war, Cable and Wireless were the ever-present provider of this capacity.

Electronic Space and Power

The submarine cable and wireless circuits of the Company created an electronic, virtual space in which it is possible to observe and explore the way in which governmental power was exercised during the Second World War. In the United Kingdom, Cable and Wireless held a monopoly over this electronic space – the electronic space outside of the country – the domestic electronic space was, on the

whole controlled by the General Post Office. Conceptions of power are configured around abstract notions of networks: socio-political, institutional structures – however, in the case of Cable and Wireless there is a literal, physical network through which the power of the British Government was exercised and disseminated. By examining this network and the flows of information within it, it is possible to chart the flow of power.

From Electra House in London – connected to Whitehall by teleprinter lines (staffed at both ends by Cable and Wireless employees) – the British Government was able to communicate, either by submarine cable or wireless circuit, with all parts of the British Empire and the rest of the world: governments, individuals and countries. If knowledge itself is power, this network allowed the British Government – in concert with the BBC and Service Wireless installations – access to an electronic well of knowledge in the form of intelligence (geopolitical, strategic, tactical, political, economic and social) that informed the way in which the British Government conducted itself during the Second World War, and dictated the relationships that formed, and are still present today, amongst her allies: for example the UK-US SIGINT relationship.

The cable and wireless networks afforded the British government access to a vast reservoir of knowledge, and were thus empowered by the information. The power facilitated by the telegraph network increased the tempo of world communications, enabling those who control the fastest and most secure communications to have strategic advantage. As Nellis notes, speed machines have always been integral to the achievement and maintenance of governmental domination in any given territory, whether by the movement of armies, the velocity of weapons, or – as this thesis asserts – the speed of communications networks.[633] This speed ascribes communications a strategic and tactical value: time sensitive information that can be transmitted and received quickly is of tactical value, whereas the communications infrastructure is of strategic value. For instance, German reliance on encoded wireless systems had a distinct weakness in that they could be intercepted and decoded, initially offering a short-term tactical advantage but ultimately a strategic weakness. The cable network was both strategically and tactically advantageous to the British Government: time sensitive tactical

[633] Nellis, M External Vigilance Inc.: The Satellite Tracking of Offenders in "Real Time" *Journal of Technology in Human Services* vol. 28 (2010) pp.23-42: 25

information could be transmitted and received at speed comparable to wireless systems, but vitally the cable communications were secure against eavesdropping and interruption, conferring upon the British Government a clear strategic advantage. The cable and wireless networks, therefore, can be considered of strategic value to the British Government and as the vehicle along which tactical information was transmitted.

The way in which the Company was formed in the atmosphere of Victorian gentlemanly capitalism, coupled with the aggressive business attitude of the Pender dynasty – for instance the forced joint-purse arrangements that drew companies into the Eastern group under threat of bankruptcy – established the comprehensive nature of the network, and as the files from the Mombasa branch have demonstrated, driven at its heart by profit. This, coupled with the strategic governmental planning at the opening of the twentieth century codified the network, cementing its global position, status and value. Liberal government-business relationships developed in the 19th and 20th centuries, coupled with the strategic network, led to the essential nature of the relationship between government and company during war.

The relationship between company and government developed from one of state/communications-company to the point where the differentiation becomes unclear: state/communications-company/agent of the state. This was manifest in a number of ways, from the control of worldwide communications – through censorship, scrutiny and interception – to the capacity of the British Government to direct the conduct of the war through the secure submarine cable network. The success of Cable and Wireless in being able to perform these functions vindicated the vision of the late-Victorian strategists who conceived the necessity of the All-Red routes of British controlled telegraph cables. The All-Red routes were constructed with sufficient redundancy that the loss of nodes within the network would have no real effect on overall security or efficiency. This network, funded by the British Government, was run and administered by Cable and Wireless. Where cables were not commercially viable, the government subsidized the company, or allowed the routes in question to be placed on a care and maintenance basis, with the capacity to be reopened in very short time. If the Foucauldian supposition that government extends its power through an ensemble of institutions, understanding

how the British Government exerted its power during the Second World War can only be examined through this ensemble: in this instance, Cable and Wireless.

This power can be seen at all scales, from the (inter)national – the regional and local – and the (inter)personal. This Ariadne's thread can be teased from the archival documents and drawn through the hierarchical structure of Cable and Wireless: from the Chairman in Electra House, to the field telegraphists in the jungles of Burma. Ogborn has noted that states are always involved in the practice of exercising power across space, and maintains that they are spatially structured towards this end.[634] However, when considering the British Government during the Second World War, the structure of exercising power across space – in an international context – was not in the hands of the state, but rather in those of a private communications company. While the government had the legal capacity to seize control of the network and operate it itself during times of crisis, it was lacking the personnel and the expertise, the *techne* to do this.

The relationship between company and government allowed the state an essential control of communications. This facilitated the state monitoring of the activities – political, social, strategic – of allied, neutral and enemy governments: to capture and copy messages in cipher (to be decoded at leisure), and vitally to monitor press dispatches and control the narratives of the war. Electronic communication, as a counterpoint to material (postal) systems, conferred both a strategic and tactical advantage to the British government: Cable and Wireless facilitated this advantage.

Where popular discourses of communications during the Second World War commonly revolve around a dichotomy of encoded German wireless communication – Enigma – and the British code breaking ingenuity at Bletchley Park, no attention has been given to the strategic and tactical advantage conferred to the Allies by the Cable and Wireless submarine cable network: an entirely secure system, that was impossible to eavesdrop on. This thesis has begun to address this, and to explore a hitherto unexplored discourse of the Second World War, that begins to unsettle dominant, popular readings.

[634] Ogborn, M Local Power and State Regulation: 218

Throughout the empirical chapters of this thesis, the relationship between state and private communications company has been an emergent and persistent theme: a relationship of compromise and negotiation. The origins of this relationship can be found in the early twentieth century with the acknowledgement of the strategic value of electronic communications; this was fostered and evolved through the forge of the First World War and into the 1920s, until the merger of both cable and wireless communications, conducted under government oversight – an oversight that would continue for the following eighteen years until the subsequent, and arguably inevitable, nationalization. This relationship was not simply between two amorphous bodies – government and company – but was between individuals, in a complex web of (inter)personal networks that this thesis has begun to reveal. For example, the correspondence between Sir Edward Wilshaw (Cable and Wireless) and Sir Stewart Menzies (SIS) demonstrates an ongoing relationship throughout the war, the origins of which are never detailed in the archival material. From this connection, and presumably through the quintessentially British notion of 'the introduction', other members of the Intelligence Services and Cable and Wireless staff are drawn into what was initially a network of two. By the end of the war, however, this network involved a large number of company employees and intelligence agents, unevenly distributed around the globe: linked by the (inter)personal network that was made real, made physical by the cable network. The real network is the line that it is possible to trace geographically and socially that constituted – across and through space – the relationship between Company and State, the latter exercising its power, while the former pursuing the interests of business.

The relationship was predicated on the control of the electronic space of communications that the company had spent the preceding century forming, defining and protecting for itself, with the expertise congruent in this – the *techne* – and personnel to run it effectively. Cable and Wireless was far more valuable to the British Government as a semi-independent entity that could be relied upon – through the veiled legislative threat of seizure – to undertake specific work – any work – at the request of Whitehall. To seize the network and to attempt to run it for itself, would jeopardise the relationship between state/company and in the short term at least, would have been disastrous for the strategic and tactical aims of the British Government.

Secret/Spaces

This thesis has examined a tenacious theme in both the archival material and the historical events that are detailed: secrecy. This is understood as not simply 'secret documents' or 'secret war work', but a persistent secrecy that shapes and reshapes spaces according to necessity, invites individuals into closed networks and structures what is permissible and what is not. Secrecy is provided for in legislature, which in turn allows for and reinforces the dominance and submission of individuals within an emergent network or space of secrecy: the secret is another manifestation of power.

No matter how secure the legislative framework, the archival door, or indeed the rectitude of the individual, the actions of others cannot be quantified or guaranteed. This is a recurring theme in the archival material: no matter how secure the secrecy seems, the actions of an individual – well meaning or otherwise – can shatter it. The sample telephone intercept included in chapter 6 demonstrates this: Cable and Wireless and the British Government went to extreme lengths to obscure the location of Ascension Island to provide cover for the secret activities there. However, when an employee in the receiving room in Head Office sees a message destined for a friend, he discloses the location of the individual: potentially shattering the secrecy that had taken years to establish. According to Vincent, secrecy is a profoundly volatile compound.[635] It is precisely because the rules are so easily breached that any system of regulation has to be embedded in a dense set of values: the preservation of secrecy is something so unstable; the temptations of betrayal are so manifold; the road from discretion to indiscretion is in many cases so continuous, that the unconditional trust in discretion involves an incomparable preponderance of the subjective factor.[636]

The shattering of secrecy can be seen in the research for this thesis and the wider literature. The co-operation with the intelligence services created an extension of the secrecy fostered during the Second World War, carrying it forward into the present day and, as a result of the archival material, into the future as well. The approach detailed here, however, is just one of two: the other chose to publish wholesale with little regard for the consequences. This highlights Baez's dilemma,

[635] Vincent, D *The Culture of Secrecy: Britain 1832-1998* Oxford University Press (1998): 14
[636] Vincent, D *The Culture of Secrecy*: 14

which researchers face when dealing with confidential or sensitive information; it has two points:

> (a) Researchers can disclose accurately and faithfully their findings, potentially exposing respondents' identities and placing them at risk of harm; or (b) they can withhold certain information (or alter it in some way) thus raising some questions about the accuracy of their studies.[637]

This dilemma was central to the presentation of the archival material and the creation of Cable and Wireless' wartime discourses: in particular while dealing with the sensitive and often redacted files. A balance was therefore struck between Baez's two points: archival material has been reproduced wholesale and in as complete a form as a possible; the only revisions have been the blackening out of certain names, places and addresses. In this way the accuracy and integrity of the research has been maintained and the ethical consideration of exposing those named in the archival files to harm has been mitigated.

The secrecy that is manifest in the present day was initially found in the long-closed archival files at Porthcurno: red-rubber stamped signs that convey a meaning to the reader, as familiar as the stop sign, impressed upon the popular imagination. 'Top Secret' implies mystery, danger, power and intrigue: in actuality it is maintained through the banal, through bureaucracy and a complex legal framework. The notion of secrecy was not a historic, documented remnant at Porthcurno, but rather a dormant, hibernating residuum. Once exposed to the light of day, the long forgotten secrecy resonates once more, reawakening spaces and networks of secrecy, whilst at the same time spawning and creating new ones. These networks and spaces of secrecy also necessitated an alternative methodological approach that has been utilized in the research: that is, employing the censor's black pen and removing elements that are still considered sensitive. In this way, obligations under the Official Secrets Act are fulfilled, yet the narrative – the history – of Cable and Wireless during the Second World War remains intact. As has been discussed, this is not the only way to approach 'secret' material, or material relating to the SIS, but it is suggested that this in this context, blackening out offending names, places, addresses and other particulars may perpetuate secrecy, but maintains the integrity and ethical standards of the research.

---

[637] Baez, B Confidentiality in qualitative research: reflections on secrets, power and agency *Qualitative Research* (2002) Vol. 2 No. 35 pp.35-58: 35

At this point it is worth returning to Balmer's three questions: first, what makes knowledge dangerous? Second, how does secrecy operate to help produce knowledge that is dangerous or otherwise? And, finally, what happens when nothing happens?[638] To these, this thesis adds: if secrecy is an active tool that allows governments to define reality through the exercise of spatial epistemic power, how has this been manifest in Cable and Wireless' war work and in the archival files that document this work? To return to the axiom that knowledge itself is power, and the recognition that knowledge is unevenly distributed, reveals the fact that the control of knowledge, or information is an exercise in power.

Secrecy fractures space into regions of knowledge and ignorance, in both the wartime files and the present day. These regions define secrecy in terms of complex social arrangements, within which secrets are produced and then serve to define relationships within these subliminal, fractured spaces. Secrecy within this thesis has been examined as both an anti-epistemology that seeks to obscure knowledge, and as a methodological process that is applied to documents, archives and conversations. As it was asserted earlier, secrecy – like power – can be enacted over distance and at a remove; indeed, power creates and enables secrecy, and secrecy (re)enforces power: it is not simply the control of information flows.

Dangerous knowledge, in the context of this thesis, is split into two discrete, intersecting spheres: knowledge gleaned from the archival material concerning the war-work of Cable and Wireless, and knowledge from the present day of the inner workings and machinations of the intelligence services. These spheres are not transparent and knowable, but rather opaque and only glimpsed. It is in the pages of this thesis that these spheres intersect – but, vitally: what makes the knowledge dangerous, and to whom does the danger exist? Essentially, knowledge in this instance is not dangerous, it is designated as such – it is considered sensitive and likely to expose the working methodologies of the security and intelligence services, or to reveal former agents. These rules, established as principles of disclosure, serve to ring-fence knowledge. Perceived danger exists for the researcher who reveals the knowledge, in the form of legislative threat. The danger

[638] Balmer, B A Secret Formula, a Rogue Patent and Public Knowledge about Nerve Gas: Secrecy as a Spatial-Epistemic Tool *Social Studies of Science* Vol. 36 No. 5 (2006) pp.691-722: 694

to the intelligence services is minimal, as they exercise the familiar phrase 'neither confirm nor deny'.

What happens when nothing happens? The files examined in the course of this research have been in one archive or another for seventy years; accessible on some level, presumably, by members of the company's staff. With the establishment of the museum and archive at Porthcurno, these files have been available to view by the general public for twenty years: to suggest that they have not been seen by *someone* in this time seems fanciful. In the last five years, however, they have been accessed to assess the scope of the project, examined comprehensively for this thesis and discussed in supervisions and over the staff room table at Porthcurno. Yet nothing happened; it was only when the security and intelligence services were alerted to their existence that they became, apparently, dangerous and sensitive and worthy of attention. The ultimate removal of the redacted files from Porthcurno to London is the final operation of secrecy: now nothing can happen.

If secrecy fractures space into regions of knowledge and ignorance – as demonstrated at Porthcurno during *secret* meetings – through the archival material it is possible to chart the fracturing of landscapes into regions of ignorance, in particular Ascension Island and the Porthcurno valley. In concert with the British Government, Cable and Wireless effectively made one of their own cable stations, and a British Overseas Territory, telegraphically invisible to altering its prefix code and designating messages from the island *Sans Origine*. At the same time, the American armed forces did their utmost to keep prying eyes as distant as possible. In the pursuance of this secrecy, and through the actions of the American commander on the island, the complexion of submarine warfare was drastically altered: by attacking the U-boats engaged in rescue work to protect the secrecy of the island, the American forces triggered the issuing of the Laconia Order, which forbad submariners from rescuing those in distress at sea.

However, the intricate arrangements – both telegraphically and in terms of military might – to create and maintain a secret space around the island was jeopardized by the transmission of just one message, asking when US servicemen on the island would be allowed direct contact with their families. This message highlights the fragile nature of secrecy, and its contingency on people: because the Mackay wireless station was enfolded in a space of ignorance concerning events on

Ascension, they were not bound by the rules and structures that the secrecy necessitated.

The Ariadne's thread alluded to at the start of this thesis – the telegraph line – is interwoven with another thread, one so gossamer fine that it could easily be overlooked; this second thread is secrecy. Wherever the telegraph line went, or Cable and Wireless were – not only during the Second World War, but right through to the present day archive – this thread of secrecy is persistent. Seemingly benign in the archival material, it is in fact razor sharp, cutting across the decades to resonate and still have consequence today. This is the central methodological contribution that this thesis has sought to make: to engage geographically through the archival material with the notion of secrecy, how it is manifest and what makes knowledge dangerous – or not. Supplementary to this, when one is confronted with secret or redacted material, how can it – or how should it – be used in research.

Communications/War

Configuring telegraphic communications as a strategic and/or tactical technology and examining its roles during the Second World War is a hitherto unexplored area of sustained enquiry[639]; by examining the work of Cable and Wireless and the relationship between Company and State, this thesis has built upon the work of Headrick to begin the analysis. Quite apart from the communications networks of the services – Royal Air Force, Royal Navy and Army – the British Government utilized the physical and sociopolitical networks and employees of a civilian organisation in its pursuance of victory during the Second World War. This is entirely in keeping with the other discourses of mobilization towards total war, as Harvey has demonstrated in his discussion of the Utility Furniture Scheme. What is revealing, however, is are the ways in which Cable and Wireless were utilized by the government throughout the war.

The entire Cable and Wireless network, infrastructure and staff were mobilised in the course of the war: from the cable ships cutting Axis cables at the outbreak of hostilities to the overseas uniformed Telcom outfit – along with every cable and member of staff between. The results of this mobilization are difficult to quantify:

[639] The only exception being Charles Graves post-war account of Cable and Wireless activities.

there are precious few intelligence reports, and no evidence that the scrutineers ever intercepted anything of value. However, cutting the Axis cables at the start of the war was an act of demonstrable strategic and tactical value – it denied both the German armed forces and government the use of secure cable communications. The mobilization of Cable and Wireless in the pursuance of victory effectively turned the entire network into one giant listening post for the British Government and all its departments; supplemental to this is the fundamental change that occurred to the company's staff: while they were technically still in the employ of a private company, undertaking the same work as always – they were now directly serving the state.

Perhaps the central purpose of the mobilization of Cable and Wireless was to provide and allow for the continuation of all British communications around the world, the gathering of knowledge and information through scrutiny and the circulation of information from the front line and between seats of government. The submarine cable network, and to a lesser degree, the imperial wireless circuits, were a strategic technology that the British Government could not afford to lose control of; it allowed knowledge at a distance, and almost instance communication with any part of the world that was connected to the network. These were the strategic and tactical roles of Cable and Wireless during the Second World War: to distort notions of distance, to allow the transfer and flow of knowledge, and to allow the British Government to exert its power across the world.

Never has the strategic value of our cables been more heavily tested…[640]

In this concluding section, each of the original research questions will be addressed in turn; not to reiterate the contents of the thesis, but to highlight clear answers to the question: what was the strategic and tactical role of Cable and Wireless during the Second World War? This is a question that is fundamentally so broad and enshrouded in secrecy that any response can only ever be partial.

1. What was the wartime role of Cable and Wireless in the UK and overseas?

Simply, the wartime role of Cable and Wireless was the provision of secure communications on behalf of the British Empire and her allies. Less simply, and more oblique, there was no clear role of the Company during the war discrete from

[640] The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F Company Meeting Cable And Wireless (The Operating Company)

its peacetime operations; it seconded parts of its network and employees to do whatever the British government bid them to do. Whether this was providing equipment to Bletchley Park or dispatching employees on diplomatically dubious armed expeditions, there seemed to be no request too great from the government that the Company was prepared to answer. A central aspect of the research is Cable and Wireless' involvement with the intelligence services and the 'secret' work; however, the use of the company's network for the transmission of uncensored reports via Service Messages and the utilization of overseas Station Managers to gather intelligence are just the tip of the proverbial iceberg: some of which can be discussed, while the majority must stay submerged.

2. How were distant cable stations mobilized in the war effort?

This thesis has highlighted the fact that Cable and Wireless were predominantly an overseas concern: domestic communications were handled – primarily – by the General Post Office. The instant a communication left the domestic sphere it was handled by Cable and Wireless or an overseas competitor (Western Union, for instance). It is for this reason that the empirical material in this thesis is so heavily weighted towards the overseas mobilization of the company, for it was on the scattered, isolated islands and provincial offices around the globe that the mobilization is seen, at the key stations in the chain.

Distant stations were mobilized for one primary reason: this is the continuation of worldwide communications. By keeping the communication lines open and encouraging their use by foreign businesses and governments, the overseas network could then be utilized for other purposes. The most obvious of these is the scrutiny scheme. Current and retired members of Cable and Wireless staff were drafted in to service – being paid by the War Office *through* Cable and Wireless books – to monitor communications that were simply crossing the network. These messages would not be impeded or held up, simply copied and forwarded to the appropriate authorities – generally through the local censor.

Overseas stations were further mobilized through their staff: on a semi-volunteer basis (as noted by the Manager at Ascension, the men were often volunteering from a sense of duty only) the staff were formed into a uniformed and armed defence force, initially tasked with defending stations, before being ordered not to

interfere with the expected enemy raider. The English staff formed the officer corps of the unit, while the local staffs – St. Helenians, Indians, Barbadians – made up the bulk of the force. The mobilization of overseas staffs was a futile gesture found at many of the Company's stations; provided with arms and uniforms and orders to surrender at the first sign of the enemy. It is, however, valuable to the overall mobilization of overseas stations because it demonstrates the necessity of total war, or total mobilization.

3. What was the Company's participation in secret activities, code breaking and intelligence?

The 'secret activities' that Cable and Wireless participated in during the Second World War are broad and far reaching. The scope of what can be discussed, what can be demonstrated is limited: the partial account contained in this thesis is shackled by legislature in the form of the Official Secrets Act. Cable and Wireless had no direct participation in code breaking, rather they provided the appropriate authorities with the raw material – be it telegraph slip or intercepted wireless transmissions – along with equipment in the form of teleprinters, and staff to operate them. In two particular examples, high-speed teleprinter circuits were installed between Electra House and Westminster, and Electra House and Bletchley Park. In the case of the former, Cable and Wireless handled every piece of electronic information that entered and exited the seat of government. In the case of the latter, if we configure Electra House as the centre of the Imperial communications network, the space through which all information had to pass, the high speed circuits ensured that intelligence was transferred to Bletchley Park in the shortest possible time.

The relationship between Cable and Wireless and their involvement with the intelligence services has its origins in the sociopolitical relationships that developed throughout the 1930s between the Director and senior managers of the company and various individuals within the intelligence communities. The personal networks between individuals and departments allowed the government to conceive and implement schemes for the collection of overseas intelligence through the company's networks. Conversely, it also meant that when Cable and Wireless were in receipt of information of potential value it could be passed to the correct authority forthwith.

These relationships can be tracked through the archival material when overseas managers were requested to perform specific tasks on the behalf of the intelligence and security services. Owing to the closure of the files there are a number of examples that cannot be discussed however there are instances that illustrate the routine nature of this relationship. For example at the Mombasa Branch and Portuguese stations intelligence would be transmitted back to the United Kingdom under the supervision of the Passport Control Officer.[641] The method of this transmission is in itself illuminating: rather than being transmitted in code or under government cover, they were sent as Cable and Wireless Service Messages. In a remarkable concession granted to the company at the outbreak of the war, the inter-station code and message service was exempt from official censorship. For this reason, its use by the Intelligence and Security services allowed the transmission of time-sensitive, tactical information to be transmitted in the most direct, unimpeded way.

4. How does the Company's wartime activity in censorship, cable scrutiny and radio interception help us to understand the relationship between private commercial enterprise and operations of government?

The true strategic value of Cable and Wireless lay in its submarine cable routes: wireless communications were subject to atmospheric interference, fading and interception. The extant cable network, with its redundancies and alternative routes, offered a technically perfectly secure system – the only weak link being the human elements sending and receiving the transmissions. To conclude, I will examine the company's wartime activities in cable scrutiny to explore the relationship between government and private enterprise, and thus the operations of government.

It has been demonstrated that throughout the 1930s and wartime period, Cable and Wireless and the British Government were drawn inexorably closer, ultimately climaxing in the privatization of the company in 1946. This relationship – familiar to scholars of the British Empire and notions of gentlemanly capitalism – was not unique: the East India Company enjoyed a similar position. Cable and Wireless were not a company 'over there', overseeing a large expanse of tropical trade

[641] The flimsy cover assigned to MI6 Officers at overseas embassies, popularized and brought to public attention in the work of Ian Flemming.

influence, they were, like the East India Company, located in the heart of London on Westminster's doorstep. This spatial proximity, and the vital nature of the business, fostered the relationships between the business and state, and vitally, individuals.

The formation of the company must also figure in the conception of this relationship:

5. What can we learn about the place of global telecommunications in the strategic and tactical issues that emerged in wartime using the case study of Cable and Wireless?

The prevailing discourses of Second World War telecommunications centre around Axis use of encoded wireless signals and British ingenuity at interception and decoding; this research demonstrates the strategic and tactical advantages conferred to the Allies by the submarine cable network, owned and run by a private company on behalf of the state. The strategic value of the cable network has been acknowledged since the dawn of the twentieth century and the creation of the All-Red network – that was entirely British owned and landing only on British soil. However, during the Second World War, the tactical value of such a network became apparent: information could be transmitted quickly and securely, allowing decisions that hinged on time sensitive information to be made with certainty.

Vitally however, was the capacity of the Cable and Wireless network to furnish Allied governments with intelligence. Whether this was in the form of censored or scrutinized messages, or the direct reports from overseas Station Managers, the infrastructure and strategic planning of the 1930s paid dividends during the Second World War. While the Axis forces certainly had an advantage in cryptography and portable wireless communications, the imperial cable network – so comprehensive in its global coverage and redundancy – conferred an overall strategic advantage to the Allied governments in the form of signals security.

Events that took place during the Second World War cemented the place of global telecommunications as a tool of the state. Headrick has noted that the submarine telegraph cable was an essential tool of empire, whereas this thesis contends that by building on this imperial tool, global telecommunications have been enmeshed

in both modern society and the operations of state. Where communication speeds have increased and satellite routes have been merged with fibre-optic submarine cables, there still exists a fundamental power geometry: this is a persistent theme from the origins of the electric telegraph to the present day. While communications networks exist and their speed has reached that of the picosecond, one still requires access to the network to take advantage of this oft remarked death of distance. Where this can be understood clearly in the terms of the Second World War one required a local telegraph office, the funds to use the service and knowing someone at the other end of the wire to speak to. In the modern era, where communications are in the air all around, there are still levels and degrees of access. From the weekly visit of the 'internet bus' in central Africa to the superfast connections of European cities, global telecommunications networks fleetingly, but immediately, connect the individual with the world.

This thesis has sought to address a number of distinct gaps within the corpus of historical geography; primarily these are the Second World War and the role of communications in wartime. These areas of enquiry have begun to be addressed by geographers and historians of technology: this research however draws these discrete but interrelated subjects together and has examined them through a historical geographical lens. Within these two primary themes, the question and scale of industrial mobilization has been examined: the mobilization of the communications industry and its enfolding within the apparatus of government. According to Ollerenshaw this is a fundamentally missing aspect to the analyses of the 1939-45 War.

By defining the British communications networks of the early-mid twentieth century (both wireless and submarine cables) as a strategic technology, it has possible to engage with military geographies and the material and discursive systems, networks and landscapes that they created during the Second World War. From the sociopolitical networks between Cable and Wireless staff, the British Government and the Fighting Services, to the heterotopia that emerged at Porthcurno. Militarism – manifest through the need for secure communications and the prevailing strategic culture in the United Kingdom – created and sustained the relationship between company and state which, in turn drew Cable and Wireless into the wartime activities detailed in this thesis.

Methodologically this research has begun an empirical examination of the notion of secrecy within a geographical context: from the historic secrecy found pervading the archival material in the Porthcurno archive to the contemporary manifestations that necessitated the redaction of sensitive information. A result of this mundane and bureaucratic process of secrecy was the loss of empirical material: this loss was countered through the use of alternative sources that alluded to or stated the same facts, but were in the public domain. Secrecy, in the context of this research, is enacted, maintained and entirely contingent on people 'doing the right thing'. In the wartime period secrecy was maintained by limiting information flow – in terms of an anti-epistemology – but there were inevitable breaches. By fracturing space into regions of knowledge and ignorance, there is an unavoidable osmosis of information; this osmosis is stemmed and managed through the threat of legal action under the Official Secrets Act. The methodology of working within these constraints, and the application of the censor's blackening pencil, is the central methodological contribution that this research has sought to make.

In conclusion, the strategic and tactical role of Cable and Wireless during the Second World War was one of information control: transmitting, collecting, dissemination and maintaining. These actions took place within a pervasive atmosphere of secrecy, in the context of industrial mobilization in a total war. This research, therefore, contributes fresh insight into the geographical aspects to the role of communications during the Second World War, the relationship between industry and state and the ways in which information can be controlled both across time and space.

12. Appendix

'Three Dawns' by E.F. the *Zodiac* of March 1940

"… 60735 40079 83152 Ckd."

Just day break. The fat old Censor opposite loosened yet another button, breathed another blast of garlic across the table, and went on rolling his day's supply of cigarettes.

Checking "Governments" at that hour, and in those circumstances, loses much of the vicarious thrill which may otherwise have been attached to such an occupation, even in the winter of 1917.

Ah, well, it had to be done, and in a few minutes perhaps a bowl of hot coffee would help to brighten the situation. Meanwhile, it was a rest and a change to glance through the batch of "plain language: which followed: "…both well …slightly wounded, don't worry…600 tons ground nuts ship immediately…regret to inform you your son…sailing to-day hooray…killed in action…darling…" All the simple fabric, the cheering and the heartbreak, of a world at war… "…desperate, please wire money…thousand cases ammunition…married to-day…no news… is father dead or deceased…' Hullo! That's a funny one – "is father dead or deceased." What's the difference, anyway?

Perhaps it might make the old Censor smile – for the first time in history – so I tossed the rather grubby form across to him while I yawned and stretched and went to see about that coffee.

…

Another dawn. A cold grey one, with pale saffron fingers in the East trying feebly to draw aside the curtain of mist.

The inner courtyard of the Fort Saint Nicholas stretched grim and dreary in the half-light, with only the paling sky and a faint drift of wood-smoke and roasting coffee from the cook-house to give promise of another day.

Three men in stained and shabby working clothes stood in a row against the far wall, facing the dawn and a file of blue-grey overcoated infantry. A small white

kitten played with a fallen leaf nearby, and jumped foolishly at the sound of the Officer's sharp command.

A moment later, and a ragged volley echoed round the stone-walled square, and the three men sagged and crumpled to the ground. A twitching fist relaxed its hold upon a child's faded photograph. Somewhere, a shutter creaked, and the first pale rays of the sun turned the grey bodies to gold.

…

"…78372 10830 37414"

Mais oui, mon ami, three of them. My father, he is in the Sureté and assisted in the affair. They lived near the docks and observed the movements of transports and war vessels. They used a simple code to their agent in Bona, who passed the information on to the submarines. Tenez, 'father' meant 'transport with troops', 'brother' meant 'cruiser', 'died' meant 'sailed yesterday', and 'deceased' meant 'sailed to-day'. Très original, n'est-ce-pas? But it appears they made a mistake, and they were all caught, and yesterday at the Fort Saint Nicholas…

I stared for a while through the open window and say the rosy glow of yet another day spreading above the roofs and chimneys of the buildings opposite. An early tram rattled and screeched its way along the street below. Soon I would have some coffee. Meanwhile…

The pale sun rose between the chimneys.

Somewhere, a child cried.

13. Bibliography and References

Books and Journal Articles

Aldrich, R Britain's Secret Intelligence Service in Asia during the Second World War *Modern Asian Studies*, Vol. 32 No. 1 (1998) pp. 179-217

Policing the Past: Official History, Secrecy and British Intelligence since 1945 *The English Historical Review* Vol. 119 No. 483 (2004) pp.922-953

GCHQ Harper Press (2011)

Alexander, B Excluding Archival Silences: oral history and historical absence *Archival Science* Vol. 6 (2006) pp.1-11

Amin, A Regions Unbound: towards a new politics of place *Geografiska Annaler*: Series B, Human Geography (2004) Vol. 86 No. 1 pp.33-44

Andrew, C *The Defence of the Realm: the Authorised History of MI5* Penguin (2010)

Ashmore, P, Craggs, R and Neate, H Working-with: talking and sorting in personal archives *Journal of Historical Geography* Vol. 38 (2012) pp.81-89

[Author Unaccredited] Ascension Island *Scottish Geographical Magazine* Vol. 49 No.1 (1933) pp.18-23

Baez, B Confidentiality in qualitative research: reflections on secrets, power and agency *Qualitative Research* (2002) Vol. 2 No. 35 pp.35-58

Bailey, A Brace, C and Harvey, D Three geographers in an archive: positions, predilections and passing comment on transient lives *Transactions of the Institute of British Geographers* No. 34 (2009) pp254-269

Baker, A *Geography and History: Bridging the Divide* Cambridge University Press (2010)

Balfour, S *Spain and the Great Powers in the Twentieth Century* Routledge (1999)

Balmer, B A Secret Formula, a Rogue Patent and Public Knowledge about Nerve Gas: Secrecy as a Spatial-Epistemic Tool *Social Studies of Science* Vol. 36 No. 5 (2006) pp.691-722

Barnes, T Geographical intelligence: American geographers and research and analysis in the Office of Strategic Services 1941-*1945 Journal of Historical Geography* Vol. 32 (2006) pp.149-168

Barnes, T Taking the pulse of the dead: history and philosophy of geography 2008-2009 *Progress in Human Geography* Vol. 34 (2010) pp.668-677

Bell, G & Zaheer, A Geography, Networks, and Knowledge Flow *Organizational Science* Vol. 18 No.6 (2007) pp.955-972

Bennet, GH *The 1942 Laconia Order: the murder of shipwrecked survivors and the Allied pursuit of justice 1945-46* Law, Crime and History (2011)

Bevir, M *Foucault, Power, and Institutions* Political Studies (1999)

Bingham, A The British Popular Press and Venereal Disease during the Second World War *The Historical Journal* Volume 48 Number 4 (December 2005) pp.1055-1076

Blair, C *Hitler and the U-boat War 1942-45* Weidenfeld and Nicolson (1999)

Boedeltje F The Other Spaces of Europe: Seeing European Geopolitics Through the Disturbing Eye of Foucault's Heterotopias *Geopolitics* Vol. 17 No. 1 (2012) pp.1-24

Bowen, H Sinews of trade and empire: the supply of commodity exports to the East India Company during the late eighteenth century *Economics History Review* Vol. 55 No. 3 (2002) pp.466-486

The business of empire: the East India Company and imperial Britain, 1756-1833 Cambridge University Press (2006)

Bradley, H The Seductions of the Archive: voices lost and found *History of the Human Sciences* Vol. 12 No. 2 (1999) pp107-122

Brayshay, M Interlocking Directorships and Trans-National Linkages within the British Empire 1900-1930 *Area* Vol. 37 No. 2 (2005), pp.209-222

Broadberry, S Howlett, P *Blood, Sweat and Tears: British Mobilisation for World War II* in Chickering, R (eds.), *A World at Total War: Global Conflict and the Politics of Destruction, 1939-1945*, Cambridge University Press (2010)

Burton-Hafner, E; Kahler, M & Montgomery, A Network Analysis for International Relations *International Organization* Vol. 63 No 3 (2009)

Cain, PJ Capitalism, Aristocracy and Empire: Some Classical Theories of Imperialism Revisited *The Journal of Imperial and Commonwealth History* Vol. 35 No. 1 (2007) pp.25-47

Calkins, L Patrolling the Ether: US-UK Open Source Intelligence Cooperation and the BBC's Emergence as an Intelligence Agency, 1939-1948 *Intelligence and National Security Vol*. 26 No. 1 (2011) pp.1-22

Cant, J Wideawake Field [Unpublished personnel recollection]

Carter, S The Geopolitics of Diaspora *Area* Vol.37 No.1 (2005) pp.54-63

Castells, M The New Public Sphere: Global Civil Society, Communication Networks, and Global Governance *Annals of the American Academy of Political and Social Science* (2008) Vol.616 pp.78-93

Castells, M *The Rise of the Network Society Vol. 1 The Information Age: Economy, Society and Culture* (1996) Oxford

Crang, M and Thrift, N *Thinking Space* Routledge (2000)

Darling, J Thinking Beyond Place: the Responsibilities of a Relational Spatial Politics *Geography Compass* Vol. 3 No. 5 (2009) pp.1938-1954

Davies, *P* MI6's Requirements Directorate: integrating intelligence into the machinery of British Central Government *Public Administration*, Vol. 78 No. 1 (2000) pp.29-49

Davis, S Military landscapes and secret science: the case of Orford Ness *Cultural Geographies* (2008) Vol. 15 pp.143-149

de Leeuw, S Alice through the looking glass: emotion, personal connection and reading colonial archives along the grain *Journal of Historical Geography* Vol. 38 (2012) pp.273-281

Deserno, I The value of international business archives: the importance of the archives of multinational companies in shaping cultural identity *Archival Science* Vol. 9 (2009) pp215-225

Dicks, TRB Network Analysis and Historical Geography *Area* Vol. 4 No. 1 (1972) pp.564-569

Dodds, K *Geopolitical Traditions: a century of geopolitical thought* Routledge (2000)

Driver, F Hidden histories made visible? Reflections on a geographical exhibition *Transactions of the Institute of British Geographers* Vol. 38 No.3 (2013) pp.420-435

Ettlinger, N Governmentality as Epistemology *Annals of the Association of American Geographers* Vol.101 No.3 (2011) pp.573-560

Falk, T Intercommunications, Distance and Geographical Theory *Geografiska Annaler:* Series B Human Geography Vol. 62 No. 2 (1980) pp.59-67

Farish, M Modern Witness: Foreign Correspondents, Geopolitical Vision and the First World War *Transactions of the Institute of British Geographers* Vol. 26, No. 3 (2001) pp.273-278

Ferris, J 'Now that the Milk is Spilt': Appeasement and the Archive on Intelligence *Diplomacy and Statecraft* Vol. 19 No. 3 (2008) pp.527-565

The Road to Bletchley Park: The British Experience with Signals Intelligence, 1892-1945 *Intelligence and National Security* (2002) pp.53-70

Fletcher, W *Powers of Persuasion: the inside story of British Advertising 1951-2000* Oxford University Press (2008)

Flint, C *Introduction to Geopolitics* Routledge (2006)

Ford, D Strategic Culture, Intelligence Assessment, and the Conduct of the Pacific War: the British-Indian and Imperial Japanese Armies in Comparison, 1941-1945 *War in History* Vol.14 No.1 (2007) pp.63-95

Foucault, M Of Other Spaces *Diacritics* Vol. 16 No. 1 (1986) pp.22-27

The Subject and Power *Critical Enquiry* Vol. 8 No. 4 (1982) pp.777-795

Archaeology of Knowledge Routledge (2002)

Power/Knowledge Harvester Wheatsheaf Press (1980)

Galison, P Removing Knowledge *Critical Enquiry* Vol. 31 No. 1 (2004) pp.229-243

Gergios, R Complexity: the dark side of network-centric warfare *Cognition, Technology and Work* (2012) pp.1-13

Gidley, B *Doing Historical and Archival Research* in Researching Society and Culture Sage Publications (2006)

Graves, C *The Thin Red Lines* Standard Art Books (1946)

Haraway, D *Simians, Cyborgs and Women* Routledge (1991)

Harris, *C* Power, Modernity, and Historical Geography *Annals of the Association of American Geographers* Vol. 81 No. 4 (1991) pp.671-683

Harris, J War and Social History: Britain and the Home Front during the Second World War *Contemporary European History* Vol. 1 No. 1 (1992) pp17-35

Harrison, E British Radio Security and Intelligence, 1939-45 *The English Historical Review*, Vol. 124 No. 506 (2009) pp.53-93

Harvey, D & Riley, M 'Fighting from the fields': developing the British 'National Farm' in the Second World War *Journal of Historical Geography* Vol. 35 (2009) pp.495-516

Harvey, D Cosmopolitanism and the Banality of Geographical Evils *Public Culture* Vol. 12 No. 2 (2000) pp.529-564

Harvey, D Oral Histories and Farming Practice *Social and Cultural Geography* Vol.8 No.3 (2007) pp.391-415

Hassan, R *Empires of Speed* Brill (2009)

Headrick, D A Double-Edged Sword: Communications and Imperial Control in British India *Historical Social Research* Vol. 35 No. 1 (2010) pp.51-65

Submarine Telegraph Cables: Business and Politics 1838-1939 *The Business History Review* Vol. 75 No. 3 (2001) pp.543-578

Global Communications *The International History Review* Vol.22 No.1 (2000) pp.171-172

Heffernan, M Geography, Cartography and Military Intelligence: the Royal Geographical Society and the First World War *Transactions of the Institute of British Geographer*s, New Series, Vol. 21 No. 3 (1996) pp.504-533

Professor Penck's Bluff: Geography, Espionage and Hysteria in World War I *Scottish Geographical Journal* Vol.116 No.4 (2000) pp.267-282

Henrikson, A Distance and Foreign Policy: A Political Geography Approach *International Political Science Review* Vol. 23 No. 4 (2002) pp.437-466

Herz, N *Operation Alacrity: the Azures and the war in the Atlantic* Naval Institute Press (2003)

Hills, J Regulation, innovation and market structure in International Telecommunications: The case of the 1956 TAT1 submarine cable *Business History* Vol. 49 No. 6 (2007) pp. 868 – 885

Hinsley, FH *et al British Intelligence in the Second World War: Vol. 1 Its Influence on Strategy and Operations* Stationery Office Books (1979)

Vol. 2 Its Influence on Strategy and Operations Stationery Office Books (1981)

Vol. 3 Part 1 Stationery Office Books (1984)

Vol. 3 Part 2 Stationery Office Books (1988)

Vol. 4 Security and Counter-Intelligence Stationery Office Books (1990)

Hobsbawm, E *On History* Weidenfeld and Nicolson (1997)

Horn, E and Ogger, S Knowing the Enemy: the Epistemology of Secret Intelligence *Grey Room* No. 11 (2003) pp.58-85

Hugill, PJ *Global Communications since 1844: Geopolitics and Technology* John Hopkins University Press (1999)

Huxley, M Space and Government: Governmentality and Geography *Geography Compass* Vol.2 No.5 (2008) pp.1635-1658

Hyson, S and Lester, A 'British India on trial': Brighton Military Hospitals and the politics of empire in World War I *Journal of Historical Geography* Vol. 38 (2012) pp.18-34

Imlay, T Total War *Journal of Strategic Studies* Vol.30 No.3 (2007) pp.547-570

Israel, K Writing inside the kaleidoscope: re-representing Vicotian woman public figures *Gender and History* 2 (1990)

Jeffrey, K *MI6: the history of the Secret Intelligence Service 1909-1949* Bloomsbury Paperbacks (2011)

Jessop, B From micro-powers to governmentality: Foucault's work on statehood state formation, statecraft and state power *Political Geography* Vol. 26 (2007) pp.34-40

Jones, JB *All-Out for Victory! Magazine advertising and the World War II Home Front* Brandeis University Press (2009)

Kellner, D Virilio, P War and Technology: Some Critical Reflections *Theory Culture Society* (1999) Vol. 16 No. 103 pp.103-125

Kennedy, PM Imperial Cable Communications and Strategy, 1870-1914 *The English Historical Review* Vol. 86 No. 341 (1971) pp.728-752

Larsen, A Air Transport Command *Minnesota History* Vol.26 No.1 (1945) pp.1-18

Latour, B *We have never been modern* Harvard University Press (1993)

Lee, J *Visual Culture in the Making of Cable and Wireless' Corporate Identity*

Upcoming (2014)

Legg, S *Governance Part II* in Agnew, J and Duncan, J, eds., *The Wiley-Blackwell Companion to Human Geography* Wiley-Blackwell (2011)

Lester, A British Settler Discourse and the Circuits of Empire *History Workshop Journal* No.54 (2002) pp.24-48

Imperial Circuits and Networks: Geographies of the British Empire *History Compass Vol*. 4 No. 1 (2006) pp.124-141: 134

Introduction: Historical Geographies of Southern Africa *Journal of Southern African Studies* Vol. 29 No. 3 (2003) pp.595-613

Imperial Networks: Creating Identities in Nineteenth-Century South Africa and Britain Routledge (2001)

Lloyd, T *Empire: the history of the British Empire* Continuum International Publishing (2006)

Lovell, WG Memories of Fire: Eduardo Galeano and the Geography of Guatemala *Geoforum* No.37 (2006) pp31-40

Lowry, R Toward a Sociology of Secrecy and Security Systems *Social Problems* Vol. 19 No. 4 (1972) pp.437-450

Lubrano, A *The Telegraph: how technology innovation caused social change* Garland Publishing (1997)

Luke, T and O Tuathail, G *Thinking Geopolitical Space: the spatiality of war, speed and vision in the work of Paul Virilio* in *Thinking Space* eds. Thrift, N and Crang M Routledge (2000)

Lynch, M Archives in formation: privileged spaces, popular archives and paper trails *History of the Human Sciences* Vol. 12 No. 2 (1999) pp65-87

Malpas, J Putting space in place: philosophical topography and relational geography *Environment and Planning D*: Society and Space (2012) Vol. 30 pp.226-242

Marston, S, Paul Jones III, J, Woodward, K Human Geography without Scale *Transactions of the Institute of British Geographers*, New Series, Vol.30 No.4 9 (2005) pp.416-432

Merriman, P Human Geography without time-space *Transactions of the Institute of British Geographers* Vol. 37 No. 1 (2011) pp.13-27

Massey, D *A Global Sense of Place in Space, Place and Gender* University of Minnesota Press (1994)

Massey, D *Space, Place and Gender* Polity Press (1994)

McKee, A *Textual Analysis: a beginners guide* Sage Publications (2005)

Mitchell, D Battle/fields: braceros, agribusiness, and the violent reproduction of the California agricultural landscape during World War II *Journal of Historical Geography* Vol. 36 (2010) pp.143-156

Morus, I 'The Nervous System of Britain': Space, Time and the Electric Telegraph in the Victorian Age *The British Journal of the History of Science* Vol. 33 No. 4 (2000) pp. 455 – 475

Nellis, M External Vigilance Inc.: The Satellite Tracking of Offenders in "Real Time" *Journal of Technology in Human Services* vol. 28 (2010) pp.23-42

Ó Tuathail, G Problematizing geopolitics: survey, statesmanship and strategy *Transactions of the Institute of British Geographers* Vol.19 No.3 (1994) pp.259-272

Ó Tuathail, G *The Geopolitics Reader* Routledge (2006)

O'Halpin, E *T*he Liddell Diaries and British Intelligence *History Intelligence and National Security* Vol. 20 No. 4 (2005) pp.670-686

O'Hara, G New Histories of British Imperial Communication and the Networked World of the 19th and Early 20th Centuries *History Compass* Vol. 8 No. 7 (2010) pp.609-625

O'Hara, S and Heffernan, M From Geo-Strategy to Geo-Economics: the 'Heartland' and British Imperialism Before and After MacKinder *Geopolitics* Vol. 11 (2006) pp.54-73

Ogborn, M Local Power and State Regulation in Nineteenth Century Britain *Transactions of the Institute of British Geographers*, New Series, Vol. 17 No. 2 (1992) pp.215-226

Writing Travels: Power, Knowledge and Ritual on the English East India Company's Early Voyages *Transactions of the Institute of British Geographers*, New Series, Vol. 27 No. 2 (2002) pp.155-171

Indian Ink: Script and Print in the Making of the English East India Company University of Chicago Press (2007)

Ollerenshaw, P War, Industrial Mobilisation and Society in Northern Ireland, 1939-1945 *Contemporary European History* Volume 16 Issue 2 (2007) pp.169-197

Pearson, C Researching Militarized Landscapes: a literature review on war and the militarization of the environment *Landscape Research* Vol. 37 No. 1 (2012) pp115-133

Pooley, C & Turnbull, J Coping with congestion: responses to urban traffic problems in British cities c.1920-1960 *Journal of Historical Geography* Vol. 31 (2005) pp.78-93

Rappert, B Revealing and concealing secrets in research: the potential for the absent *Qualitative Research* (2010) Volume 10, pp.571-587

Reimer, S and Pinch, P Geographies of the British government's wartime Utility furniture scheme, 1940-45 *Journal of Historical Geography* Vol. 39 (2013) pp.99-112

Riley, M & Harvey, D Landscape Archaeology, Heritage and the Community in Devon: An Oral History Approach *International Journal of Heritage Studies* Vol. 11 No. 4 (2005) pp.269-288

Oral Histories and Farming Practice *Social and Cultural Geography* Vol.8 No.3 (2007) pp.391-415

Rose, G *Visual methodologies: an introduction into Researching with Visual Materials* (2012) Sage

Royle, S 'The Island Has Been Handed Over to Me': Ascension Island as a Company Colony, 1922-42 *Singapore Journal of Tropical Geography* Vol. 25 No. 1 (2004) pp109-126

Saldanha, A Heterotopia and structuralism *Environment and Planning A* Vol. 40 (2008) pp.2080-2096

Scott, J *A Matter of Record: Documentary Sources in Social Research* Cambridge Polity Press (1990)

Slater, D Analysing cultural objects: content analysis and semiotics in C. Seale (ed.) *Researching Society and Culture* (1998) Sage

Smith, A & Higgins, M Introduction: Reporting war – history, professionalism and technology *Journal of War and Culture Studies* Vol.5 No.2 (2012) pp.131-136

Smith, M *The Emperors Codes* Bantam Press (2000)

Solymar, L *Getting the Message: a history of communications* Oxford University Press (1999)

Standage, T *The Victorian Internet* Walker and Company (1998)

Steedman, C Something She Called a Fever: Michelet, Derrida, and Dust *The American Historical Review* Vol. 106 No. 4 (2001) pp.1159-1180

The Spaces of memory: in an archive *History of the Human Sciences* Vol. 11 (1998) pp.65-84

Steinberg, PE Book Reviews *Annals of the Association of American Geographers* Vol. 91 No.1 (2001) pp. 203-244

Souden, D *Voices of Change Cable and Wireless* Granta Editions (2001)

Taylor, P *Political Geography* Longman (1993)

Teyssot, G *Heterotopias and the History of Spaces* in eds. Hays, KM *Architecture Theory Since 1968* MIT Press (2000)

Thomas, N "Exploring the boundaries of biography" the family and friendship networks of Lady Curzon, Vicereine of India 1898-1905 *Journal of Historical Geography* Vol.30 (2004) pp.496-519

Thompson, P *The Voice of the Past: Oral History* Oxford University Press (1988)

Thrift, N Time and theory in human geography part II *Progress in Human Geography* Vol. 1 (1977) pp.413-457

Space: the Fundamental Stuff of Geography in *Key Concepts in Geography* eds. Clifford, N, Holloway S et al SAGE Publishing (2008)

Tivers, J 'The home of the British Army': the iconic construction of military defence landscapes *Landscape Research* Vol. 24 No. 3 (1999) pp.303-319

Tonkiss, F *Space, the City and Social Theory* Polity Press (2005)

Toogood, M Modern Observations: new ornithology and the science of ourselves, 1920-40 *Journal of Historical Geography* Vol. 36, No. 3 (2010) pp.243-366

Vincent, D *The Culture of Secrecy: Britain 1832-1998* Oxford University Press (1998)

Virilio, P *Bunker Archaeology* Verso Books (2009)

Speed and Politics Verso Books (2006)

The Information Bomb Verso Books (2005)

Wall, B Textual Analysis of Retired Nurses' Oral Histories *Nursing Enquiry* Vol. 14 No. 4 (2007) pp.279-288

Wallsten, S Returning to Victorian Competition, Ownership and Regulation: an empirical study of European telecommunications at the turn of the twentieth century *The Journal of Economic History* Vol. 65 No. 3 (2005) pp.693-722

Ward, K *Networks of Empire: forced migration in the Dutch East India Company* Cambridge University Press (2009)

Warf, B Global Communications *The Professional Geographer* Vol.52 No.3 (2000) pp.567-590

Wark, W In Never-Never Land? The British Archives on Intelligence *The History Journal* Vol. 35 No. 1 (1992) pp.195-203

Wark, M *Virtual Geography: living with global media events* Bloomington (1994)

Wenzlhuemer, R The Development of Telegraphy, 1870-1900: A European Perspective on a World History Challenge *History Compass* Vol. 5 No. 5 (2007) pp.1720-1742

West, N *GCHQ: the secret wireless war 1900-1986* Weidenfeld and Nicolson (1986)

Wexler, M Conjectures on the Dynamics of Secrecy and the Secrets Business *Journal of Business Ethics* Vol. 6 No. 6 (1987) pp.469-480

Wilson, RJ 'Tommifying' the Western Front, 1914-1918 *Journal of Historical Geography* Vol. 37 No. 3 (2011) pp.338-347

Winter, P Churchill, British Intelligence, and the German Opposition Question *War in History* Vol. 14 (2007) pp.109-112

A Higher form of Intelligence: Hugh Trevor-Roper and Wartime British Secret Service *Intelligence and National Security* Vol.22 No.6 (2007) pp.847-880

Withers, C Constructing 'the geographical archive' *Area* Vol. 34 No. 3 (2002) pp303-311

Woodward, L *British Foreign Policy in the Second World War* Her Majesty's Stationery Office (1962)

Woodward, R From Military Geography to militarism's geographies: disciplinary engagements with the geographies of militarism and military activities *Progress in Human Geography* Vol. 29 No. 6 (2005) pp. 718-740

Wright, S and Wallace, D *Secrecy in the Biotechnology Industry: Implications for the Biological Weapons Convention* in S. Wright (ed.), *Biological Warfare and Disarmament: New Problems/New Perspectives* Rowman and Littlefield (2002)

Yang, D Telecommunication and the Japanese Empire: a Preliminary Analysis of Telegraphic Traffic *Historical Social Research* Vol. 35 No. 1 (2010) pp.66-89

Yow, V *Recording Oral History: a guide for the Humanities and Social Sciences* Alta Mira Press (2005)

Zamir, M The Missing Dimension: Britain's Secret War against France in Syria and the Lebanon, 1942-45 *Middle Eastern Studies* Vol. 46 No. 6 (2010) pp.791-899

Zraket, C Strategic Command and Control *Communications and Intelligence Science*, New Series, Vol. 224 No. 4655 (1984) pp.1306-1311

Archival material consulted

Part 1: Overview of collections consulted:

The primary archival source for this project was the Porthcurno Telegraph Museum pre-war and wartime holdings on Cable and Wireless. This included letters to and from the Company held in departmental files, images, oral histories (both transcripts and original recordings), maps and charts and the personal diaries of former employees. Each of these collections offered insight into the wartime role of the Company and the pre-war planning that took place between State and private enterprise. This material was supplemented by the Government

records held at Kew, which took the form of Cabinet minutes and papers, along with letters between departments.

Part 2: Specific list of references within the thesis.

Porthcurno: Cable and Wireless

Digitized copy of John Norman Diary 1938-41 Dorset and Aden. Un-catalogued. Porthcurno.

DOC//5/121 'Some Memories of Telcom' enclosed w/letter from RP (Ray) Connolly, January 2012.

DOC/CW/12/356 Telcom Charter: Preamble

DOC/CW/1/504 Med Area 5: Decode of Telegram DM/Med Algiers to MD. FIL. Dated 16th September 1943.

DOC/CW/1/504 Med Area 5: Excerpt of Letter from Sir Edward Wilshaw to Layman, dated 26th November 1943.

DOC/CW/1/504 Med Area 5: Memorandum from Staff Manager to General Manager 'Mobile Station Algiers', dated 1st October 1943.

DOC/CW/1/504 Med Area 5: Note of a meeting of Sub-Committee "F" of the Wireless Telegraphy Board held at 143, Picadilly.

DOC/CW/1/504 Med Area 5: Suggestion from the Cable and Wireless 'Ideas' Box.

DOC/CW/1/505 Med. Area 6: Decode of telegram from DM/Mediterranean to MD: FIL (17.01.1944)

DOC/CW/1/546 Key Points: CL Air Survey Report dated 27th March 1939.

DOC/CW/1/546 Key Points Porthcurno Defence: Key affixed to air plot dated 19th September 1941

DOC/CW/1/546 Key Points: Letter from Lord Lloyd to Sir Edward Wilshaw dated 25th June 1940

DOC/CW/1/546 Key Points: Letter from Lord Lloyd, Colonial Office to Sir Edward Wilshaw, dated 2nd July 1940[642]

DOC/CW/1/564 Key Points: letter from Manager, PK to Head Office dated 28th February 1942: Defence of Branch

DOC/CW/1/546 Key Points: Letter from Ministry of Home Security to Sir Edward Wilshaw, 1st May 1940

DOC/CW/1/546 Key Points: Letter from Porthcurno to Head Office dated 8th October 1940

DOC/CW/1/546 Key Points: Letter from Porthcurno to Head Office, dated 3rd October 1940

DOC/CW/1/546 Key Points: Letter from Porthcurno to Head Office, dated 3rd October 1940

DOC/CW/1/546 Key Points: Letter from Porthcurno to MD, 28th September 1939

DOC/CW/1/546 Key Points: Letter from Wilshaw to Bell, Porthcurno, 7th July 1939

DOC/CW/6/237 Files on Porthcurno: Memo General Manager to Engineer-in-Chief, 25th June 1940

DOC/CW/6/237 Files on Porthcurno: of a Meeting at Electra House dated 3rd April 1939

DOC/CW/6/237 Files on Porthcurno: Report by Imperial Communications Advisory Committee to Sir Edward Wilshaw, 15th May 1939

DOC/CW/6/237 Files on Porthcurno: Report from Sir Edward Wilshaw to Lord Lloyd, Secretary for the Colonies dated 6th August 1940

DOC/CW/6/237 Files on Porthcurno: Report from Sir Edward Wilshaw to Lord Lloyd, Secretary for the Colonies dated 6th August 1940

DOC/CW/6/237 Files on Porthcurno: Service Message from Bell, Porthcurno to MD, Head Office, dated 27th September 1938.

DOC/CW/6/237 Files on Porthcurno: Service Message from Porthcurno to MD RUSH, 7th July 1940

DOC/CW/6/237 Files on Porthcurno: Service Message Porthcurno to MD, 25th August 1939.

DOC/CW/6/237 Files on Porthcurno: Summary Document, 25th June 1940

DOC/CW/6/237 Files on Porthcurno: Summary Report on Porthcurno dated 17th November 1941

DOC/CW/1/450 Nairobi. Letters between the managers at Kenya and Nairobi stations concerning 'national service'; letters between Wilshaw and the Colonial Office arranging for the exemption of telegraph workers for enrolment.

DOC/CW/1/469 Ascension Gen.1: Letter from Edward Wilshaw to Manager, Ascension: censorship scheme and documents.

DOC/CW/1/469 Ascension Gen.1: Letter from Manager, Ascension to Edward Wilshaw concerning censorship.

DOC/CW/1/469 Service Message Bunker (Ascension) to MD dated 26th August 1939.

DOC/CW/1/470 Ascension Gen.2: General Notes on Ascension Island, dated 1st Mach 1942.

DOC/CW/1/470 Ascension Gen.2: Service Message from Edward Wilshaw to 'Key Stations in the Chain' detailing the Scrutiny Scheme.

DOC/CW/1/470 Exchange of Service Messages between Manager Ascension and Head Office dated 26/05/1943

DOC/CW/1/470 Letter from Denison-Pender to Sir Preston Colvin dated 16th September 1942.

DOC/CW/1/470 Letter from Sir Preston Colvin to Denison-Pender dated 19th September 1942.

DOC/CW/1/470 Letter to Manager Ascension from Head Office; cover note of new censorship arrangements for the island.

DOC/CW/1/470 Memorandum from Chief Telegraph Censor to Censor in Charge, Cable and Wireless, dated 11th September 1942.

DOC/CW/1/470 Memorandum from General Manager to Traffic Manager, 26th March 1942: Ascension

DOC/CW/1/470 Service Message from Edward Wilshaw to Manager Ascension.

DOC/CW/1/470 Service Message from Manager Ascension to Edward Wilshaw, dated 20/03/942

DOC/CW/1/470 Service Message from Managing Director to Manager, Ascension, dated 27th May, 1942

DOC/CW/1/470 Transcript of Telephone Intercept dated 28th August 1942. From London (untraced) to Portsmouth 2740?

DOC/CW/1/471 Ascension Gen.3. Letter from the War Office to Sir Edward Wilshaw dated 17.02.1942. Forming an information request concerning Ascension Island; marked Most Secret.

DOC/CW/1/471 Decode of Telegram Ascension to MD dated 14th February 1940

DOC/CW/1/471 Extract from the Times dated 30th December 1943.

DOC/CW/1/471 Letter from British Government to Cable and Wireless concerning the American survey of Ascension Island.

DOC/CW/1/471 Letter from MD to Wethered, Postal & Telegraph Censorship Department, dated 26th May 1943.

DOC/CW/1/471 Report prepared by Cable and Wireless for the War Office concerning the history and disposition of Ascension Island.

DOC/CW/1/471 Service Message to Manager Ascension regarding American survey party.

DOC/CW/1/471: Letter from Manager, Ascension to MD, London. Dated 25th December 1939.

DOC/CW/1/472 Ascension Island – Suggested Local Defence Force: note of a meeting at the Colonial Office on Wednesday 12th July 1939.

DOC/CW/1/472 Ascension Island Defence Force. Letter from Colonial Office to Admiral Grant, dated 26th June 1939.

DOC/CW/1/472 Ascension Island Defence Force. Service Message from Sir Edward Wilshaw to Bunker, Ascension.

DOC/CW/1/472 Draft Ordinance of the Ascension Island Defence Force, published by the Governors Office, St Helena.

DOC/CW/1/472 Letter from Bunker, Ascension to Head Office dated 03.03.1941 – Defence Force has been augmented by a detachment of Artillery.

DOC/CW/1/472 Letter from Bunker, Ascension to Sir Edward Wilshaw regarding the Ascension Island Defence force – composition, uniform etc.

DOC/CW/1/472 Letter from the War Office to Eastern and Associated Telegraph Companies, dated 29th July 1918.

DOC/CW/1/472 Message from Manager Ascension to Head Office

DOC/CW/1/472 Telegram from Ascension to MD, dated 27th March 1942.

DOC/CW/1/472 Telegram from MD to Ascension, dated 28th March 1942.

DOC/CW/1/488 Letter from [redacted] at the Foreign Office to Sir Edward Wilshaw dated 28.03.1939 concerning the Scrutiny Scheme.

DOC/CW/1/488 Letter from the Communications Department at the Foreign Office to Cable and Wireless, authorising the managers of certain stations to act as censors – later corrected to scrutineers.

DOC/CW/1/488 Office Scrutiny Scheme: Letters exchanged between Cable and Wireless and the Foreign Office concerning retired members of Company staff.

DOC/CW/1/488 Service Message from Sir Edward Wilshaw to scrutiny staff at overseas and provincial stations dated 22.06.1939.

DOC/CW/1/492 Defence Precautions at Branches. Cable from Manager, Seychelles to Edward Wilshaw dated 28.09.1938.

DOC/CW/1/537 Portuguese Branches: 'Most Secret' note by Denison-Pender dated 2nd September 1943.

DOC/CW/1/537 Portuguese Branches: decode of telegram from Manager, St Vincent to MD; dated 26th October 1940.

DOC/CW/1/537 Portuguese Branches: decode of telegram MD to Sierra Leone, dated 31st December 1940.

DOC/CW/1/537 Portuguese Branches: extract from the Daily Mail, dated 28th August 1940.

DOC/CW/1/537 Portuguese Branches: letter from Denison-Pender to Entwhistle dated 17th July 1943.

DOC/CW/1/537 Portuguese Branches: letter from Major A. Godfrey at the War Office to Denison-Pender. Dated 27th February 1941.

DOC/CW/1/537 Portuguese Branches: Letter from Major Godfrey to Denison-Pender, dated 28th May 1941.

DOC/CW/1/537 Portuguese Branches: note by Denison-Pender dated 26th November 1940.

DOC/CW/1/537 Portuguese Branches: note of a conversation with Major Godfrey (War Office), on Thursday 24th April, 1941.

DOC/CW/1/537 Portuguese Branches: note of a telephone conversation with Lt. Commander Turner on Friday 8th August 1941.

DOC/CW/1/537 Portuguese Branches: Note to the Chairman, dated 28th April 1941.

DOC/CW/1/537 Portuguese Branches: summary document hand written by Denison-Pender in autumn 1941.

DOC/CW/12/113: Telcom in Burma: Public Relations Office dated 25th July 1945

DOC/CW/12/336 Telcom Army is Taking Over in the East. The *Zodiac*: September-October 1945: 151

DOC/CW/12/356 Cable and Wireless Ltd Mobile Wireless in the Far East 1944-46: Extract from Burma Liberator, dated 'early 1946'.

[Un-Catalogued] Transcript of Interview: Anthony Norman Billson. Conducted by Belinda Dixon, 2010

The *Zodiac* Volume: 1922

The *Zodiac*, April 23rd 1942: 138: Greetings to Gallant Malta

The *Zodiac*, December 1939. Volume 32 Number 337, P.146: War Comes to Edinburgh.

The *Zodiac*, December 1939. Volume 334 Number 406: Staff in the Far East

The *Zodiac*, January 1943, Volume 35 Number 412: 70: Notes on Wartime Activities of Cable and Wireless Limited.

The *Zodiac*, May 1939. Volume 31 Number 370, P349: Cable and Wireless Communication to the Staff: The Crisis.

The *Zodiac*, May 1944: Defending the Stations: 105

The *Zodiac*, May 1944: G.W. Roynon Captured by U-boat: 117

The *Zodiac*, November 1939. Volume 32 Number 376, Editorial.

The *Zodiac*, November 1940 Volume 55 Number 588: P.83: Well wishes from New Zealand.

The *Zodiac*, October 1939, Volume 32 Number 375, Editorial: The War-Time *Zodiac* Travels Light

The *Zodiac*, October 1940, Volume 33 Number 387, Editorial: The War – Reported Missing, now believed Prisoners of War.

Archive: Kew

CAB/24/196 Secret Report on the Imperial Wireless and Cables Conference, 1928

CAB/66/8/10 (former ref W.P.(40) 180) dated 29th May 1940 Portugal: Report by the Chiefs of Staff Committee

DEFE 1/238 Postal and Telegraph Censorship Department; Overseas Censorship; Middle East Area; Malta: Censorship Reports. Details of Telegrams March 1942.

DEFE 1/238 Postal and Telegraph Censorship Department; Overseas Censorship; Middle East Area; Malta: Censorship Reports. Reports of censored correspondence 1942.

Oral Histories

Conducted by David Souden, 1991, as part of the Cable and Wireless Oral Histories Project.

DOC/CW/5/309 Transcript of interview with Colin Stubbs; conducted by David Souden; transcript, DAT recording and cassette. 27th January 1991

DOC/CW/6/403 Transcript of interview with John Gage conducted by Peter Young on 29th January 1991

DOC/CW/6/406 Transcript of Interview with Stanley Theobal and John Kellor.

Oral Histories Project CD4. Uncatalogued. 2012

Newspapers

Cable & Wireless Ltd.Illustrated London News (London, England), Saturday, August 05, 1944; pg. 167; Issue 5494 (117 words)

Cable & Wireless Ltd.Illustrated London News (London, England), Saturday, July 28, 1945; pg. 2; Issue 5545 (109 words) Category: Display Advertising

Cable & Wireless Ltd.Illustrated London News (London, England), Saturday, June 02, 1945; pg. 600; Issue 5537 (104 words)

Cable and Wireless Ltd.Illustrated London News (London, England), Saturday, July 22, 1944; pg. 111; Issue 5492 (137 words)

Cable and Wireless Via Imperial.Illustrated London News (London, England), Saturday, November 24, 1945; pg. 588; Issue 5562 (63 words)

The Times, Friday, Jun 09, 1944; pg. 7; Issue 49878; col F Cables And Wireless Ltd. Category: Display Advertising

The Times, Monday, Apr 24, 1944; pg. 3; Issue 49838; col F Cable And Wireless Ltd Category: Display Advertising

The Times, Thursday, Jun 28, 1945; pg. 8; Issue 50180; col F Company Meeting Cable And Wireless (The Operating Company), Maintenance Of Communications In War.

The Times, Tuesday, Dec 21, 1943; pg. 3; Issue 49734; col A The Ministry Of Information Category: Display Advertising

The Times, Tuesday, May 18, 1943; pg. 3; Issue 49548; col F GPO Category: Display Advertising

Websites

https://www.sis.gov.uk/our-history/official-history/principles-of-disclosure.html 'Principles of Disclosure': accessed 14/06/2011

https://www.sis.gov.uk/our-history/archive.html: accessed 12/06/2011

Legislature

Official Secrets Act 1989: Section 1 – Security and Intelligence.

The Freedom of Information Act 2000, Part II: Exempt Information. 23: Information supplied by, or relating to, bodies dealing with security matters.