

An Investigation of Maps and Cartographic Artefacts of the Gallipoli Campaign 1915: Military, Commercial and Personal

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Abstract Producing maps and related representations of geography in warfare provides information about the terrain and the positions of troops. They are also used in strategic planning and as operational tools. They are an integral part of a military campaign. Maps are provided by military topographic agencies as the main resource for operations. However, many complementary products have been produced by commercial map publishers and as support for newspaper articles reporting on battles. As well, combatants produce many ‘informal’ maps and diagrams before, during and after a campaign. These products can be considered to be more personal and to provide a different ‘view’ of a battle than the official maps provided by conventional publishing methods. An international collaborative research project is studying the geographical information resources and geographical representations used for analysis, planning, conducting and post-event analysis of large-scale operations. The research is focussing on the geographical information resources used in the Gallipoli Campaign in World War 1, so as to appreciate mapping resources used to visualise the political and physical geography that contributed to the selection of the Gallipoli peninsula as a site for a second front during World War 1, the determination of possible landing sites, developing ‘at location’ troop deployment and movement plans and the eventual evacuation of forces from Gallipoli. This chapter provides an insight into some of the mapping and geographical artefacts that were found during research into the availability of cartographic resources from the Dardenelles campaign of 1915. These can generally be described as official, commercial and personal. It describes samples of the maps and drawings that were found in historical map collections. These products were published by the military, by commercial map producers and

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in newspapers. As well, soldiers recorded things like their journey to the Gallipoli campaign, general observations of battle situations and field-drawn base maps and pictorial representations of troop positions and emplacements.

Keywords Cartography • History • Gallipoli • Personal geographies

1 The Gallipoli Campaign

The Gallipoli campaign of 1915–1916 came about because of the deadlock on the Western Front, which turned British eyes towards other possible theatres, plus appeals for assistance from Russia early in January 1915 (Travers 2001a; Velsley 1997). A plan preferred by Winston Churchill, then the First Lord of the Admiralty was to be a naval operation (Heffernan 1996). The original plan was for a combined Anglo-Franco naval fleet, using mainly outdated battleships; to force the Narrows, sail into the Sea of Marmara and then on to Istanbul. Once this was done, three Divisions of the Greek Army would advance on Istanbul.

However, this was later amended to be a naval engagement, after Russian opposition to the use of Greek troops. The revised naval plan was to force the Narrows, penetrate the Sea of Marmara and bombard Istanbul, compelling Turkey to surrender (Sea Power Centre 2005). This was attempted on March 18, 1915, with seventeen allied warships, supported by an assortment of other craft, like mine sweepers (Millett 2000). Mine fields and hidden guns prevented the success of this plan. Six battleships were sunk or severely damaged (Millett 2000). Some military analysts considered that this plan would have never worked. *I am still of the opinion however, that the Royal Navy could not have “rushed” the Narrows and go through in sufficient numbers to tackle the hostile fleet it would have met in the Sea of Marmara* (Aiguillette 1962, p 63). The entrance to the Dardanelles and the Narrows is shown in Fig. 1.

Then Britain prepared another plan, for a larger military operation that would capture the Gallipoli Peninsula, allow the waters to be cleared of mines and opening it for the fleet to sail to Istanbul (Sea Power Centre 2005). To support the military operation, France provided a Division (the first division of the *Corps Expédition d'Orient* made up of North African (Arab and European), Foreign Legion and Sengalese troops (Hughes 2005)), Britain its 29th Division, Australian and New Zealand troops (moved from Egypt) (Travers 2001a) and the Zion Mule Corps. The stage was set for the invasion and subsequent landings on the beaches of the Turkish Gallipoli (Chanakale) Peninsula by British, ANZAC and Indian troops and at Kum Kale (on the Asiatic shore) by French troops (who acted as a diversionary force by capturing a Turkish fort on the Eastern shores of the Dardanelles (Millett 2000)) (who were moved to Cape Helles on 26 April, where they held the eastern part of the Allied line) (Hughes 2005) on April 25, and the Allied attacks of 28 April at Helles, 1915 (Travers 2001b).

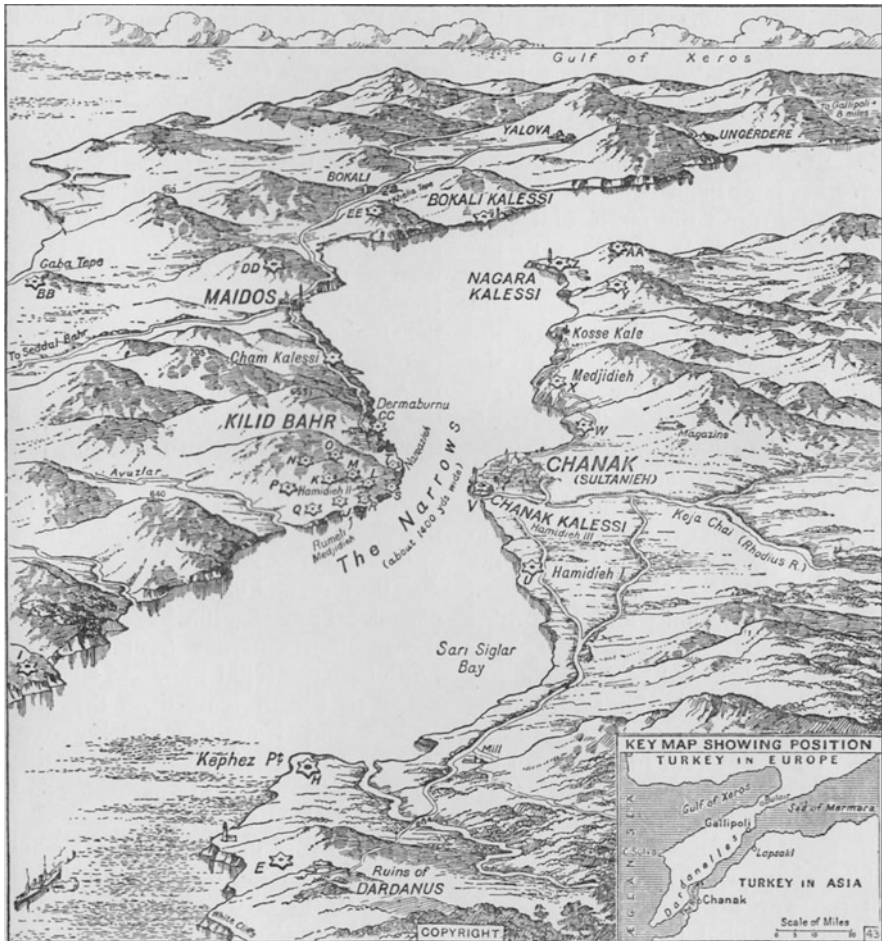


Fig. 1 The entrance to the Dardanelles to the straights. Source http://www.firstworldwar.com/photos/graphics/gw_dardanellesdardanellesentr_01.jpg (free online download)

The Allied forces fought ashore, but were unable to seize the strategic heights which dominate the lower third of the Peninsula (the Sari Bair Ridge complex, shown on the map in Fig. 2) (Millet 2000). The Australasian landings took place at “Beach Z” and the Anglo French landings were at Cape Hellas, to the south. The map in Fig. 2 shows the allied and Turkish positions on April 27, 1915, 2 days after the landings.

The campaign extended over a 10-month period (Millet 2000), until the final evacuation in January 1916 (Mason 1936; Millet 2000).

2 Towards Gallipoli 2015 Project Overview

The initial overtures of a research project began in 2009. The project being developed will study the geographical information resources and geographical representations used for analysis, planning, conducting and post-event analysis of large-scale operations. As well, the project will develop and assess methodologies for analysing and visualising the accuracy of historical maps, imagery and geographical artefacts related to strategic planning and decision-making.

It aims to leverage on the combined strengths of an international research team in cartography/geographical visualization, surveying and positioning, photogrammetry, remote sensing, Geographic Information Systems analysis and modelling to undertake research and visualisation tool development that can be used to determine the accuracy (and therefore usefulness) of maps, imagery and geographical artefacts for strategic planning and operational management. Also, the results of the research will have the additional benefit, whereby, due to the study area selected, the results from the studies will be available to the Australian, New Zealand, British, French and Turkish communities to better understand the role that political geography had in sending troops to the Dardenelles in the first place and how the terrain of the Gallipoli Peninsula impacted on the operation of the campaign.

3 Exploring Collections to Determine the Availability of Maps and Geo-artefacts from the Gallipoli Campaign

Exploratory research to identify maps and geographical artefacts was undertaken in mid to late 2009 at the Australian War Memorial, Canberra, the Imperial War Museum, the British Library, the Royal Geographical Society map library and archive, the Army Museum and archive, all in London, the Département des Cartes et Plans, Bibliothèque nationale de France, and the Service Historique de la Défense, Department de l'Armée de Terre Division, France in Paris.

This initial research provided valuable information regarding the maps and drawings available at the beginning of the Gallipoli campaign, maps used to plan and execute military activities and maps and drawings published 'at home' by commercial map publishers and newspapers. This paper provides an overview of this 'first cut' of these investigations into maps and drawings produced for Gallipoli and will illustrate the diversity and richness of the artefacts found. As well, some of the maps sourced during research have been used to illustrate the next section—The Gallipoli Campaign.

4 Maps and Geo-located Artefacts from the Gallipoli Campaign

World War I generated an unprecedented demand for maps at scales from 1:200, for detailed trench maps (Chasseaud 1999; cited in Collier 2002), to 1:1,000,000 and smaller for strategic planning maps (Heffernan 1996; cited in Collier 2002). On the Western Front mapping was provided via proven channels of information provision.

The campaign in the Dardanelles needed accurate maps to depict the terrain where landings would take place. This would be difficult terrain to traverse and maps were needed for assessment of possible landing sites and for later strategic deliberations. Due to the hurried planning of the Gallipoli campaign, very few maps were available for planning and the execution of landings in the Dardanelles.

According to Piersig (1994) the lack of accurate maps caused many problems, including:

- Tactical planning
- Use of naval firepower; and
- Communication between ground units.

Many references were made to this in Moorhead's book, *Gallipoli* (Moorhead 1997).

In the absence of maps staff officers scoured the shops (of Alexandra and Cairo) for guidebooks" (p 99). ... "There was a shortage of almost everything ..." (p 99). "... and the maps which were supplied to the officers were incomplete and downright inaccurate" (p 113). "... the Gaba Tepe region, where the ANZAC troops were to land, was unmapped and almost wholly unknown (p 113).

Piersig (1994) also made comments about the problems:

Intelligence at the tactical level was woefully inadequate—for example, accurate maps were not available" (p 4). Hamilton's plan hinged on effective communication and coordination between his forces ashore and the forces at sea. Poor communications were caused by equipment problems; by doctrinal and language difficulties ... and the lack of accurate maps hindered the operation (p 18). "Lacking reliable ship-to-shore communications and accurate maps, the army was unable to utilize the fleet's firepower effectively (p 18).

But, in time accurate maps were obtained (Piersig 1994).

As the campaign continued the number of maps and drawings produced increased, and the range of artefacts widened. These were produced at Gallipoli, to support troop movements, 'at home' by commercial map producers and newspapers for a civilian population eager for news from the front and geographical depictions of the campaign area. Some of these products are outlined in the following sections.

4.1 Maps

Sinclair (1999) studying maps of the Gallipoli campaign stored at the National Library of Australia and the Australian War Memorial archive identified a number of map types:

- Maps produced by Australian Staff Officers;
- Captured German maps;
- Situation maps;
- Field sketches;
- Artillery maps;
- Intelligence maps; and
- Administrative maps.

As well as the military topographic maps identified by Sinclair (1999), additional geospatial artefacts were found during research at the Australian and European archives listed earlier in this paper. These include:

- 3D perspective drawings from British and French map publishers and newspapers;
- General maps for consumption ‘at home’ that described the conflict in the Dardenelles;
- Field interpretations and sketches reproduced via diazo printing methods;
- Field perspective drawings;
- Newspaper maps;
- Trench maps;
- ‘Marked-up’ topographic maps;
- Air photographs;
- Glass lantern slides used to brief troop commanders; and
- Annotated maps—hand annotations of commercially-published ‘general purpose’ maps.

4.1.1 Allied Topographic Maps

The allies needed a topographic map of the Dardenelles. To produce this map they used 1:25,000 Turkish maps, captured in a previous Balkans war, and reduced the information therein to produce their 1:50,000 topographic map—the “Orographical map of the Dardanelles” (Fig. 3).

Further topographic maps were made available, like the Survey of Egypt 1:20,000 series maps (Fig. 4).

The first attempts to use aerial photography to construct original mapping took place during the Gallipoli campaign. However, this was not entirely successful (Dowson 1921; cited in Collier 2002). However, by the end of World War I aerial

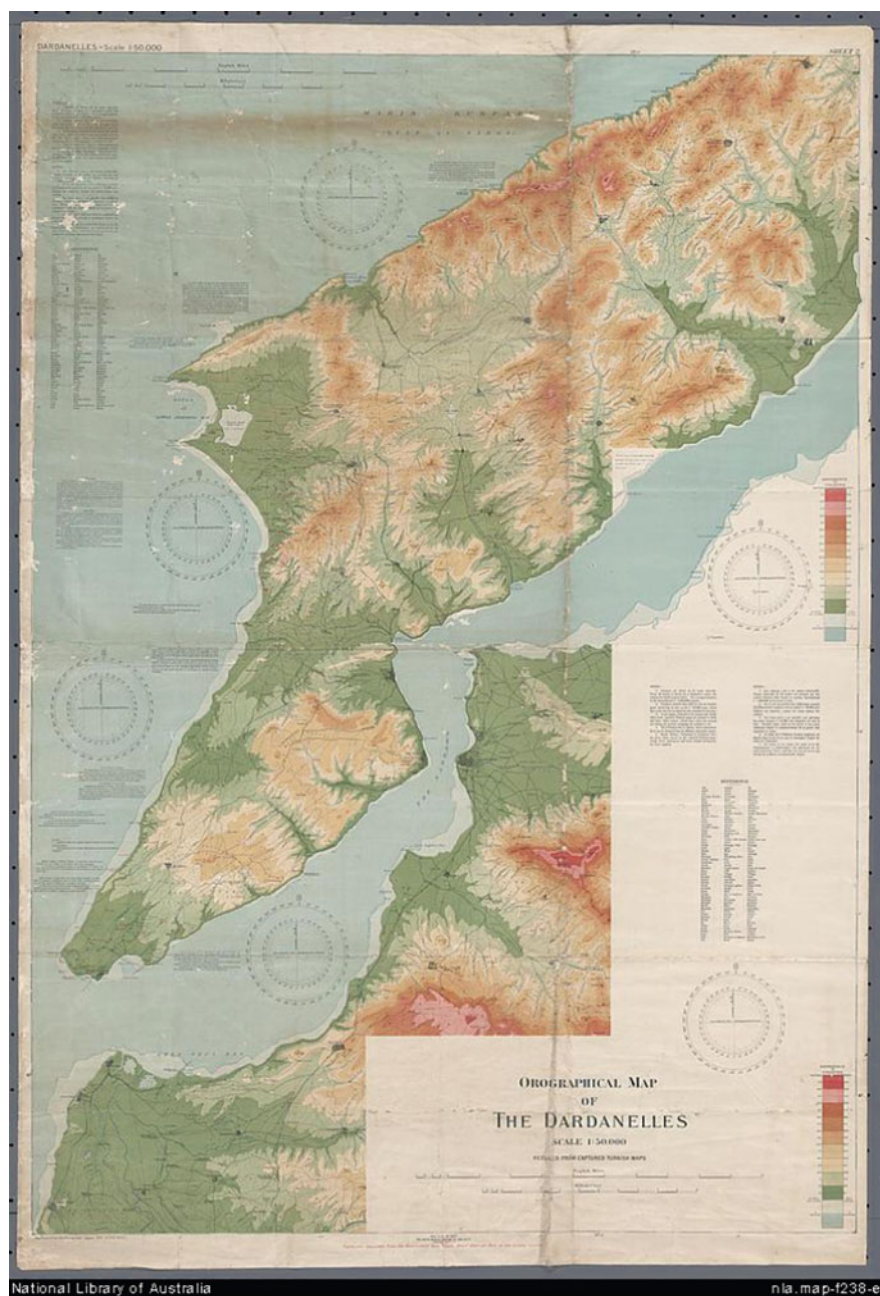


Fig. 3 Orographical map of the Dardanelles 1:50,000. *Source* National Library of Australia (free online download). <http://nla.gov.au/nla.map-f238>

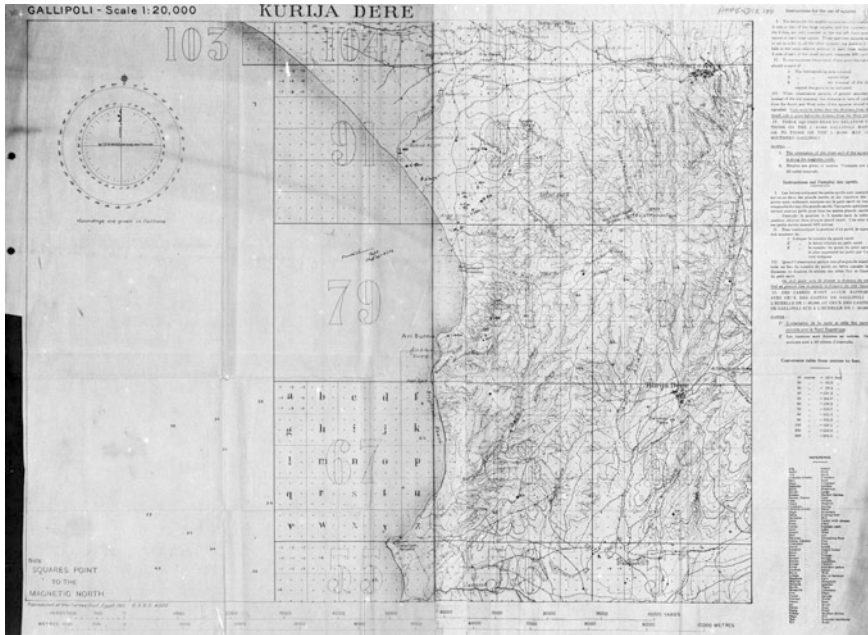


Fig. 4 0939 Map of Gallipoli-Kurija Dere-Koja Dere 1915. Scale 1:20,000. *Source* MAPCO—Map and Plan Collective Online <http://archivemaps.com/mapco/kurijadere/kurijadere.htm> (free online download)

photography had become the accepted source material for map revision on the Western Front (MacLeod 1919; Jack 1920; Chasseaud 1999; all cited in Collier 2006).

4.1.2 German Military Topographic Maps

The German forces supporting Turkey had access to small-scale Military mapping from Austria Hungary. This was the 3rd Military Mapping Survey of Austria-Hungary, produced in 1910 and covering the Austria-Hungary Empire and areas of military interest to Austria-Hungary. An example map, covering the Dardanelles, is provided in Fig. 5. Whilst small-scale maps were not appropriate for engaging in close military operations, the existence of the Austria-Hungary map series reflects the geographical intelligence had by Turkey and its allies and the lack of such information by the Anglo-French military planners.



Fig. 5 Third military mapping survey Austria-Hungary 1910 sheet 44-40 (Gallipoli). *Source* Department of Cartography, Eötvös University, Budapest, Hungary. <http://lazarus.elte.hu/hun/digkonyv/topo/200e/44-40.jpg> (free online download)

4.1.3 Sketch Maps

Sinclair (Sinclair 1999) notes that there were few military maps of Gallipoli in existence in 1915. As a result, Australian Staff Officers at Gallipoli had to produce

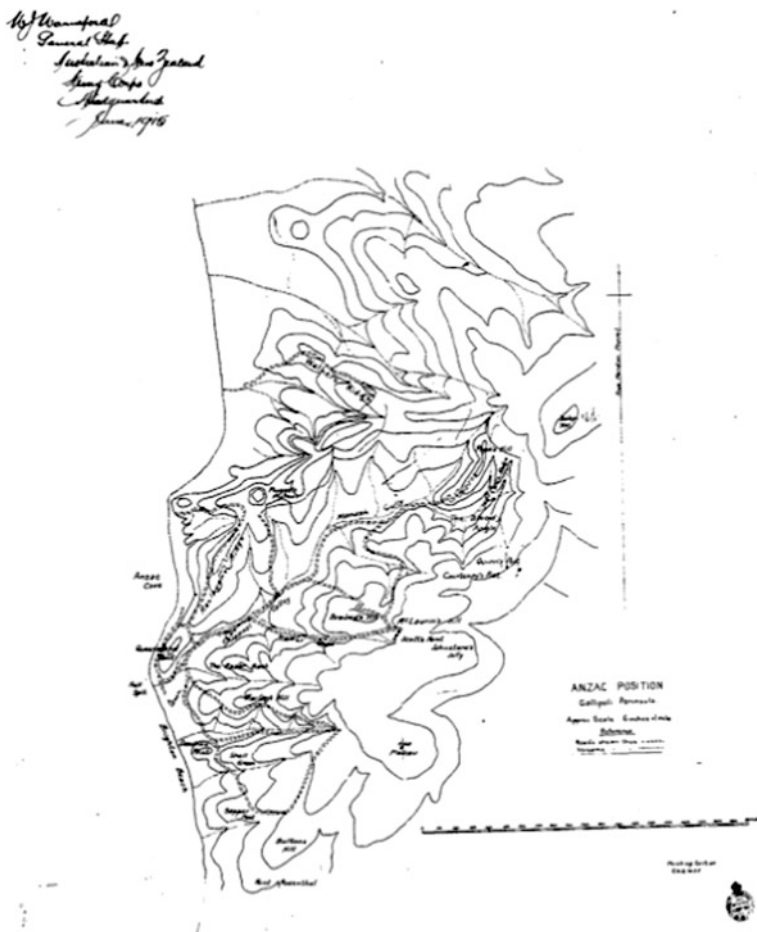


Fig. 6 ANZAC position, Gallipoli, drawn by W. J. Warneford, General Staff, Australian and New Zealand Army Corps, in June 1915. Scale: 6 inches to 1 mile. *Source* Sinclair Sinclair 1999, p 2

their own maps until military surveyors produced suitable maps. Figure 6 shows a typical type map of this type, drafted two months after the landing.

4.1.4 Combined Forces Maps

As well, since this was one of the earliest combined naval/land engagements, a new type of map was required. Whilst the military campaign took centre stage for the remainder of the campaign, at its peak 250 British and French ships were involved (Sea Power Centre 2005). According to the Sea Power Centre (2005) this

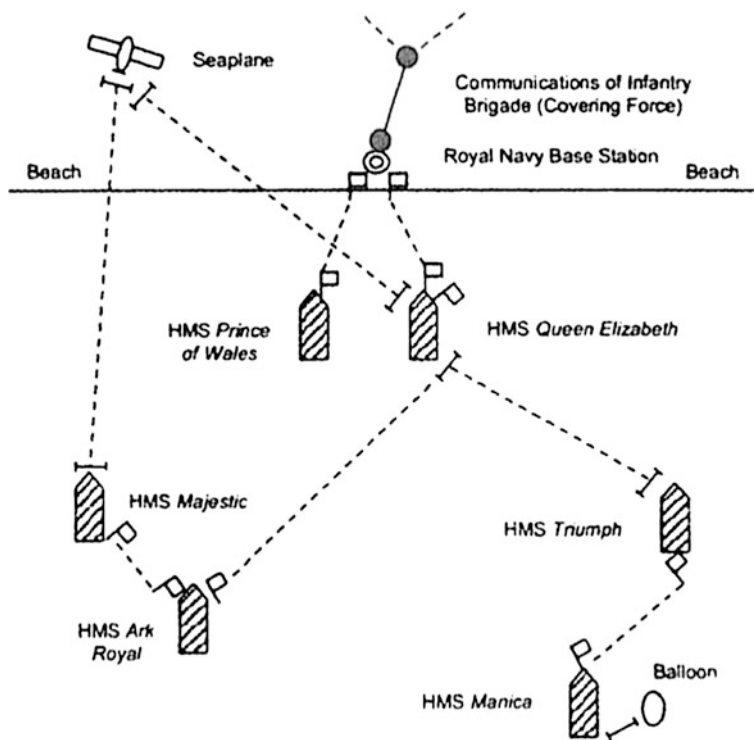
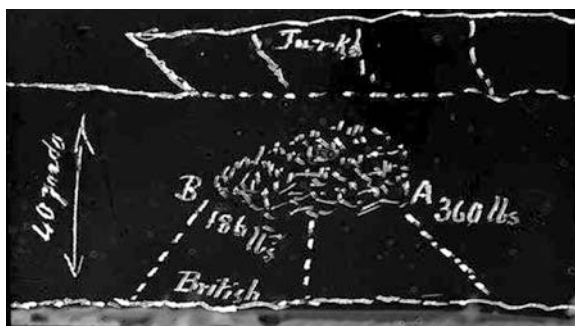


Fig. 7 Fire support plans for initial ANZAC landings at Gaba Tepe, 25 April 1915. *Source* Sea Power Centre 2005, p 56

Fig. 8 Diagram of British and Turkish lines of Gallipoli campaign—glass lantern slide transparency (8.5 × 8.5 cm). *Source* State Library of Victoria. <http://catalogue.slv.vic.gov.au/vwebv/holdingsInfo?bibId=1787764>



needed the coordination of land, sea and air assets, which demanded the generation of new drawings like fire support plans (Fig. 7), which did not exist prior to these combined operations.



Fig. 9 Section of British topographic map with mark-ups—detail. *Source* Service Historique de la Défense, Département de l'Armée de Terre Division, Château de Vincennes, Paris

4.2 Diagrams, Drawings and Marked-up Maps

Diagrams and drawings were produced to provide intelligence and to map military installations, trenches, etc. The examples that follow show a field sketch of trench positions produced as a glass lantern slide transparency (8.5 × 8.5 cm) (Fig. 8), marked-up annotations of key facilities on pre-colour topographic maps (Fig. 9), hand-drawn diagrams showing the positions of troop emplacements (Fig. 10) and spirit 'quick print' perspective views (Fig. 11).

4.3 Mapping the War at Home

The 'man and woman in the street' was interested in gaining an appreciation of the battlefronts in World War I. Commercial map publishers and newspapers satisfied this need for geographically-placed information. English map publisher Stannard and Son produced a map showing a perspective view of European and Asiatic Turkey, Russia, Austria and Persia. It showed ...*the whole of the seaboard, railways, rivers and probable points of attack/compiled from the latest official sources by Alfred Concanen*. The map is shown in Fig. 12.

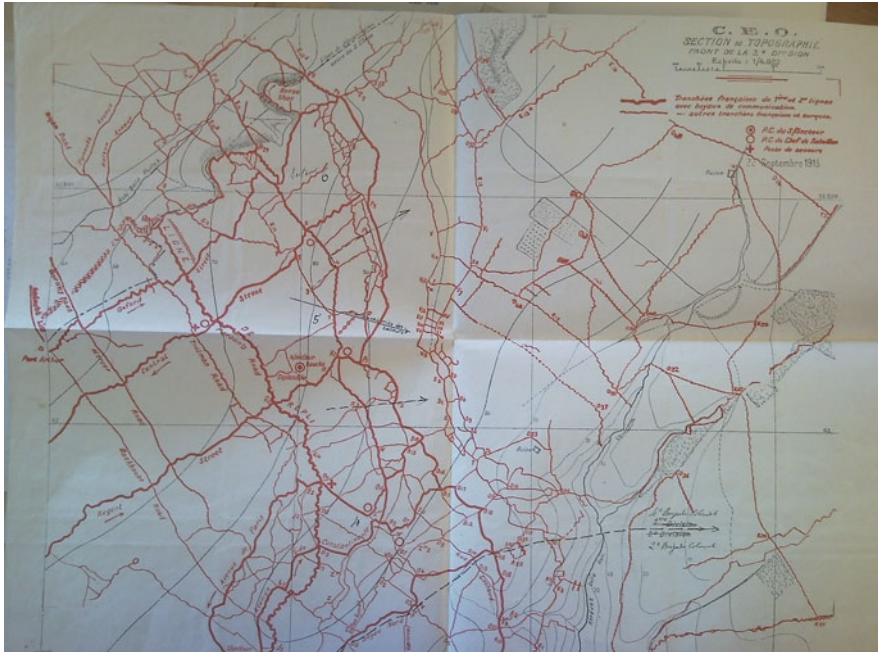


Fig. 10 Spirit print, French troop emplacements 22 September 1915. *Source* Service Historique de la Défense, Department de l'Armée de Terre Division, Château de Vincennes, Paris

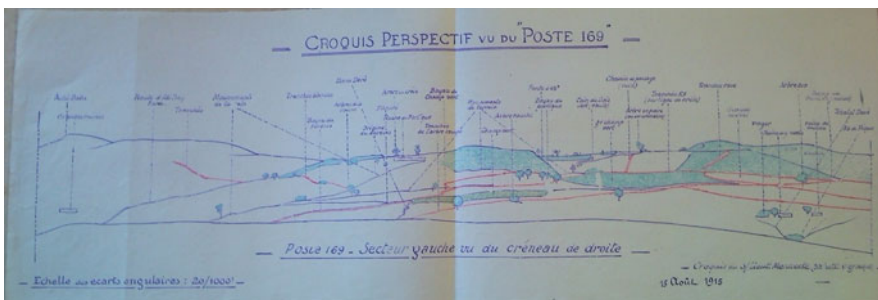


Fig. 11 Spirit print, French Perspective Drawing Post 169, 15 August 1915. *Source* Service Historique de la Défense, Department de l'Armée de Terre Division, Château de Vincennes, Paris

Stanford Geographic published a black and white map of Anzac Cove (Fig. 13) and *The Strand Coloured Detail map of the Dardanelles, Constantinople, &c., &c.* was published by George Newman Ltd., London.

As well as publishing their own maps, several cartographic companies produced maps for newspapers. London-based cartographic company Geographia produced maps for *The Daily Telegraph*—"The Daily Telegraph War Map No. 12" (Fig. 14).



Fig. 12 Stannard and Son's perspective view of European and Asiatic Turkey, Russia, Austria and Persia. Source National Library of Australia. <http://nla.gov.au/nla.map-f246>

Newspapers also produced more artistic views of the battle, and these were sold as supplements to newspapers. The example shown in Fig. 15 is the *Daily Mail*.

French newspaper, *Le Matin* was also a prolific publisher of maps in its editions. A sample map—"Les Dardenelles"—is shown in Fig. 16.

4.4 Personal Artefacts Representing the 'Geography of Warfare'

During research in 2009 at the Service Historique de la Defense, Department de l'Armee de Terre Division, Château de Vincennes in Paris the author was provided with one particular archive publication: *Inventaire Sommaire des Archives de al Guerre 1914–1918, Ministère d'état Charge de la Defense Nationale* (Nicot et al. 1972), a general reference to the Service Historique de la Defense, Department de l'Armee de Terre Division collection might provide the key to accessing appropriate documentation stored in the archive. The publication provided a comprehensive catalogue to artefacts in the archive up to 1972. This included maps and other geographically-related documents. The section of interest to research into the French involvement in the Gallipoli campaign was "Grandes Unites Françaises d'Orient and Commandement des Armees Allies en Orient—Corps Expeditionnaire d'Orient



Fig. 14 *The daily telegraph war map no. 12, 1915?* Source National Library of Australia. <http://nla.gov.au/nla.map-gmod1>

I was provided with five dust-covered boxes from the archive that held maps and other documents. One particular box—Box 20N33—contained official military maps, sketches and reports. But this box also contained one additional document—a commercially-produced *Colour map of Europe and Turkey*, folded and reinforced with linen at the folds.



Fig. 15 “Scene of the landing operations at the Dardanelles”, *Daily Mail* map of the Dardanelles. Source MAPCO—Map and Plan Collective Online (free online download) <http://archivemaps.com/mapco/gallipmail/cover.htm>

This map had been annotated with ‘travel line’ from Paris to Marseilles to the Dardanelles by its possible owner, H. Barrot. (This name was noted on the verso). The map had a pencil line drawn over the shipping lines that were included in the map. It traced his journey from Paris to the Dardanelles. It was a record of Barrot’s involvement in the preliminary movement of troops before the landings at Gallipoli. The map is shown in Fig. 17. Detail from this map is shown in Fig. 18.

The discovery of this particular map led to a related field of research—“Personal Geographies of Warfare”—which will examine how individuals geographically recorded their wartime experiences using everyday artefacts.

5 Further Research: Personal Geographies of Warfare

The unfortunate consequence of any military engagement is the loss of life. Those individuals whose sacrifice is generally lost in the accounting and reporting generalization of warfare ‘disappear’ without their contribution to a battle—and the individual’s departure from family and loved ones, related training, preparation,

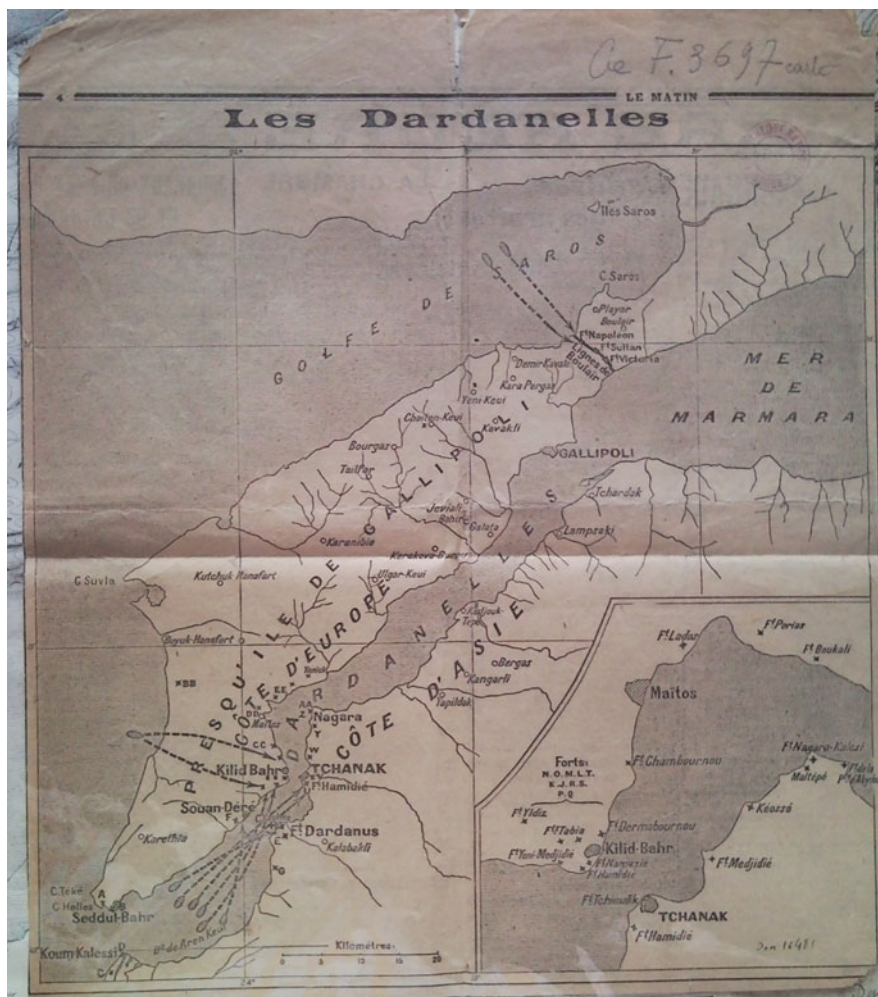


Fig. 16 Map 'Les Dardanelles' from *Le Matin* depicting aspects of the failed naval action trying to force a passage through 'The Narrows'. *Source* Département des Cartes et Plans, Bibliothèque nationale de France, Paris

transportation, preparation for battle and aftermath. Their stories are not recorded on maps produced to represent a campaign—these maps are impersonal.

The 'geography' of military campaigns can be represented by the assembly of many personal geographies of that campaign—the assembled experiences of military and civilian populations that were directly involved in action or personally effected by the outcome—either directly or indirectly. But how best to 'map' these personal geographies of warfare?

The geography portrayed in most maps of military campaigns does not provide any information about the personal geographies of a campaign or battle. These



Fig. 17 Annotated map of Europe and Asia Minor.1. *Source* Service Historique de la Defense, Department de l'Armee de Terre Division, Château de Vincennes, Paris. *Photograph* William Cartwright

elements are missing. Personalisation is impossible when immediate geographical information is required to be represented prior to a battle or afterwards, as a record of the actual clash and its aftermath.

Personal geographies can be used to give an insight into the human stories of traveling to battle, the preliminary movements, the battle itself and combatant's reflections on what has happened. Mapping personal geographies can be done by assembling a montage of geographically-related artefacts, notes, annotations and maps that individuals have used to record their thoughts, feelings and reflections. Further, related research on this topic is being undertaken by the author.

6 Conclusion

The investigation of geographical artefacts and maps related to the Gallipoli campaign in World War I found rich resources in online archives, in map collections and in military archives. The products range from professionally-produced topographic maps to hand-drawn maps from field observations. The military, commercial map publishers and newspapers produced documents. Occasionally individuals produced maps themselves, where no 'official' map was available.



Fig. 18 End of Barrot's voyage from Paris to Marseilles to Asia Minor—at a point (marked 'E', by hand), just to the east of Lemnos. *Source* Service Historique de la Défense, Département de l'Armée de Terre Division, Château de Vincennes, Paris. Photograph: William Cartwright

As well as illustrating the wide range of maps and drawings generated during the campaign, what was most evident was the different printing methods employed—lithographic to spirit printing. Here, it is assumed that the less time-consuming replication methods were employed when time was of the essence and 'rapid response' mapping was needed.

As noted in the introduction, this paper reports on the findings from the first stage of the project Towards Gallipoli 2015. It provides an overview of the maps and geo-located artefacts that can be accessed for further investigation and analysis.

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