ANZAC Biscuits versus Turkish Peksimet: How Food Logistics Affected the Gallipoli Campaign

Aylin Öney Tan

The Gallipoli Campaign, known as ‘Çanakkale Savaşı’ in Turkey, is one of the foremost important milestones in the history of Turkey, defining a national victory which lead the way to the establishment of Turkish Republic. The often-repeated phrase ‘Çanakkale Geçilmez!’ (Çanakkale is Impassable!) is still a manifestation of independence and national pride. Dardanelles Strait is indeed almost impassable when defended. It has a unique geographical setting; it is a narrow, long, winding river-like natural strait connecting the Sea of Marmara to the Aegean Sea, and separating Thrace and Anatolia, which is today European Turkey and Asian Turkey. Together with the Bosphorus Strait, it forms the continental boundary between Europe and Asia, and the only waterway connecting the Black Sea to the Mediterranean, making it of utmost strategic importance. (Fig. 1) Controlling the straits has always been of great importance for commercial and military reasons. Hence, this location has witnessed some of the most ferocious battles in human history, from the Trojan Wars to the Gallipoli Campaign. The strategic importance of Troy was its position on the Troas plateau controlling traffic through the strait. During the Byzantine period the importance of the Dardanelles was even more accentuated, since it was vital for the defense of Constantinople, but once it was captured by the Ottomans, the destiny of Constantinople was doomed to change. From 1354 the Dardanelles was constantly under Ottoman control.

Fig. 1. Gallipoli Strait

The Allies of the First World War planned to capture İstanbul to control the sea route to Russia. The Allies were British Empire, including forces from India, New Zealand and Australia, France, Russian Empire, Italy and the United States against Central Powers, which were German Empire, Austria-Hungarian Empire, Ottoman Empire and Kingdom of Bulgaria.

The only way to seize the Ottoman capital was to pass through the Dardanelles. Their attempt in March 1915 to pass through the strait had been disastrous. Many ships and submarines of the Royal Navy were sunk, or heavily damaged. The next attempt had to be via the land. That is how the Gallipoli campaign that would last almost a year was started; the Allies landed in Anzac Cove on 25th April 1915.

1915 was a year of extraordinary climate conditions, an exceptionally hot and dry summer, followed by an unusually cold bitter winter. Losses on both sides had been devastating; besides fierce fighting, the conditions in the trenches, harsh climate, inadequate or improper food, water and sanitary supplies had been major factors affecting the number of casualties. Finally the campaign ended on 9th January 1916 with the retreat of the last Allied troops.

Not letting the enemy pass Çanakkale meant more than a victory in battle for the Turkish side. Though the battle took place in the last decade of the Ottoman Empire, it is considered as the beginning of national awakening that initiated the Turkish Independence War under the leadership of Mustafa Kemal Pasha, who outshined as a commander at Gallipoli on the victorious Anafartalar front. His leadership eventually led to the foundation of the Republic of Turkey on October 29, 1923. Ironically, despite the defeat of the ANZACs, the Battle of Gallipoli proved to be also the benchmark for the birth of national consciousness in Australia and New Zealand. The same applied for the Irish soldiers who volunteered to fight in the British army; the enormous Gallipoli casualties among the Irish lead to an awakening that paved the path for the Irish War of Independence; as expressed in the inspirational ballad ‘The Foggy Dew’: ‘Twas better to die ‘neath an Irish sky than in Suvla or Sedd el Bahr’.

One way to look at the Gallipoli Campaign is trying to see it through daily life in trenches, what they did, what they ate, how they thought about their conditions. Here one finds amazing details of humanity despite the ferocity of war. Gallipoli was a battle where enemies came to an appreciation for the other, and through developing empathy for the counter part, both sides ended in rediscovering their own national identities.

Micro History Revealing Real Gallipoli

The history of the Gallipoli Campaign is often told with the casualties, numbers, and strategic position of fronts. It is judged by the victory or defeat of battles, interpretations
varying depending on your standing side. Daily life, logistics and conditions in the trenches are usually mentioned to add to the drama of the narration, but seldom scrutinized on its effects on the battle. The story of the individual is often neglected; may be not so much for the ANZAC’s; but stories of individuals are quite rare for the Turkish part as letters, notes, diaries, accounts are relatively scarce.

The accounts of food shortages, starvation and thirst are usually used to fuel the heroic myth (Macleod 2004, pp.5-7). Though there are detailed lists of provisions, type and quantity of food supplies, daily rations of soldiers on both sides, there is less data on what exactly happened on the battleground. The reality is often hidden in details; studying the scribbled notes, heartfelt letters and neatly written diaries can give a true insight about the trench life and shed light upon the real story of the Gallipoli Campaign.

Pre-War Situation and Logistic Arrangements

The Gallipoli Campaign, in a way, marks the start of the transition between the Ottoman Empire and the Turkish Republic. The Ottoman army, allied with German and Austro-Hungarian forces, was on the defence; however its state was a fading shadow of the once mighty military force, stripped of its power by the 1912 Balkan wars. The Ottoman Empire was passing from decline into disintegration (Ortaylı 2015, pp.17-18). The first attempt of the Allies in March 1915 to pass the Dardanelles to reach the Marmara Sea and the Bosphorus Strait had previously failed. The Ottomans was in a triumphant mood after the victory of 18th March, it was understood that there would soon be a forthcoming land campaign. The Ottoman side swiftly formed the Fifth Army for the defense of Gallipoli and Çanakkale on both sides of the Dardanelles strait (Koyunoglu 2015, p.243). Military mobilization was announced to call the civil public for the army, as numbers of soldiers were not sufficient and the army needed support to get prepared for defense. Another call was made to stock as much food as possible.

Logistics is key to success in a military campaign; and delivery of provisions is crucial for successful logistics. Even if the army is well trained and fully equipped, if adequate and timely food & drink supply is not in place, any campaign is doomed to failure. When we read through the Ottoman archives of World War I, food logistics seem to have suffered serious problems compared to the former campaigns of the impeccably organized Ottoman Army (BOA 2005, Vol. I-II). We also see frequent lamentations about inadequate food in memoirs and letters; however at a closer look, one notices that the initial situation has not been terribly grave. Both the Allies and the Ottoman parties were trying to get well prepared and had ample stocks. The Allies had to have all their supplies carried along with them, including water.

The Ottomans had the advantage of having all the land on their side. Though the country suffered serious shortage of food, it seems that the least affected Ottoman front of WWI was the Gallipoli one compared to other battlefields where the Ottoman army was fighting. Its closeness to the capital Istanbul and its strategic location on the seafront enabling marine transportation was a convenience. The railway reaching up to the Uzunköprü station made the transportation work quite well up to a certain extent (Şahin 2015, pp.271-297). Though supplies coming from Istanbul could easily be delivered via maritime transport to the ports on the shores of the strait, or via rail to Uzunköprü, which was quite inland; further land transport was problematic. The road network was almost nonexistent, consisting of narrow paths fit only for mules. Still, Gallipoli benefited from its proximity to the capital Istanbul compared to far away fronts on Eastern and Middle Eastern borders. However, in a battlefield, nothing goes as expected. Despite the initial reasonably adequate mobilization, later in the course of the campaign, there were several records of poor organization, failure of delivery, insufficient supply or tedious diet.

Initial estimation for the daily provision of the Fifth Army was around a total of 150 tons of food, fodder and fuel. Eventually the number of the army reached 137,599 soldiers, with 24,734 animals. The numbers were increased with the advance of the war; by 28th July 1915 there were 250, 818 soldiers and 69, 163 animals (Erat 2003, p.118). This meant that the need of supplies also doubled compared to the initial plan. From the onset of the campaign on 25th April 1915 to its end on 9th January 1916, the battle took a total of 256 days; the magnitude of the provisions needed to feed and sustain the army can easily be imagined. It was not only the vast amount of supplies but also the delivery to the battleground that created a problem.

Sourcing of Provisions

Food was primarily sourced locally from the peasants in the region if available. If local supplies were inadequate the food was transported from Istanbul or elsewhere. If not found or produced nationally (e.g. tea, coffee, sugar), it was imported. In practice, a percentage of each lot of import item was confiscated for the use of the army; the rate for imports changing over time. For instance, during the Gallipoli Campaign, tea and coffee were significantly reduced. The rate for tea was reduced to 15% of the total amount (Çevik and Çeloğlu 2015, p.305).

The means of food acquisition was as follows:

- Direct purchase (usually applied in cases of local sourcing from peasants),
- Opening tender bids,
- In form of tithe (one tenth of annual produce, formerly taken as a tax, this time as a support for the army),
- By donation or charity,
- As war tax named Tekalif-i Harbiye.
Tekâlîf-i Harbiye was a war tax instituted in 1912, but was only put into implementation during the WWI. It implied a certain share of agricultural produce to be seized as army provision to be paid for later. One way to implement the war tax was to seize the goods (called yaz-ı yed) with a down payment of 15-25 % to be paid later after the campaign (Esenkaya 2014, pp. 48, 57-59).

In 1915, with a decree of the Ottoman Parliament, approved by Sultan Mehmet V. Reşat, the following list was decided to be acquired for the Gallipoli campaign:

443,540 tons wheat, rye, corn and millet; 536,218 tons barley, oat and other grain fodders; 67,940 tons dried vegetables and legumes, 359,410 tons grass and 11,885 tons onions to be obtained as tithe; 232,100 tons of hay to be obtained as donation from the rich; 69,697 tons meat as 15% war tax from slaughter houses (ATASE Archives No.1/6, Dos. 1155/126, F. 3).

Following the decree, before the start of the campaign on 25 April 1915, during the period between 31 July 1914 and 28 February 1915, the Army Material Command transferred the following provisions to the storage of the Dardanelles Defense Command:

981,105 kg wheat (whole wheat berries), 689,740 kg wheat flour, 106,200 kg corn meal, 85,954 peksimet (twice baked bread, hardtack), 11,049 kg meat, 18,678 kg canned meat or kavurma (potted meat), 2,880 kg potted meat for soup, 5,493 kg vegetables, or canned vegetables, 16,161 potatoes, 8,226 kg onions, 23,383 kg rice, 20,971 kg bulgur, 9,880 eggs, 76,976 kg dried beans, 57,808 kg dried fava beans, 4,319 kg clarified butter, 7,137 kg olive oil, 19,205 kg olives, 350 kg salt cured sardines, 111,090 kg cheese, 33,331 kg salt, 24,485 kg sugar, 1,717 kg tea, 7,728 kg raisins, 1,885 kg dates, 7,133 kg soap, 286,665 kg barley (for animals) (Erat 2003, pp.116, 131; Esenkaya 2014, p.63; Genelkurmay, Çanakkale Cephesi Harekatı Volume V, Book 1, Table 12).

At the same period Eceabat and Bandırma Depots were stocked with the following:

242,942 kg buğday, 189,570 kg wheat flour, 45,872 corn meal, 35,325 whole wheat flour with bran, 37,177 kg meat, 174,407 kg canned meat or kavurma (potted meat), 18 cattle (to be slaughtered), 1,549 eggs, 99,333 kg chickpeas, 21,333 kg dried fava beans, 1,805 lentils, 930 kg onions, 77,106 kg olive oil, 50,121 kg salt, 100 kg vinegar, 6,680 kg sugar, 73 kg tea; for fodder 333,349 kg barley, 26,538 kg grass fodder, 26,058 hay, 2,484 kg rye, 6,301 kg corn, 44,139 kg burçak vetch, 46,360 kg bran, 342,403 kg millet (Erat 2003, p.116; Genelkurmay, Çanakkale Cephesi Harekatı Volume V, Book 1, Table 12).

These supplies were further transferred to provision depots situated at twelve different locations: İlkılar, Burgaz, Lapseki, Gelibolu, Karabiga, Biga, Akbaş, Irgandere, Keşan, Uzunköprü, Malular, Akbaş. There were two bread making stations (Ekmekçi Takımı) at Çanakkale and Burgaz; four teahouses at Karapınar, Yerlisu, Bayırköy, and Gürecik. (Koyunoğlu, 2015, p. 243) Bread making stations were providing not only freshly baked bread, but also peksimet, the twice-baked bread slices that could be carried like biscuits, and kept long to be consumed later. Field bases (menzil in Turkish) complete with ovens and tent kitchens were set up on the route of the soldiers to cook warm dishes from scratch. Field bases were also accommodating field hospitals and shelter for animals (Keskin 2007, p. 42).

We can say that the start of the campaign the defense side was pretty well organized; but later in the course of the campaign, it would be hard to maintain the same flow of food supply. By the end of July, the situation became quite problematic. According to the Decree of Rations issued on 8th October 1914, the daily ration of a Turkish soldier was estimated to equal to 3149,25 calories and was as follows:

900 g bread; 250 g meat (or half the amount of kavurma (potted meat), pastırma (cured dried meat), sucuk (cured spicy sausage) or canned meat); 150 g bulgur (cracked wheat); 20 g clarified butter; 20 g salt, 20 onion; 86 g rice or ¼ of meat substituted with pulses like chickpeas, beans, dried vegetables, potatoes or canned or fresh vegetables (Keskin 2007, p.69).

However this amount of daily provision could never be fully delivered, to the extent that some items never appeared. For example meat could only be given twice a week, first equaling to 62 g per day, then to 31, and 16 g, in practice it was not delivered at all. Vegetables were always hard to find as well. The basic diet was reduced to pulses, grains and dried fruits. Soup and compote were the most frequently served dishes.

One point is striking in these lists; there is no processed industrialized food, as food industry has not yet developed in the Ottoman Empire. There were only canning facilities in Istanbul and İzmir. Ermis Konserve, the first factory of canned vegetables, was established in 1892, first at the Princess Islands (Büyükada) near Istanbul, then having factories in other locations. A few others followed Ermis; according to the statistics of industry for the years 1913-15, there were a total of eight food conservation factories in Istanbul and İzmir, other than that, food industry was practically nonexistent in Anatolia (Ökçün 1984, p.68). However traditional preserving techniques were a stronghold of Anatolian food heritage, and they were all present in the Ottoman rations, including dried vegetables and fruits, potted meat (kavurma, a sort of cubed meat confit cooked in its own fat), dried salt cured meat (pastırma), sausages (sucuk, dried spiced fermented salami), and the ubiquitous dried wheaten products like dried flat bread, and peksimet.
When we have a look at the Allies provision preparations, almost all of the food had to be carried with them and water was sourced from the Greek islands. As everything had to be brought by the ships the Allies needed to be more organized, calculating every detail and planning ahead. According to the military orders of April 1915, the scale of rations after leaving Egypt for Gallipoli would be:

- 1¼ lbs, bread, or 1 lb. biscuit (hard tack), or 1 lb. flour; 1¼ lbs. fresh meat, or 1 lb. preserved meat; 4 ozs. bacon; 3 ozs. cheese; 2 ozs. peas, beans or dried potatoes; ¼ lb. jam; 3 ozs. sugar; 5/8 ozs. tea; ½ oz. salt; 1/20 oz. mustard; 1/36 oz. pepper; 1/10 gill lime juice; ½ gill Rum; tobacco not exceeding 2 ozs per week. The last three items had the note, at discretion of G.O.C. on recommendation of S.M.O. (Butler 1938, p.242).

As seen, in contrast with the Ottoman side, the supplies of the Allies are heavily stocked with processed food. Instead of fresh meat, mostly preserved meat (bully beef) was given; and hard tack nicknamed as Anzac biscuits substituted bread or flour. (Fig. 2) There was almost nothing fresh; and most items were strongly salty or sugary products, ie bacon and cheese, or jam. It seems that both sides had their own organisational skills, tried their best in their own capacities and sources. The ANZAC side seems to be much more organized and better equipped as every detail had to be planned ahead. The Ottoman side on the contrary, could adjust and back up supply upon demand, monitoring the necessities of the battlefield; they had the advantage of having the land behind them. In a peculiar way, with this advantage they could afford to be less organized.

Apart from the daily rations, both sides had certain items solely for pleasure, like tea & coffee, or cigarettes & tobacco or even brandy or rum. It is interesting to see lime juice and rum in ANZAC rations, as if the voyage from Egypt to the Dardanelles was a cruise trip. The Turkish soldiers had little pellets of opium gum at hand to induce sleep. Some remains of Bomonti brand beer bottle shards were found in the Turkish trench excavations. Bomonti was a brewery in...
planned to have tanks to convert seawater to potable water, the system could never be established and all the equipment remained useless at the Anzac cove (Fig. 5). Even if water was available, carrying it to the front lines were a major problem (Fig. 6). A thorough mapping and listing of accounts in regard with water supplies is a study that needs to be done to understand how water shortage affected the campaign.

One recent publication is the diary of İbrahim Naci, a 20 year old lieutenant who wrote not only day to day accounts, but also his own thoughts and feelings, in earnest from the heart. Such detailed and sincere writing is not easy to come by in the Turkish side. His diary was found in a private collection and printed recently. He died on 21st June, so the battle has not yet seen its worst days; according to his notes they had ample and satisfactory food. Some accounts long for certain tastes; for example Münim Mustafa, a reserve officer, longed for sweetness and sourness: ‘During the time we were there, the things we missed the most were sugar and vinegar. Oh, a bit of sugar and a bit of vinegar… How delicious were they! It’s enough to see or even smell these delicacies of the world. Oh, a bowl of salad!’ Even if there was appreciation of adequate food, some dishes were not as welcome as others. Broad beans were hated by most soldiers. Some rare luxuries or more healthy food such as fresh fruit and yogurt were given to sick and injured at the hospitals. Food was cooked at the back lines in fear that the Allies would spot the smoke.

In the course of the battle, food captured from the enemy trenches were also consumed by both parts; one story from the Turkish accounts tells that they feasted on canned food and jams they found in an enemy trench evacuated by a retreating troop (Keskin 2007, p.70-71). There were also cases of food exchange and other items swapped during truce time where opposing trenches were separated only by a few meters. In such exchanges there were even preferences for certain gifts from other sides. Ceasefires were the moments when the two sides could come to a humane state, even passing notes with each other to swap goods. One usual trade would be food from the ANZAC side in return of Turkish tobacco and cigarettes. We do not know whether the Turks enjoyed the brick-hard Anzac biscuits they received, but they surely liked the canned milk but deliberately avoided canned beef out of fears that it might be pork. One note attached to a cigarette pack thrown from the Turkish trench to the other side included a kind note written in broken French:

*Notre Cher Enemis Prenez A Vee* (to our dear enemy, please take).

Upon receiving the detested bully beef in return, the responding note came along:

*A Notre Herox Enemis, Bully Beef Non... Envoyez Milk.* (To our heroic enemies, no bully beef, send milk).

**Food Stories in Accounts**

Notes from trenches, and other accounts from the war, give us an idea on how successful or disastrous food logistics have been during the campaign. One thorough study can only be made listing all accounts of both sides; putting them in chronological order if possible, also mapping the locations where possible, and try to see the general picture of how things went on site within the course of the battle. Accounts of extreme thirst and hunger are usually recited as stories of heroism; often missing are expressions of fear and cowardice. Thirst and not getting fresh spring water was a major issue in Gallipoli, especially in summer months of July and August. Again, the Ottoman part had the advantage of owning and knowing the land, though transport of water to front lines could be hard to maintain. On the Allies part, lack of adequate water had grave consequences, including diseases. Though they even

---

Fig. 5. Water purification system at AriBurnu

Fig. 6. Carrying water was a major issue
from the fire, and carried to front lines, inevitably to be served cold. German Colonel Hans Kannengiesser states that when supplies were scarce the main meal of the day would only be cold bulgur (cracked wheat) pilaf. Every soldier would cheer if meat and rice pilaf were served; it was the best dish always. Bean or chickpea stew with meat, fatty soup, raisin compote were other usual dishes. We see that some nuts, olives wrapped in a handkerchief, a handful of raisins and of course peksimet (hard tack) are usually found in pockets of soldiers.

The counterpart of peksimet on the ANZAC side is the notorious Anzac biscuit, also nicknamed as Anzac brick. There are several notes about the questionable palatability of these indestructible 'bullet proof' hard tacks. One note from the diary of Lieutenant A. L. Dardel laments about the inedibility of biscuits, but praises the marmalade: ‘The man who can eat Gallipoli stodge (called bread can eat anything. There is one thing we do get here though that is good and that is MacConachie’s marmalade, the real thing... I only wish they would issue more edible biscuits. The things we get are great unwieldy things like those tiles. Why couldn’t they be a bit smaller and thinner. Somebody will break his neck someday wandering round with his eyes shut and his teeth clenched on a biscuit trying to bite it through. They are most unsuitable for this hilly country.’ (Clarkson 2014, p.1146). Humorous quotations about the notorious biscuits are endless. Lieutenant A. E. Whitear finds them useful in a funny way: ‘We were camped at Fisherman Huts, these were situated between ANZAC and Suvla Bay. Our rations consisted of Bully Beef and Biscuits, both of these items of diet became more useful later in the War in France, the Bully Beef made excellent Roads and the Biscuits made excellent fires.’ (Clarkson 2014, pp.844-845).

One thing not much mentioned in the accounts is consuming wild food. It is highly likely that the soldiers would have consumed edible wild greens if one thinks about the lush Gallipoli flora. Foraging for edible plants is a strong tradition in Anatolia. Aegean region, and Thrace area, including all the Gallipoli and Dardanelles territory is particularly rich in edible greens, to be consumed either cooked or raw, particularly in spring and fall. Foraging is traditionally women’s work, but men also share the knowledge. Small children, including young boys, also usually go out foraging in the fields together with mothers. There are also Anatolian spring folk celebrations where children go out in the fields, gather crocus bulbs, and a festive communal bulgur pilaf is cooked with the bulbs. Such accumulated knowledge had been with the young soldiers of the Turkish side, especially when one thinks that they most were gathered from rural Anatolia. My assumption is, in cases they were short of food or water, they would be able look for an edible plant to suppress hunger or quench thirst. After all it was their own land; they knew their countryside pantry. The ANZAC side, on the contrary, was totally alien to the land. Though they could be familiar with some of the plants, such as thyme, it is not likely that they would have such a foraging background. Even if they had the intention to pick some, unless they weren’t highly knowledgeable about wild plants, that would be quite risky as some plants are not edible at all, and some, like hemlock varieties, are highly poisonous. There are only accounts of wild thyme growing everywhere and used by soldiers to improve the taste of bully beef. Another study to investigate this possibility would be to study the edible plants of the campaign sites in parallel to the chronology of battles. Though the climatic conditions of that particular year was quite extreme, and the flora of Gallipoli has dramatically changed since than with forestation plans, still the wilderness have survived up to a point. It would be interesting to see how much wild food was available in the battle scene.

This paper is an attempt to have a glimpse of a vast subject with only a tiny fraction of knowledge mentioned here among a myriad of countless sources. Surely, such a topic needs a multi disciplinary team to work both in archives and the field; such a study would definitely be rewarding to understand and learn from the atrocities of the past.

References
Aysal, N. (2015) Çanakkale Muharebelerinde Sağlık Hizmetleri ve Osmanlı Hilal-i Ahmer Cemiyetinin Faaliyetleri (Medical Services During the War of Çanakkale and the Activities of the Kızılay Society), İstanbul: 100’üncü Yılda Çanakkale Zaferi Sempozyumu; T.C. Harp Akademleri Komutanlığı Stratejik Araştırma Merkezi, pp 267-278.


Kılinç, E. (2010) Çanakkale Savaşı Günlüğü (Çanakkale War Diary); İstanbul: Otüken Neşriyat.


Tarman, Z., (2011) Tarihe Sığmayan Destan Çanakkale (A Legend Beyond History: Çanakkale); İstanbul: Ferfir Yayınları.


