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Unveiling the Cartographic Nexus Exploring the Interplay Between Maps and War Bulletins in the Capture of Gorizia (June-September 1916)

Keywords: Battle of Gorizia; Military Cartography; War Bulletins; Intelligence Gathering; Isonzo Front.

Summary: Our research explores war bulletins from the Historical Archive of the Army General Staff (ASSME), along with military maps and secondary documentation such as situation maps and reconnaissance sketches. Using a semiological approach, we examine the writing of maps and their interaction across multiple command levels. The war bulletins offer near-daily updates on troop movements and conflict status, reflecting the Italian Armed Forces' high command perspective. These documents often overstate national successes, enemy positions and losses. Our paper focuses on comparing strategic and tactical maps and sketches and war bulletins received by high commanders and Cadorna during the Battle and capture of Gorizia (June/August 1916). We aim to explore how cartography shaped these bulletins and whether the information in them matches the top-level maps. We also investigate the complex production processes of war bulletins, derived from multiple sources across different levels. This comparative analysis deepens our understanding of how cartographic knowledge influenced strategic decisions and battlefield outcomes. It highlights the role of military cartographers in shaping operations during World War I. By analysing the interaction between command levels and representation scales, our research clarifies the influence between cartographic and documentary production, offering insights for future historical studies and the valorisation of the history and memory of the Eastern Front.

1. Introduction

1.1.Historical context and use of war bulletins

1.1.1. General overview

In June 1916, Italian operations began with a counteroffensive on the Carso, yielding limited results. However, in the second half of the month, the Italian Army started reorganizing its units based on the information gathered about the positions of the Austrian units. This counteroffensive attempt, though ultimately exhausted within 1916, had the effect of drawing more attention to the Trentino front than to the one stretching from Carnia down to the sea (Sema 2020). At that point, General Cadorna aimed to achieve a positive outcome to boost the morale of the troops and present it to the newly established Boselli government (Schindler 2021). Therefore, he decided to initiate preparations for the Sixth Battle of the Isonzo and the subsequent capture of Gorizia in the first half of August.

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The Sixth Battle of the Isonzo, occurring from August 6 to 17, 1916, marked a pivotal moment in the series of twelve battles fought along the Isonzo River between Italy and Austria-Hungary. The broader context of these battles lies in Italy's ambition to gain territory from Austria-Hungary, particularly aiming to annex regions like Trentino and the Istrian Peninsula. The Italian Chief of Staff, General Luigi Cadorna, orchestrated these offensives, hoping to break the stalemate that characterized much of the Italian Front.

This particular battle, however, is significant for the successful capture of Gorizia, a strategically crucial town that had previously eluded Italian forces. The Italian army launched a surprise attack, leveraging a well-coordinated artillery bombardment followed by infantry assaults. This strategy caught the Austro-Hungarian forces off-guard, leading to significant territorial gains for Italy. The fall of Gorizia represented not only a tactical victory but also a significant morale boost for the Italian forces and their allies (Sema 2020).

The capture of Gorizia was celebrated as a major achievement and showcased a rare Italian breakthrough during a largely stagnant front. Despite heavy casualties, this victory allowed Italy to establish a stronger foothold in the region and bolstered its standing in the ongoing conflict. The aftermath of the battle saw Italy securing a defensive position across the Isonzo, setting the stage for future engagements and highlighting the strategic importance of controlling key locations along the river (Sema 2020).

In essence, the Sixth Battle of the Isonzo was a defining episode in World War I's Italian Front, illustrating the fierce and costly nature of the conflict as well as the tenacity of Italian efforts to alter the balance of power in their favour.

1.1.2. Overview of War Bulletins as strategic communication and propaganda tools

War bulletins, particularly those detailing Austrian troop movements on the front lines during World War I, served as essential information and military tools (Ministero della Guerra 1937: 174, 186). These bulletins were meticulously compiled by intelligence officers who gathered data from a variety of sources, including interrogations of prisoners of war, captured documents, and field observations. The information collected was then analysed and synthesized by the intelligence office and relayed to the Chief of Staff. Such bulletins provided critical insights into the disposition, strength, and intentions of enemy forces, enabling military leaders to make informed strategic decisions. By offering real-time updates on the enemy's operational status, these bulletins helped to shape tactical planning and operational execution, ensuring that the military command could adapt to changing conditions on the battlefield (Ministero della Guerra 1937: 32). The systematic dissemination of these reports not only facilitated effective coordination among various units but also enhanced the overall strategic awareness of the high command, making war bulletins indispensable for successful military operations.

1.2.Role of cartography in representing and analysing military movements during World War I.

1.2.1. Importance of cartography in war bulletin production within the context of the capture of Gorizia

The capture of Gorizia during the Sixth Battle of the Isonzo in August 1916 underscored the critical role of cartography in the production of war bulletins. Accurate and detailed maps were indispensable for both planning the offensive and reporting its progress (Ministero della Guerra 1936; Ministero della Guerra 1937). As Italian forces prepared to breach Austro-Hungarian defenses and capture Gorizia, military cartographers meticulously updated and analysed maps based

on intelligence gathered from reconnaissance, prisoner interrogations, and aerial photography. These maps provided vital information on terrain, enemy positions, fortifications (Figure 1), and potential routes for troop movements.

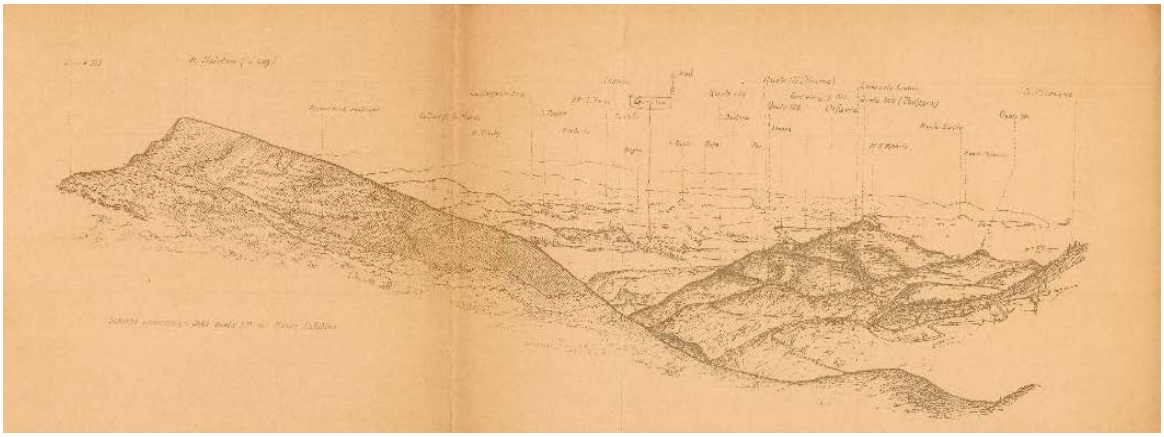

Figure 1- Sketch of Mount Sabotino with Austrian positions.
Source: Archive of the III Army Museum of Padua

Cartography enabled military planners to visualize the battlefield in three dimensions, allowing them to identify strategic objectives, anticipate logistical challenges, and coordinate multi-unit attacks. During the battle, maps were continually revised at tactical and operational level[4][1] and used to generate war bulletins that communicated the dynamic front-line changes to the high command and other relevant units. These bulletins were not merely descriptive reports; they were strategic tools that depicted the geography of conflict, delineated conquered territories, and highlighted key areas for further operations.

The integration of cartographic data into war bulletins also facilitated a shared understanding of the operational environment among commanders (especially at Division and Army corps level[5]), ensuring cohesive action and quick adjustments in response to shifting battle conditions. The capture of Gorizia itself was facilitated by an accurate understanding of the terrain and enemy defenses, which allowed Italian forces to execute precise artillery bombardments and infantry assaults (Ministero della Guerra 1937a)[6].

Post-capture, the updated maps in war bulletins helped solidify Italy's hold on the newly acquired territory by providing detailed insights into the region's topography, infrastructure and about also enemy positions which were crucial for consolidating gains and planning future offensives.

Thus, cartography was not just a technical exercise but a critical component of wartime communication and strategy. It enhanced the effectiveness of war bulletins as tools for real-time battlefield management and strategic planning, proving essential for the successful execution of operations such as the capture of Gorizia.

[4] What can be observed is that the strategic maps (for use by the General Staff) related to Italian operations were updated daily (even twice a day), while those related to enemy positions did not reach the General Staff daily: there are maps showing enemy troop positions as of August 1, followed by a second update only on August 15, once the positions of both sides had stabilized.

[5] All the operational orders of the divisions and almost all those of the Army Corps included one or more maps that illustrated, often at a scale of 1:25,000, the positions of both the Italian and Austrian troops (Ministero della Guerra 1937a).

[6] The maps at a scale of 1:25,000 or 1:50,000 attached to the deployment orders of the artillery sometimes indicated the positions that had been executed rather than those to be executed — especially during the reorganization phase following the capture of Gorizia (Ministero della Guerra 1937a: 347).

1.3.Literature review on cartographic-military processes during the I World War

As mentioned in paragraphs before, military cartography during World War I was an essential component in strategic and tactical decision-making, integrating technological innovations and traditional reconnaissance methods to produce highly detailed and functional maps. Some authors emphasize that prior to the war, significant advancements in surveying and printing technologies had been made, yet early battles revealed inadequacies, such as German troops' disorientation at the Marne due to poor mapping (Eckert-Greifendorff 1939: 327–328; Albrecht 1969: 8). A significant portion of the literature agrees that the First World War represented a turning point in military cartography because the "old maps" (those of the previous century) proved ineffective in adequately supporting war operations on various fronts (Bulatov 2018; Chasseaud 2018; Collier 2018; Espenhorst 2018). The First World War saw the advent of new technologies: aerial photography (Boelcke 1920) and wireless intercepts (Radunzel 2016), which the British and Dominion forces used to enhance traditional intelligence methods[7] in mapping enemy positions.

These maps were crucial for planning and executing operations, such as those by the 7th Field Survey Company during the Third Battle of Gaza, where a cyclical process of map creation and refinement was evident (Radunzel 2016). In major battles like the Third Battle of Ypres, maps detailing troop movements and enemy fortifications allowed commanders to make informed decisions that significantly influenced battle outcomes (Meyer 1937; Stichelbaut 2017). Reconnaissance missions by cavalry units were still important for gathering data, which was then processed and transmitted to the Supreme Command to ensure a comprehensive understanding of the battlefield and strategic advances (Poseck 1922) even if aerial reconnaissance was taking over the role of horseback troops (as Hussars) in this role especially in the Western Front – in Eastern Europe and Middle East cavalry still operated in its traditional role (Simkins et al. 2003; Wrangel 1982). The dynamic nature of these maps, constantly updated with new intelligence, was crucial for maintaining the effectiveness of military strategies and adapting operational plans in real-time (Richelson 1995: 31-46). This adaptability and the integration of cartographic data into decision-making processes underscored the indispensable role of military mapping in the conduct of World War I, setting a foundation for future developments in military intelligence and cartography.

In conclusion, the literature emphasizes that World War I marked a significant transition from "old cartography" to new practices. This shift was driven not only by the advent of new technologies but also by the rapid pace of "total war" from 1914 to 1918. Consequently, there were both qualitative and quantitative impacts: qualitatively, technical and semiological innovations emerged due to the scale of operations and new military technologies. Quantitatively, the speed of operations necessitated an extensive increase in cartographic production, affecting the entire command chain. Both formal cartography (e.g., maps from the Italian Geographic Institute, IGM) and informal sketches (e.g., reconnaissance drawings) catered to different needs using varied techniques and tools.

From a semiological perspective as well (Dai Prà et al. 2022), World War I brought about significant innovations due to technological advancements in the military and the introduction of new tools. An example of this is the continual updates to the manuals of various armed forces and the symbolism related to the representation of the enemy. For instance, in the early stages of the war,

[7] Mainly prisoner interrogations and chivalry reconnaissance

the United Kingdom depicted its forces in blue and the enemy in red; this practice was reversed after the initial battles[8].

1.4.Purpose of the article

Starting from this literature and these considerations, our research delves into previously unpublished war bulletins from the Historical Archive of the Army General Staff (ASSME) headquarters, along with top-level maps and secondary documentation such as situation maps, reconnaissance sketches, and other supplementary documents and records. Employing a semiological approach, our paper examines the writing of maps in the interaction between multiple command levels. We aim to explore the significance of cartography in shaping these bulletins and whether the information conveyed in the war bulletins correlates with the representations on the top-level maps. Our investigation sheds light on the intricate relationship between cartography and military decision-making, highlighting the pivotal role of military cartographers in shaping the course of operations during this critical period of the First World War. Through this comparative analysis, we seek to deepen our understanding of how cartographic knowledge production influenced strategic decisions and battlefield outcomes.

2. Methodology

2.1.Justification of the case study: why the capture of Gorizia.

Known also as the Sixth Battle of the Isonzo, the Battle of Gorizia is particularly relevant for both historiography and cartography, and it is the focus of our research. From a historiographical perspective, it is the first major Italian victory that positively impacted the morale of both the troops and military leadership. Politically, it restored a degree of trust between the government and the High Command. Additionally, the battle showcased improved Italian military strategies, including better preparation and the effective use of artillery, marking a departure from the traditional frontal assaults that had previously led to heavy casualties (Frizzera 2015). Cartography and information services played a crucial role in the Battle of Gorizia by enhancing strategic planning and execution. Accurate maps of the terrain around Gorizia were essential for planning the Italian offensive, including topographical details, enemy positions, and fortifications, which allowed Italian commanders to devise more effective strategies. These maps facilitated better artillery coordination, enabling precise targeting of enemy defenses and key positions, which significantly contributed to the success of the offensive. Cartographic information was also crucial for Italian sappers, helping them plan and execute tunnelling operations to undermine Austro-Hungarian positions without detection. Information services ensured real-time updates and intelligence were efficiently communicated between units through telegraphs and signal corps, relaying information about enemy movements and battlefield conditions. These advancements in cartography and information services significantly contributed to the improved tactical execution and overall success of the Italian forces during the Battle of Gorizia (Marcuzzi 2017).

[8] British Army WW1 Trench Maps. In *The Great War 1914-1918*. http://www.greatwar.co.uk/research/maps/british-army-ww1-trench-maps.htm.

3. The capture of Gorizia: a case study to underline the interaction between cartography and bulletins

The offensive against the Austrian line of defence in the so called "Isonzo Sector" represented a masterpiece of logistic organisation and wise usage of the newest war technologies and tactics. This struggle had a relevant outcome among the High Command Cartography (now stored in the ASSME Archive in Rome). The terrain of the battle was well known: since the first days of war the Italian Army was struggling to breach the massive defense line settled by the Austrian forces along the Isonzo River and the Carso plateau aiming to reach Ljubljana and the hearth of the Habsburg Empire. For this reason, the zone of operation was deeply explored by cavalry and reconnaissance formations and a huge amount of new cartography was produced. The staff of III Italian Field Army published numerous maps and guidebooks specifically about the Isonzo and Carso regions (Tarolli 2001) with specific attention to the locations where the Isonzo River was passable and the most probable paths of advance. According to the doctrine of the frontal assault (the so called "spallate"), the first five Italian offensive known as "Battaglie dell'Isonzo" shattered against the Austrian defenses: heavily outnumbered by the enemies, the imperial soldiers compensated the disparity with an intricate system of trenches, bunkers and barbed wire lines that – fully exploiting the characteristics of the terrain – made the war in this sector a real siege.

The sixth battle, object of this essay, planned by Italian General Staff for the mid of 1916 was delayed by the Austrian spring offensive in the Tyrolean sector. Known by the name Strafexpedition (Punitive expedition) this offensive drained massive forces, ammunitions and energies from the Isonzo front from both the armies to the mountain front. The delay caused by the necessity of resistance along the Trentino front and the logistical effort made to overcome the Austrian imposed anyway a major planning of the eastern offensive. The extensive preparation is clearly recognizable through the analysis of the cartographic production operated by the Italian Supreme Command between June and August 1916: during the late spring of the year the focus is entirely on the Tyrolean sector, while the Isonzo front received relatively little attention. The eastern front gained an increasing interest that concretizes in the number of maps produced by the general staff – at varying scales and levels of detail – depicting the front facing Gorizia. While in June the High Command noted that the offensive in Trentino was beginning to stall principiated the movement of troops and artillery to the Isonzo front in anticipation of the offensive. The logistical effort was enormous: more than 300.000 men, thousands of artillery pieces and innumerable quantity of ammunition and supply were moved across the internal railways and roads (Ministero della Guerra 1937). The relocation began on June 29 and continued for several weeks. The cartographic effort was not less than the logistical one: as example, a very significant map dated at the same 29 June represents the front held by the III Field Army. What is noteworthy is the unusual level of detail, previously absent for this sector of the front: troops are accurately represented down to the battalion level and the semiological representation is supplemented by a written list reporting formations available to individual divisions. More, some specifical branches of the troops – as cavalry – are reported at platoons or company levels. This accuracy in a strategical map suggests the level of focus used by the command in prevision of the great offensive.

During the same days, large-scale representations also appeared among the documents preserved in the High Command Archive: an exemplary map from June 29 at scale of 1:25.000 (the standard IGM scale, mostly used for tactical purposes) meticulously describes the area of the VI Army Corps, deployed in front of Gorizia. This map indicates the disposition of Italian formations, their positions and enemy fortifications, along with precise annotations of tactically important locations. This

reflects the intention among the Italian army to provide the most accurate information about the terrain features to the highest level of the decision-making process.

Figure 2 - Highly detailed map of the 3rd Field Army sector. June 29, 1916. (Source: ASSME, 5/137)

On the same time, the updates of the maps became more frequent: from non-existent to bi-weekly, weekly, and then daily during the offensive. This indicates an increase in the speed and volume of information flowing from the front lines up to the hierarchy to the highest ranks in the command chain. Particularly, maps depicting the movement and deployment of artillery – whose use was a decisive factor for the entire battle's success – are noteworthy. These maps, alongside those usually showing heavy artillery which normally find space in the SME archive, received an unusual increase of production in number and detail: information normally prerogative of the tactical or operational levels as position of medium and small caliber guns, trench mortars and ammunition depots are detailly reported to highest officials far away from the front. The presence of legend on the maps highlights the unusual type of information that travelled across the command chain: normally absent, the legend underlines the necessity of clarify the meaning of symbols typically unused in such context.

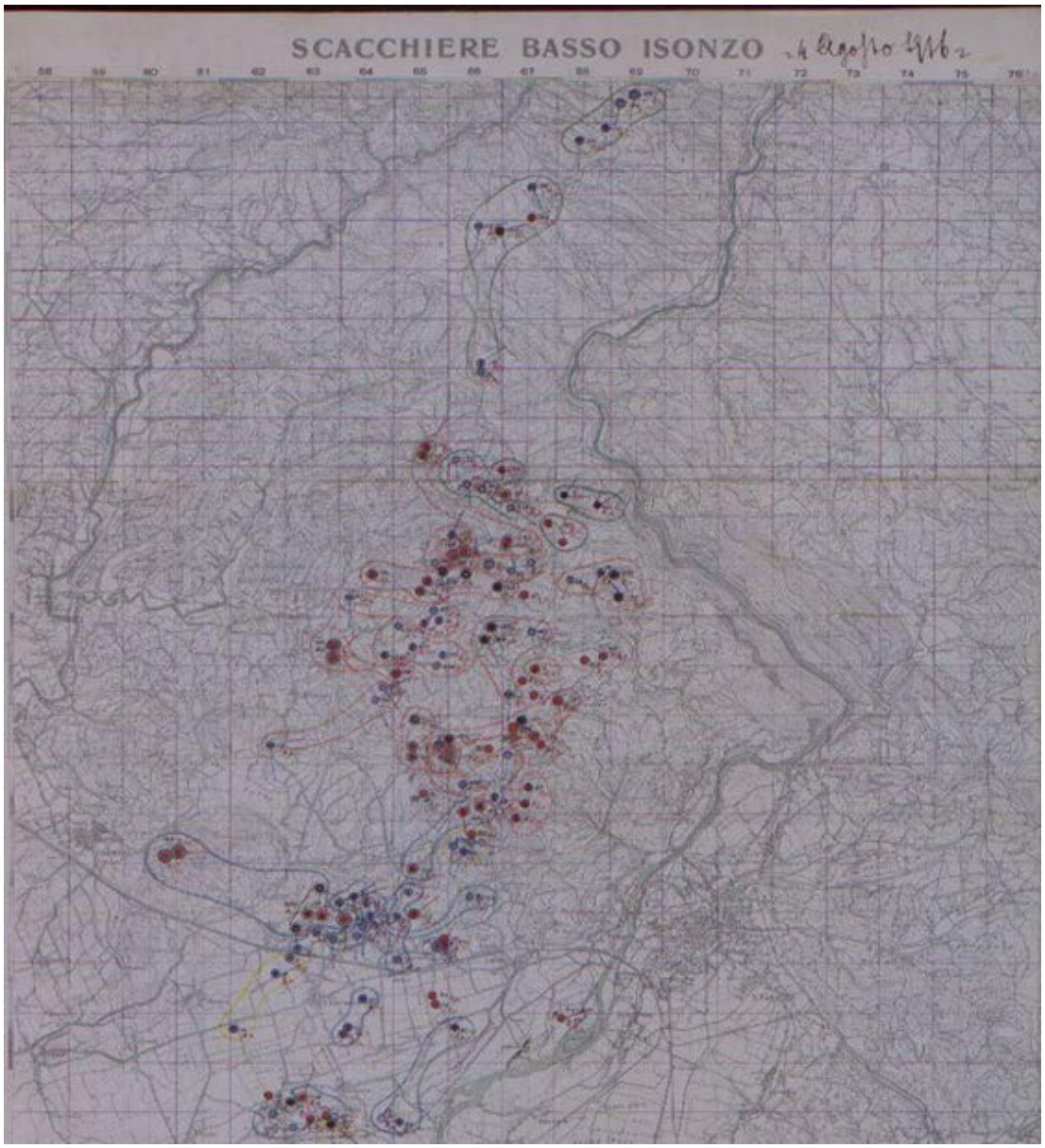

Figure 3 - A thematic map representing the artillery deployment in front of Gorizia. August 4, 1916 (detail). (Source: ASSME, 6/093)

In the preparation of the Battle of Gorizia other several types of peculiar maps were created among the Geneal Staff. Some large-scale maps represent single sectors of attack or artillery firing zone, sometimes marking the enemy positions and specifying other tactical information such as the identity of troops that will attack that specific area or the nature of batteries in charge of bombarding a specific zone.

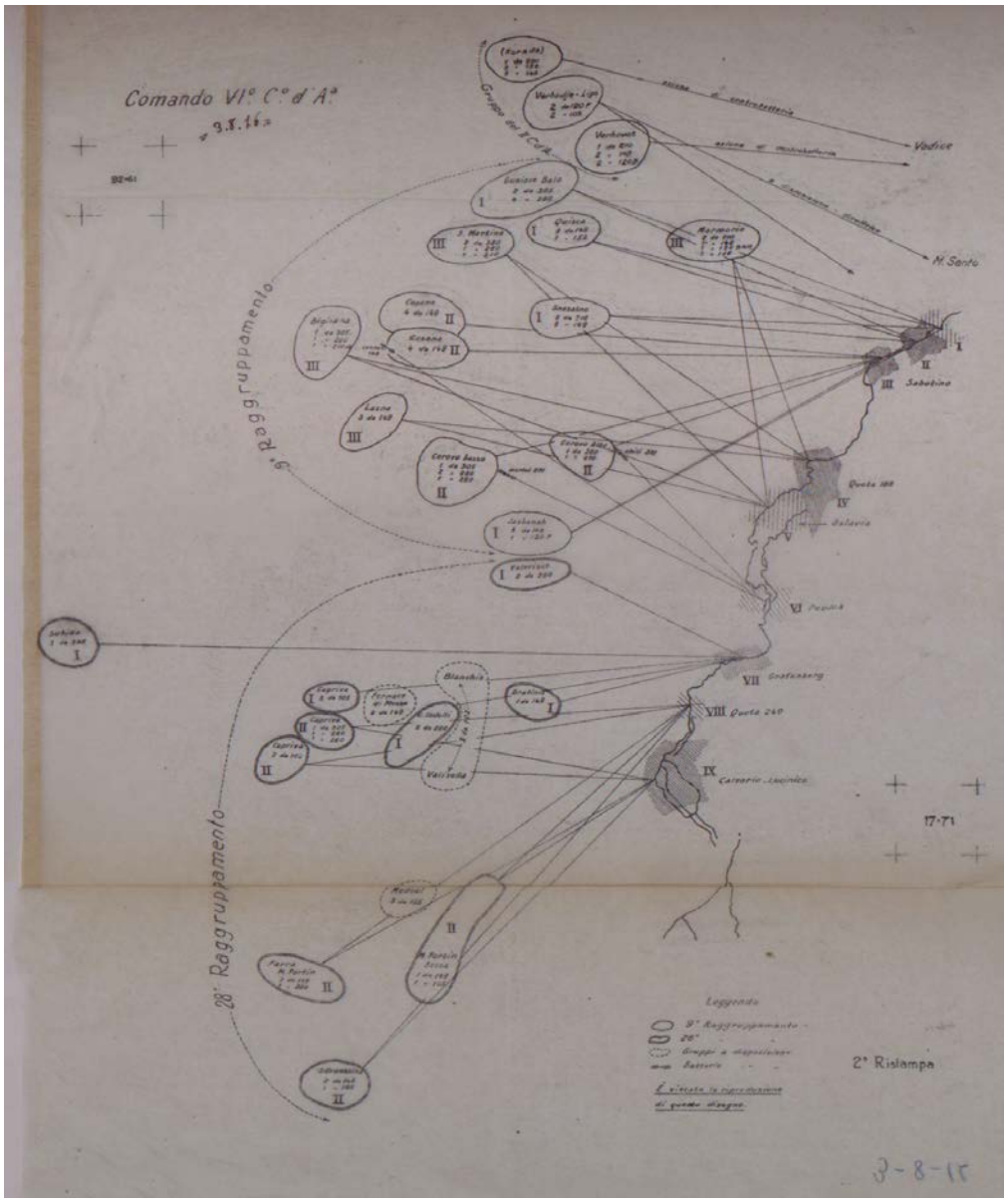

Figure 4 - Sketch depicting the bombardment planned before the assault. August 3, 1916 (detail). (ASSME, 6/091)

During the battle even other types of maps were created among the cartographic offices of Field Armie's High Command and Supreme Command: collecting information from the frontline the cartographers summed them in thematic maps, daily updating the advance of the Italian troops, the reserves arriving from the rearward to the new Gorizia frontline with a great amount of details such as marching direction, points reached, colours indicating the different formations.

3.1. Cartography and Bulletins: the information-gathering process.

The new models of cartographic production by the Supreme Command underline the question of this essay: how occurred the bidirectional information transfer between the frontline, the immediate rear, and the individual cartographic offices at various levels (Division, Field Army, High Command).

Planning was a fundamental element in the Battle of Gorizia: as previously noted, the preparation for the income of troops and material, the organisation of artillery barrages, and infantry action

played a crucial role in the Italian success against the fortified line that had resisted repeated assault for over a year.

This organisation was only possible thanks to the information gathered not only about the disposition of enemy defences but also on the movements of their reinforcements, the composition of their units (both numerical strength and ethnic majorities), their morale, and the losses suffered. Such information would normally rise up the chain of command, summarised through maps or bulletins and utilized to issue directives in the decision-making centres, from which orders would descend to smaller formations, dictating actions to the tactical scale.

Information gathering occurred through various channels: direct observation – including through cavalry patrols or aerial reconnaissance (Dai Prà E., Gabellieri N. 2020; Gabellieri 2021) -, agents in neutral countries, interception of communications or, particularly, through the capture of enemy prisoners or deserters, their interrogations and the reading of documents they carried. (Di Martino 2017)

The information collected sometimes even did not pass beyond the front line, remaining within the tactical scope of action and being used locally (Tarolli 2001); in other cases, it reached the office responsible for organizing the information and was thus compiled in two major forms of documents: cartographical production and bulletins.

It is now necessary to briefly outline the Italian organisation responsible for intelligence operation and information gathering to understand the possible ways of correlation between maps and bulletins.

The information-gathering system of the Italian army was reorganised by General in Chef Cadorna in February 1916 (Di Martino 2017): various offices worked toward the same aim of collecting information, verifying it, and providing it to the General Staff to consequently plan the conduct of operations. At the highest level of this apparatus there were two major offices: the "*Ufficio Informazioni*" (Information Office), which dealt with a network of informants, spies and trusted agents, and the "*Ufficio Situazione e Operazioni di Guerra*" (Situation and war operation Office), which was more focused in collecting all the elements related to the deployment of national and enemy forces, gathering geographical information, and know details about the organisation of Austrian army.

In 1916, the "Ufficio Situazione" was assigned by Cadorna the specific task of gathering and evaluating information in order to provide the High Command with constantly updated reports about the general balance of forces on the Austro-Italian frontline. The information, collected as depicted before, came normally from the individual CRITO units (*Centro Raccolta Informazioni Truppe Operanti*, Information Gathering Centre for Operating Troops) present in all the major units of the Army, from the Brigade to Army Corps level. These offices were tasked with obtaining information and utilising them on a dual level: on one side providing the information to higher levels of hierarchy, on the other producing a range of support materials - often cartographical products - that could be used by lower-ranking officers to plan field operations. Numerous examples of these outputs are still preserved in Italian archives (among them, were consulted documents in folder n. 20 of the Italian War Museum archive in Rovereto). These maps, primarily to a tactical scale, would merit a separate study: they provide detailed descriptions not only of enemy arrangements and the locations of bunkers, machine guns, or observation posts but also of confirmed or potential artillery concentrations, most commonly used roads in enemy rear areas, the positions of command centres, or gaps in enemy barbed wire. Such specific information was obviously too detailed for use by the supreme command and was therefore almost exclusively used among operational officers.

The information gathering by CRITOs and collected by the Ufficio Situazione did not always worked in a straightforward manner: the plurality of actors involved, the inaccuracy of the data, and the monstrous amount of documentation produced often made the process poorly organised and inefficient, resulting in many instances in a pile of intelligence material being assembled in an unsuitable manner (Colonna Vilasi, 2013).

The collection of informational bulletins issued by the Ufficio Situazione related to the period of the Battle of Gorizia represents, in addition to what has been mentioned, a primary historical source for reconstructing not only the Battle itself but also the process of information circulation from and for the frontline. Emanated almost on a daily basis, these bulletins fully depicted the situation of the opposing forces on the front held by the Italian army and provided a clear picture of the priorities and concerns of the army general staff. These documents, of varying length and composition, were an up-to-date account of the enemy forces facing the different Field Corps in the different sectors of the frontline. They mostly report the numerical strength, often expressed by battalions or brigades; alongside this information, they also include all those additional details – frequently unconfirmed or awaiting authentication – gathered from prisoners or deserters: troop composition, morale or efficiency, movements of Austrian units from a sector to another, units in reorganisation, the composition and armament of the single companies, the casualty suffered from specific formations.

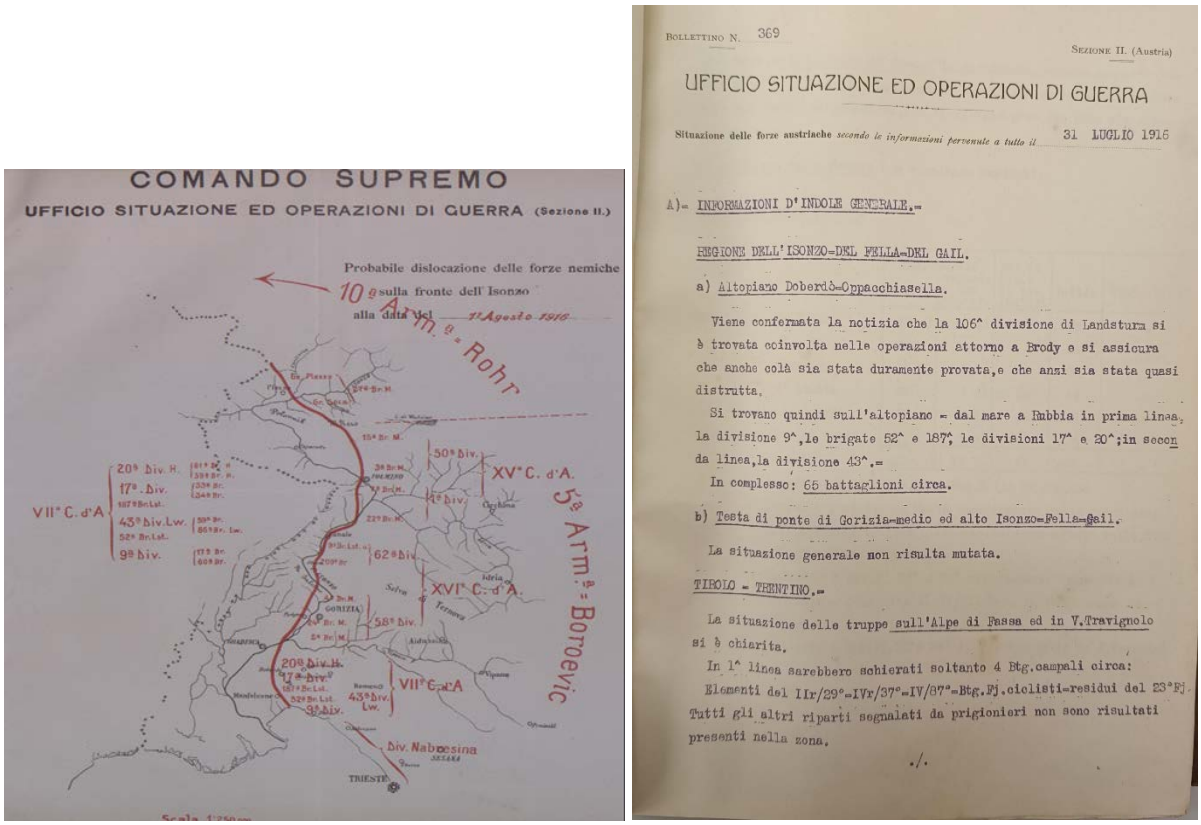

Figure 5 – A bulletin (July 31, 1916) and the map attached to it (Source: ASSME 6/087)

In addition, to the daily bulletins, a sort of graphical summary was attached approximately every fifteen days: this document, a map not to scale representing the entire Europe, is meant to give a general picture of the course of the entire war. The opposite forces (this time presented at the Division or Corps level) are noted on the individual fronts in order to provide to the High Command

a more general scheme of the war's progress. Similar to the Maps of the General Staff Archive, the bulletins in summer of 1916 present two major focuses: until June the attention was primarily concentrated on the Trentino sector, relegating the Isonzo frontline to just sporadic updates, mostly dedicated on reporting which Austrian unit were moving from that sector to support the offensive in progress. Starting from the end of June, however, the Goriza and Carso sectors began to gain increasing importance: updates became more frequent and specific even exactly noting, for instance, the individual identities of Austrian formation holding the line. As the battle approached, this operation became increasingly meticulous by analysing each subdivision of the frontline along the Isonzo river.

3.2. Interaction Between Cartography and Bulletins in the Decision-Making process

Cartography and bulletins represented two complementary tools for the transmission of information – the first in a visual manner, the second more textually – between the frontline and the commands. The interaction between the two ways of intelligence transfer became clear as the battle evolved. These two sources were used jointly to provide the highest level of decision-making with the most updated to the High Command officers and generals: consequently, the increasing focus between June and August 1916 towards the front interested by the offensive is notable in both Bulletins and High Staff Maps, notable from daily updating – even several times a day during the early days of the clash – and the more precise news reported in the documents. The process of continuous updating involving the assessment of information about both friendly and enemy troop, was crucial for maintaining a real-time view of the battlefield. The use of high-level cartography and bulletins represented the best way to provide the General Staff of a panoramic tool in order to make timely and informed decisions. The complementarity of use of these sources was highly functional: maps mainly depicted the positions and movements of friendly forces, with specific maps detailing enemy positions or fortifications, mostly on a tactical level; on the other hand, bulletins provided a continuously updated picture of status, movements and composition of Austrian troops. This combination ensured that general Staff remained well-informed about the dynamic situation occurring on the battlefield.

3.3. Examples during the Battle: Interaction between cartography and bulletins in the decision-making process during the Sixth Isonzo Battle

During the days leading up to August 1916 and throughout the battle, which lasted between August 4 and 17, the informational interaction between cartography and bulletins became more and more evident: the accumulated information and the continuous analysis allowed to constantly refine the attack plan. On the night On the night of July 31, two Italian-speaking and one Czech officer-candidates deserted to the enemy, providing not only exact positions of some enemy locations and the composition of the garrison, command posts, and the lack of reserves – an element already highlighted in the bulletins since the end of June – but also enabling the Italians to "successfully implement their carefully-laid plans; many important bastions of the defence would fall in a few hours" (Austrian Federal Ministry of the Army and War Archive 1932). In addition, in the days immediately following the initial thrust, bulletins began to include systematically various information gained from the "Numerous prisoners – officers and troops captured at the front" who "confirm the deployment" (Bulletin 7/8/1916) of previously reported units or provide new information on the composition of the Austrian forces trying to reorganize a defensive line after the

Italian attack. Simultaneously, in the archive of the Supreme Command, large-scale, highly detailed maps can be found, precisely marking the objectives captured by the Italians in their advance eastward. In these maps, formations are represented with areas for individual battalions, identified by name and a colour scheme indicating their specialty (infantry, bersaglieri, alpini). The maps are updated daily, often noting the time of the update and marking the hypothesized directions of march.

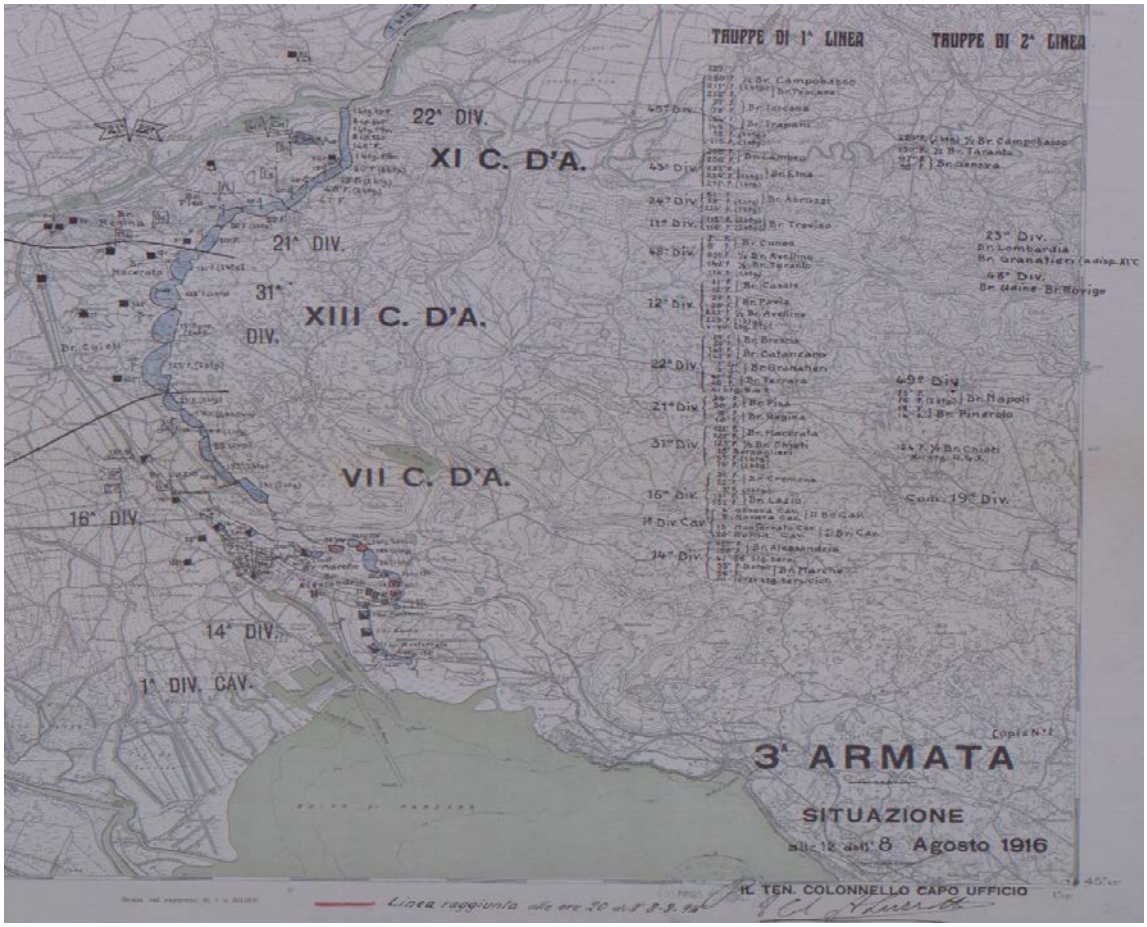

Figure 6 - The situation of the 3rd Field Army, August 8th, 1916, h. 12. (ASSME, 6/099)

During the same days, the Supreme Command issued orders pretending to gather even more information General-in-Chief Cadorna demanded that new patrols be conducted to stay in contact with the enemy. Meanwhile, the Army Corps commands reported reconnaissance operations both on the ground and from the air to discover the strength and combat readiness of enemy formations, indicating where they had advanced or been stopped by Austrian resistance (Ministero della Guerra 1937a*).* When necessary and information was scarce, the command itself requested targeted reconnaissance to confirm or refute some of the news reported in the bulletins: this was the case on August 10 when General Pecori Giraldi – serving in the Trentino area – communicated to his subordinates the order from the Supreme Command to actively conduct reconnaissance "even at the cost of some sacrifice" (Ministero della Guerra 1937a) to capture prisoners and gather information on the formations moving from the Trentino front to the Gorizia front. The previous day's bulletin reported that there was no contact with some Austrian formations and that some prisoners captured on the Gorizia front belonged to divisions that, according to Italian interests, should have been in Trentino.

4. Conclusions

The daily war bulletins issued during the Battle of Gorizia represent a primary historical source of great importance, detailing the situation of enemy forces on the Italian front. These documents not only reported the numerical strength of the opposing troops but also included additional information gathered from prisoners or deserters, such as unit composition, morale, movements of Austrian troops, and casualties suffered. “These bulletins, issued almost daily, provided an up-to-date account of the enemy forces, offering a clear picture of the priorities and concerns of the army general staff” (Di Martino, 118). Cartography and bulletins operated in a complementary manner to provide precise and updated information at the highest decision-making level. While maps visually represented the positions and movements of friendly forces, the bulletins provided a continuously updated picture of the status, movements, and composition of Austrian troops. “This combination ensured that the general staff remained well-informed about the dynamic situation on the battlefield” (Tarolli, 44). The joint use of maps and bulletins was essential for maintaining a real-time view, enabling timely and informed decisions. The interaction between bulletins and cartography was particularly evident at the tactical level, where detailed information was necessary for immediate battlefield decisions. However, in the high-level cartographic production, while complementary, the two tools did not integrate as closely. At the supreme command level, the primary focus was on monitoring the positions of national troops and the progress made, rather than the precise location of enemy trenches. “Maps mainly depicted the positions and movements of friendly forces, while bulletins provided details about enemy forces” (Vilasi, 61).
A common element in both documentary sources was the frequency of updates and the level of detail. The bulletins were updated daily, often including unconfirmed or pending information. Similarly, maps were frequently updated, sometimes several times a day, to reflect the latest available information. “This continuous updating process was essential for keeping the general staff well-informed about the dynamic situation on the battlefield” (Tarolli, 30).

4.1. Future perspectives

The analysis of war bulletins and cartographic production during the Battle of Gorizia underscores the critical role of detailed and continuous information gathering in military strategy. This approach not only enabled the Italian High Command to make informed decisions but also demonstrated the importance of integrating various sources of intelligence. Future research can extend this methodology to other contexts, both within the Great War and in other conflicts, to understand how different armies utilized intelligence and cartography to their advantage. For instance, similar studies could be conducted on the Western Front, examining the interplay between reconnaissance reports, captured enemy documents, and the resulting tactical maps to provide a comprehensive picture of the decision-making processes in those theaters. The potential methodological developments in military history and historical cartography are vast. By employing advanced GIS technologies and digital archiving, researchers can create dynamic maps that integrate data from various sources, offering a multi-dimensional view of historical battles. This approach allows for a more nuanced understanding of how information flow influenced military strategies and outcomes. As stated, “Without this meticulous and patient work of cartographic calculation, and without an accurate and detailed preparation of observation and communication services, we cannot hope to achieve the maximum efficiency of the means at our disposal,” the future of military historical research will benefit significantly from these detailed studies (Tarolli, 30).

Moreover, applying these methodologies to other wars, both before and after the Great War, can provide valuable insights into the evolution of military intelligence and cartography. For example, examining the American Civil War, the Napoleonic Wars, or World War II through the lens of cartographic and bulletin analysis can reveal the continuity and changes in military strategy over time. This broader application not only enriches our understanding of specific conflicts but also contributes to the general field of military history, highlighting the enduring importance of detailed planning and information gathering in warfare.

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