Caught between the Lines

Cartographic Narratives of the Palestinian village of Dayr Ayyub from the First World War to the Present

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This article explores the history of visual representation of the destroyed Palestinian village of Dayr Ayyub by analyzing its spatial domain through the reading of selected maps and aerial photographs for Palestine since World War I. It investigates the interdependent relationship between cartography and the rural landscape transformation caused mainly by colonial actions (military or administration). Maps are investigated as an active agent of transformation rather than passive spatial representation of reality and related changes. “Map” here is an integral part of a political process that embeds power relations not only in the form of monopolizing the power of production and use of maps, but also in the form of knowledge production, described by John Harley as “the way in which the exercise of power structures the content of maps.”1 This article also attempts to utilize iconology interpretation of images by decoding the messages sent and received through Dayr Ayyub’s representation on maps and aerial photography, as both an image of the village space and as an archival document. Tracing the cycles of radical reduction and expansion of Dayr Ayyub’s representation on maps allows an analysis of the role and message communicated by the elements of each photo and map starting from the Oriental imagination of pre-WWI maps, the surveillance of war maps and photography, the control and discipline of British Mandate maps, the manipulative cartography of negotiation for drawing and crystalizing the 1949 Armistice line, and finally, the geographical colonial hegemony of topographical Israeli maps.
The selection of Dayr Ayyub as an area of investigation was based on its geographic location and related historic events. Dayr Ayyub has frequently been a turning point in many realms. It is located where the last stretches of the Palestinian coastal plains meet the central highlands within a central location, along the Jaffa-Jerusalem road at Bab al-Wad; at a change point in land topography and in agricultural cover between the plains and the mountains; a frontier in the local struggle against several colonial projects that led to the destruction of the village on several occasions; a border line where colonial land settlement stopped favoring plains over mountains; an advance frontier border between 1949–67; part of the border itself by falling inside the no man’s lands established in 1949; and later pushed gradually into the “green buffer zones” of natural parks and forests as a last colonial attempt to nullify the Palestinian rural presence and landscape in such critical geography. The process of violent transformation imposed on this geographical spot represents an important story of erasure and transformation of the rural Palestine in the last one hundred years, and which needs closer investigation.

The Village: A Brief History

The village of Dayr Ayyub was located approximately twenty-four kilometers to the west of Jerusalem, and almost 325 meters above sea level. In 1948 the population of Dayr Ayyub was 371.² The village was located on a low hill at the western edge of the Jerusalem mountains. This distinctive location offered a great variety of land topography, vegetation cover, and agricultural activities in a relatively small-scale village. The southern part along the main Jaffa-Jerusalem road (with adjacent narrow valleys to the west and the east) were fertile plains suitable for planting crops such as wheat. The elevated plain to the north of the core was comprised of orchards (hawakir). The surrounding mountains to the east and south east (Safhat Wad ‘Ali, al-Habta, and Bab al-Wad area, and another mountain to the northwest) were rocky with less vegetation cover and probably used for seasonal grazing before being partially transformed into forest from 1927 by the British afforestation policy.

The village was located on a strategic hill less than five hundred meters north of the main Jaffa-Jerusalem road, and less than one kilometer from Bab al-Wad, where the road starts to penetrate the mountains ascending towards Jerusalem. This strategic location between the Latrun hill and Bab al-Wad put the village within the frontier of a number of wars and campaigns to capture Jerusalem throughout history. Every foreign army approaching Jerusalem from the west had to pass through this strategic gate or region and therefore had to control this strategic transportation node. Successive military campaigns left devastating effects on the village of Dayr Ayyub, destroying village houses and killing inhabitants, not to mention ruining the landscape and agricultural production. In 1834, when Palestinians began a revolution against Ibrahim Pasha, the Egyptian ruler, the village and the Latrun castle were demolished and the surviving inhabitants pushed to temporarily leave their homes. They resettled
in 1853 after a long dispute between the Dayr Ayyub inhabitants, and Ibrahim Pasha’s alliance with the Abu Ghosh tribe.³

In 1917, the village was temporarily vacated during the British forces’ advance towards Jerusalem.⁴ In 1938, British forces demolished a significant number of village homes as a collective punishment measure during the 1936 revolt.⁵ During the 1948 war, the village suffered a series of direct military offensive attacks from Israeli forces which gradually pushed inhabitants to leave their homes. In 1949, the village core fell within no man’s land. After the 1967 war and Israel’s occupation of the West Bank, the Israeli army destroyed the remaining villages located in the Latrun area, and in 1973 Canada Park was established mainly on land belonging to ‘Imwas and Yalu villages and partially to Dayr Ayyub, including the village core and significant expanses of landscape surrounding the village.

The Early Visual Representations and Descriptions of Dayr Ayyub

For many centuries Palestine and its geography had captured the interest of many travelers, archaeologists and scholars who had produced enormous amount of texts, drawings, maps, and other visual representations. Those materials produced were an attempt to capture not only the geography but also the history of the land with a focus on the biblical historical geography. Few descriptions of Dayr Ayyub could be found in the accounts by travelers in the nineteenth century or earlier. Several western travelers had mentioned the Bab al-Wad area (especially the caravanserai) or briefly described the landscape when passing Bab al-Wad. The descriptions had focused on the moment of dramatic change from the fertile plain region to the rocky mountains, or vice versa. One of the early brief descriptions found was written by William Lynch, the head of the famous United States expedition to the river Jordan and the Dead Sea (1849).⁶ While travelling from Jerusalem to Jaffa, Lynch described Wadi ‘Ali, the olive grove near Saris village, and vegetation in the ravine, and also commented on “the high state of cultivation” after he left Jerusalem and travelled west, specifically mentioning the grazing and cultivation activities in the area of Dayr Ayyub.

In Survey of Western Palestine, Dayr Ayyub was described briefly as “a very small hamlet”⁷ on the Jaffa-Jerusalem road. On the Palestine Exploration Fund map, Dayr Ayyub appeared as a small blob with no details. Archaeological sites, water resources, and roads appeared on the map but there were no details about the landscape features or agricultural activities. This representation in nineteenth century maps of rural Palestinian settlements was typical among most of the maps produced at that time,⁸ such as the Van de Velde map (1858) and the Zimmermann map (1850). Neither the scale nor the mandate of such cartographic missions exceed the minimal visual representation of the modern Palestinian rural villages, which could be summarized as a dot on the Holy Land geography, unless biblical history or interest surfaced.
WWI Maps and Aerial Photography

From the time of Napoleon’s campaign in Palestine in 1799, more technical and detailed maps for Palestine began to be produced driven by various motivations such as military campaigns (Jacotin map, prepared in 1799 and published in 1826), or scientific missions such as archaeology (Palestine Exploration Fund maps, the United States expedition of 1848, or the Newcombe map for southern Palestine in 1914). One could argue that the last three maps were produced for military or intelligence purposes under the cover of archaeology, but the direct intelligence and military goals in the Newcombe map were the sharpest. In addition, a rapid analysis of the pre-WWI maps of Palestine illustrates that imperial power and motivation were embedded in those maps regardless of the level of technical advancement, modern representation, realistic or imaginary depiction of the geographical features, or the purpose of making them. Both historical fantasies of reconstructing biblical geography maps, and realistic documentation of settlements and archaeological ruins maps, served the colonial agenda to a certain extent as observed by John Harley: “Maps were used in colonial promotion, and lands claimed on paper before they were effectively occupied.”

A radical shift in cartography occurred during the First World War. The 1915–18 Sinai and Palestine campaign required detailed geographic features (the terrain, landscape...
features, strategic hills, and water resources) to serve military activities such as locating enemy lines, trenches or even troop positions. These needs compelled both armies (British on one side, Ottomans and Germans on the other) to produce a new type of dynamic mapping that captured the rapidly changing status of the war theater in such foreign terrain.

Dayr Ayyub Village on the WWI Map

The nature of the military field operations reached highly populated areas in Palestine, and dictated the use of a new scale of maps with relevant visual representation. The British produced detailed maps of 1:40,000 and 1:20,000 while also updating the already existing Survey of Western Palestine map scale of 1:63,360 and Newcombe’s map scale of 1:125,000. The Ottomans were already busy with the survey initiative they had begun in 1909 and managed to partially finish several maps of a scale of 1:200,000 (for example, Jerusalem area and Nablus area) covering some areas in Palestine by 1917 before they retreated and were pushed out of Palestine by the British at the end of 1918. The Germans produced a number of regional maps of a scale of 1:250,000, but the most detailed ones were produced in 1917–18 of a scale of 1:50,000 and 1:25,000, mainly for the central part of Palestine. Both sides undertook intensive aerial photography activities for reconnaissance and map preparation in the region.

One could argue about the importance of WWI maps and the valuable historic information they demonstrated about Palestinian geography, landscape, and settlements. Nevertheless, one can also critically analyze the maps and examine their value and limitations. First of all, it must be acknowledged that these maps were produced mainly for one purpose: military operations. Consequently, they employed a straightforward, selective, minimal representation of reality for the conduct of military tasks on both the planning and operation levels.

As a preliminary attempt to analyze the cartography of such maps, I chose to examine the British 1:40,000 map of the Latrun area, which includes Dayr Ayyub village. Produced in 1918 (after the capturing of Jerusalem) and reprinted in 1919, the map of Latrun illustrates a distinctive representation of the Palestinian geography in a very particular hierarchy. The human settlements were represented as nodes of solid black blobs connected to a web of roads and transportation routes. Dayr Ayyub, among other villages, was represented only with an undetailed solid black blob (polygon) due to the small-sized core and marginal location.

The most dominant layer on these maps was the transportation network indicating different types and grades for the movement of artillery. The main Jaffa-Jerusalem road appeared as a dominant element on the map; details of the distance marking each kilometer were added along the route. This web was placed carefully on a well-carved terrain represented by detailed contour lines, mountain summits (with altitudes), detailed webs of valleys (wadis), water resources, and ruins. No details about agricultural land or vegetation cover were available, except for selected tree groups for obvious military reasons.

The most distinctive feature of these maps is the military grid imposed over all the other elements of cartography, which sliced and contained the nature and landscape of Palestine.
in a multilayered dividing grid. Moreover, the exaggerated grid numbering and lettering shows again the dominance of the military grid over geography through the size and position of those numbers and letters, in comparison to the naming and lettering of geographical features. Within such a grid system each natural feature and geographical location was positioned and indexed within a system of reference.

The military grid resembled a classic case of power exercised over geography through cartography. Here army troops dominate the geography by being able to navigate the terrain through relating their position to any target or landscape feature by simple orientation and distance calculation. One can also add a third dimension to this map navigation by calculating the difference in altitude by using the contour lines and mountain summit altitudes.

In short, this map served as an illustration for the war theater where villages resembled a spot either to capture or to pass by along the main army advancement plan. One could argue that the added value of those maps on the village level, if compared to the 1880 (printed) Palestine Exploration Fund survey of western Palestine maps, is minimal. Nevertheless, the British WWI map had more detailed contour lines and updated geographic features such as new roads and village built up areas. But what is the distinctive feature of those maps is the power embedded in the visual message it communicates, on the symbolic level, regarding the hierarchy of representation of the geographic and cartographic symbols, in addition to those elements that were marginalized, such as rural landscape and landcover.

Figure 2: Seventh Field Survey Company R.E.E.F, Latrun (B.4) Map, 1st edition provisional 1:40,000, showing “Deir Eyub” and surroundings, 1918 and reprinted in 1919 by the Survey of Egypt (adapted and cropped), National Library of Israel.
The WWI Aerial Photography

Similar to WWI maps, aerial photography produced during the war focused primarily on the same elements – the main artillery routes and military targets – while Palestinian landscape and villages remained in the background. A rapid analysis of any WWI reconnaissance aerial photo shows either the main transport route or army camp or convoy at the center of the frame. Villages or landscape features would appear as a reference point in the frame or background. Nevertheless, the reconnaissance nature gave them another interesting feature. One can find several photos for the same areas during different times of the week, month or even the year. Comparing the aerial photos from different time periods can offer a deeper analysis than looking at one standard aerial photo taken for mapping purposes.

Despite the scarcity in numbers and unsystematic cover of the Palestinian geography in the WWI aerial photography, Dayr Ayyub received considerable coverage. Directly after the capture of Jerusalem by the British, the Bavarian Squadron 304 began reconnaissance missions behind the enemy lines. One of the areas observed was the strategic route between Jerusalem and Jaffa with intense focus on the Latrun area, including Dayr Ayyub and Bab al-Wad. Crosschecking with the written record about the advancement of British forces shows that the British XX Army Corps headquarters was established in Latrun by 28 November 1917. Troops and army divisions had to pass the area while advancing towards Jerusalem. Several photos were taken by the Bavarian Squadron between November 1917 and August 1918 mainly to gather information about the British troops in the Latrun area.

In contrast to the previous mentioned maps, the Bavarian aerial photography transformed Dayr Ayyub from a point, a hollow circle or solid black box on the previous maps, to an area open for investigation and interpretation. The first encounter between the researcher and this visual aerial representation of the Dayr Ayyub village has its own magic. A typical structure of a Palestinian village at the turn of the twentieth century appeared; the small built up area takes the shape of a crescent surrounded by the agricultural fields. The photos show the plains to the south of the core next to the Jaffa-Jerusalem road, and the adjacent fields to the north and northwest. The most prominent feature of the typographic representation is the rocky hills to the far east in the Bab Wadi ‘Ali (Bab al-Wad) area with plantation pockets around the caravanserais. Main roads and minor dirt roads heading to the village fields and to the adjacent villages are also visible.
Figures. 3–6. Aerial photographs taken by Bavarian Squadron 304, showing Dayr Ayyub and surroundings over several seasons during 1917–18, December 1917, May and July 1918 (adapted, cropped), Bavarian State Archives, online at (gda.bayern.de) tinyurl.com/wdsqpek (accessed 7 March 2020).

Adding the time dimension to the analysis gives new insights. By tracing the aerial photography of the village between November 1917 to August 1918, one realizes that those flat, arid-like areas along the main road south of the village in December have transformed into plots of narrow agricultural strips (mawaris) during the spring and summer season with several vegetation covers. It is surprising how much arid land, seen as light grey patches on the photo, were later transformed into agricultural fields. The grey areas changed into a mosaic of dark and light grey patches indicate the likely existence of heavy agriculture activities even during the war period, an obvious conclusion for anyone with minimal field experience about the Dayr Ayyub landscape. Nevertheless, one must bear in mind the limitation of expanding the exclusive use of such representation to draw conclusions about the state of land cover or vegetation.

World War I aerial photography may seem a neutral mechanical direct visual record for terrain and landscape, avoiding the selective nature of map representation. However, it is neither neutral nor subjective since it is open for interpretation, or even manipulation, as any other medium or archival material. I
will analyze one dimension of interpretation based on the locality type (urban or rural) subjected to the aerial photography exercise. In the urban and built up areas, the level of subjective interpretation could be minimized due to the intensity and close up nature of the photography. In addition, the plastic nature of the urban fabric elements such as buildings, city walls, routes, and landmarks make them easy to distinguish from above. Thus, aerial photography could be a useful tool to analyze urban characteristics or the development of cities such as Jerusalem, Jaffa or Gaza, especially when compared with other aerial photographs from an earlier or later era. The level of objective interpretation is questionable when researchers apply this to rural areas and open landscapes. Here a snapshot of rural landscape would give an idea about the plastic elements of the village structure such as built up area, transportation routes, and orchards to some extent. The interpretation becomes more subjective based on the reader’s agenda and cultural reference when observing an open, changing landscape and agricultural fields comprising most of the spatial domain of the rural landscape.

Applying this to Dayr Ayyub, Bab al-Wad, and the adjacent vicinity, researchers and scholars used photographs, including aerial photography, isolated from other archival documents or oral history, as material for arriving at rapid assessments about the degree to which the land was arable.

Some rudimentary readings were made for the rocky mountainous areas regardless of the limitation of such a medium, such as Benjamin Kedar’s description of the “barren mountains” near Abu Ghosh and Saris that were transformed later to woodlands. Here, flat grey areas apparently without trees meant to the authors barren areas, neither seasonal grazing areas nor agricultural terraces.

Freezing the condition of the land to the moment when the photo was taken is quite misleading. One needs to impose additional layers from different sources such as the historic socioeconomic layer, episodes of dramatic ecological changes, or natural disaster events such as the several episodes of drought at the turn of the twentieth century, the locust plague in 1915, and the devastating damage to vegetation cover and livestock during World War I. The use of one type of vegetation such as trees as the exclusive sign for fertility is quite surprising in reading such historic aerial photography, since the existence of other types of vegetation such as vegetables and crops is difficult to interpret by one visual snapshot of aerial photograph or panorama.

This selective use of distinctive green cover illustrates a subjective interpretation based on a broader cultural reference or even colonial reference and definition for what can be arable or fertile landscape based on an imaginary Oriental image of how Holy Land fertility should look. Such an interpretation for the historical Palestinian landscape is a continuation or simulation of the old-fashioned Oriental selective description of the Palestinian landscape and the level of degradation before the colonial power arrived and began the recovery process by afforestation and other polices. This argument was utilized often as a moral justification for colonial activities and presence. The British high commissioner
Herbert Samuel’s first report vividly showed such an attitude when he described the degraded status of the Palestinian landscape and “the need for development and ecological restoration.” On one hand, such selective interpretation highlights the constructed colonial landscape and narrative. On the other hand, it silenced the Palestinian rural landscape narrative and features such as crops, vegetables or grazing fields due to the limitation of the aerial photography presentation.

**British Cartography and Aerial Photography**

World War I aerial photography expanded the village visual representation beyond a dot on the map to an area on the surface of a photograph for army personnel or researchers. At the same time, rural inhabitants remained invisible in those representations, nor did they have any contact or knowledge about such maps or photographs. They were not in need for such secret military tools in order to discover their village, navigate the familiar terrain or travel to other localities. The first radical encounter for the rural inhabitants with the cartographic exercise, as a systematic exercise of colonial power, was during the British Mandate when the British authorities began surveying Palestine to produce cadastral maps among other types needed for civil administration.

As a modern colonial regime with its own goals, in addition to the burden of the Balfour Declaration to support the establishment of a “national home for the Jewish people” in Palestine, it came as no surprise that the British utilized modern science including cartography as a tool for control and discipline. To achieve such goals, British conducted a massive multidimensional exercise of colonial knowledge where, for Palestine, land was at the core. This stretched from structural change (institutional, laws, and policies) to implementing infrastructure projects, to finally designing and implementing land settlement and survey projects. One can argue this was not only a routine colonial exercise implemented in similar colonies to control the indigenous population, but also a special one aimed also at managing the future transformation of the country. Land settlement was the first aim of the survey exercise. Thus, the program of the Survey of Palestine Department was directed toward land survey since it began in 1920, only a few months after the San Remo conference and the transformation of the military government into a “civil administration” of the British Mandate.

Here we focus on one basic map type, the village map scale 1:10,000, in relation to the village transformations during the Mandate, in order to read how this selective representation produced its impact on village structure, village economy, and afforestation initiatives.

The map selected for analysis is “the village map” using the 1:10,000 fiscal/cadastral map of Dayr Ayyub. This type of map had been produced for almost all localities in Palestine between 1928–34. Those maps had served two conflicting objectives: first, to serve as a base map for the rural taxation system
through defining fiscal blocks; and second, to serve loosely as the base map for the next cadastral exercise of land settlement for each cadastral block and parcel in the village. In the case of Dayr Ayyub, a rapid analysis of this map gives us crucial information about the status of land type *masha‘* (communal ownership, subject to periodic distribution among villagers) or *mafruz* (permanent individual ownership, also surveyed), built up area size and shape, status of adjacent orchards (*hawakir*), the status of cultivated land (type of cultivation, degree of cultivation, and percentages), as well as the status of uncultivated lands, rocky areas, and forests.

Figure 7. *Survey of Palestine*, village map 1:10,000 for Dayr Ayyub, Institute for Palestine Studies Archive.
Figure 8. Survey of Palestine, village map 1:10,000 for “Deir ‘Aiyub,” land use details (edited), Institute for Palestine Studies Archive.

This map constitutes one of the early visual representations of the village not only as a spatial unit with spatial hierarchy, but also as an economic unit through which the agricultural land and activities were surveyed by recording related features. This mapping exercise needed to cut the village into blocks and additional subdivisions that exhibited similar physical or fiscal features. This cartographic exercise was both a spatial and structural control mechanism of the village by a specific system of representation. A spatial subjugation and control were enforced on the village space through the visual hierarchical representation of the village: village border delineation, fiscal blocks, categorization of natural and man-made features, standardization of names (areas, localities and natural features), the use of trilingual toponomy, and the like. This was all enclosed within a number of corner lines that resemble the minimal presence of the national coordination grid to situate this floating geography of the village within the national space. In addition, trigonometrical points exist within the village to help the mission.

A structural economic subjugation of the village agricultural activities to the colonial regime was applied by surveying agricultural activities in each block or sub blocks. In each block, the surveyor calculated the percentage of cultivated lands to uncultivated ones, the type of agriculture products and shares, and the type of land holdings (masha’ or mafruz). Colonial authorities not only provided information on
the vegetation cover, the condition of land surfaces, and property borders, but also assessed the tax for each plot – thus, building a “scientific” modern spatial image about this “pre-modern” economic unit supported the knowledge production about the colonized subject population.

All of this information was enclosed in the delineation of the village border, which proved to be useful on the national level for building the 1:250,000 index of villages and settlement maps, where the whole fluid geography of Palestine was divided into a definite number of enclosed shapes of localities as socioeconomic units. This index map was used numerous times to present national information (such as mapping waste land, forests, land ownership types, and progress of land settlement) spatially and know immediately the implication on the locality level. This village border closed shape had parallel attributes to the military grid of WWI maps regarding discipline, control, and surveillance. The military grid’s squares were transformed to irregular defined closed shapes that fit better for complex colonial administrative control over inhabitants, economic activities, and property.

The cadastral part of this exercise can be summarized, as Linda Quiquivix explained, as the enforcement of “a property mapping regime to replace local practices that negotiated borders and land use, shifting power from peasants to colonial institutions.” However, land settlement until 1948 did not cover Dayr Ayyub land. The land settlement process stopped at the adjacent village of Latrun, reflecting the British priority of surveying the coastal plain where Jewish interests in land purchase prevailed in contrast to the mountainous area. Thus, no final detailed cadastral maps were produced for the land of Dayr Ayyub.

Figure 9. Survey of Palestine, index of villages and settlement, map 1:250,000, progress of land settlement in 1947, National Library of Israel.
Another feature to analyze is the presence of the state domain in the form of the closed forest reserve in the Bab al-Wad area. This presence of the state domain within the village boundary in the shape of a closed forest was something odd for the traditional village structure. The forest resembles the colonial policy of afforestation in Palestine during the British Mandate period. The Bab al-Wad forest was declared as closed forest reserve in 1927 only one year after the forest ordinance was issued in 1926. This forest, in addition to Dayr Aban and Dayr al-Hawa forests, was the beginning of the long-term afforestation effort begun during the British Mandate and advanced by Israeli efforts after 1948 for the whole region west of Jerusalem on the ruins of many Palestinian destroyed villages and landscapes.

The forest had a distinctive story: it was declared in the official gazette in 1927 without a map, and with the “vaguest of boundaries” possible. The British authorities used a verbal description for borders similar to those used by the local vernacular description system for their intimate geography. Also, they used the local vocabulary and local Arabic names for the natural features. The area was declared vaguely with a rough estimated area of 2,000 dunums and unclear borders, according to British modern standards. No clear specific scientific criteria or justification was attached to the declaration. According to the available material about the British policy of afforestation, forests were usually claimed to be established over uncultivatable land, assuming it to be waste land.
Was this declared area a rocky mountainous wasteland? The available maps and official documents could not answer this question directly. This needs further investigation beyond the mandate of this paper. Nevertheless, one could go beyond the rapid impression judgment of an outsider and conclude that the area was “barren mountains,” similar to what Benjamin Kedar stated about an adjacent vicinity.

A preliminary analysis of the Dayr Ayyub village structure and economic life, such as the local names for the natural and geographic features, and the oral history about the village’s pastoral economy, would reveal the traces of another layer of the landscape that disappeared in, or before, the map-making process: the grazing lands (permanent and seasonal). This could be supported also by preliminary archival research about grazing, cultivating, and land ownership disputes with the government on parts of forest land. Several cases of dispute and land claim occurred in Dayr Ayyub, Saris, and Bayt Mahsir regarding agricultural activities inside the forest boundary. At this stage one could not draw decisive conclusions about the whole forest area, whether it had been cultivated or used extensively for grazing before, but one could at least argue that the colonial normalization which was presented later on the village map, of around 1,500 dunums – as one area with one land cover and one land use – appears alien to the complex and micro-managed traditional system of land use in Palestinian village life.

This representation of the forest sends contradictory messages: a new alienated space, the government forest, that had little to do with the village hierarchy, economy, control or structure imposed by colonial policy to realize an imaginary colonial vision of the Palestinian landscape. However, it still appeared within the village administrative boundaries, and carried the local geographical names assigned by villagers for many generations. Moreover, this map shows that the afforestation policy attempted to bring a new large owner to the village: the state. In the case of Dayr Ayyub the land settlement survey had not been conducted; thus, land ownership did not yet take that last shape on cadastral maps and deeds. On the archival level, this visual presence of the forest on the first detailed map of the village, without the existence of preceding versions, would help to silence claims of prior use of land and would enforce the colonial narrative of the history of the Palestinian landscape, especially on the grey areas. This argument may highlight the need for future spatial research about the hostility of the colonial regimes to the common usage of masha‘ land, especially grazing, communal ownership, and state land acquisition through afforestation.

The declared (by written order) closed forest was translated directly onto the real physical terrain before being added to the official cadastral maps, waiting for land settlement and cartography to catch up later. This unusual reverse process shows the urgency and priority given to such colonial national projects such as afforestation and related state domain controversies. At the same time, it does not address the urgent needs of the local rural Palestinian community such as services (electricity, roads, and schools) and agricultural development (enhanced product marketing, better access to credit).
Caught between the Armistice Lines (1948–49)

During 1947–49, Dayr Ayyub was caught at one of the most critical fronts of the 1948 war, in the midst of the Zionist offensive to establish geographical continuity between the coastal plains and Jerusalem, through a continuous rural Palestinian landscape, with scattered Jewish colonies. The whole area was militarily contested, especially the narrow Bab al-Wad ravine that proved its strategic importance in controlling the road, where Palestinian and Arab fighters succeeded in cutting Jewish supply lines between Jerusalem and the coast. The village and its inhabitants suffered numerous attacks from British and Jewish forces, including the bombardment of houses. Similar to WWI, the inhabitants were forced to leave the village core many times, traveling back and forth, until they were eventually pushed out.28

On 3 April 1949, the Israel-Jordan Armistice Agreement was signed which included delineation of the Armistice line. No man’s land was established to include the Jaffa-Jerusalem road and the surrounding valley, but strangely enough it included the Dayr Ayyub village core as well. Villagers of Dayr Ayyub found themselves in very peculiar situation. According to the agreement maps, their village built up area fell inside no man’s land, in other words they were caught in a new map between the two lines.29
Again, in the war aftermath and in truce negotiations the village’s spatial structure had been drastically reduced to a spot on the map similar to that established during WWI. Instead of the grid that had been imposed over all the layers in WWI, here it seems the demarcation of the snake-like Armistice line that went through several complex phases of negotiation and cartography reproduction was the main factor deciding the demise of this rural landscape.

We have little information about the process of negotiations leading to the establishment of no man’s land in this particular area, or the reason why it took this shape, why it was erased in other areas but maintained here, or how each side determined its claim to holding territory and calculated the continuous line on the map along its holding, bearing in mind the impossibility of troops existing at each point, meter or feature along the imaginary lines drawn on the maps. In addition, due to the nature of battle, there will always be grey areas, or buffer zones, between the fighting parties, so how those areas were negotiated and reduced to lines on the map to become the cease-fire line needs further investigation. Usually such delineation was done first on a map as a cartographic exercise during negotiations based on preliminary information from the field about military holdings. This task, however, is usually subject to power relations on the ground, political and technical manipulation, and knowledge about the real terrain that maps present or hide.

We know from several sources about the use of maps during the negotiations, agreements, and demarcation on the ground, several map types and scales were used – 1:250,000, 1:100,000, 1:25,000 and 1:20,000. The signed agreement used an attached map of 1:250,000. The map scale and the nature of the imposed hand-drawn thick green and red lines (rough-shaped and an over-exaggerated thick drawing style), and the path, illustrates that truce negotiations had to be rapidly prepared to bring the fighting to an end. This artificially rapid open-ended result of the cease-fire implied that another cartographic negotiation-manipulation event began when translating the Armistice line from one scale to another, in addition to the on-site demarcation and interpretation. The Israel State Archives published a low resolution partial topographic map scale of 1:100,000 apparently used in the secret negotiations in early 1949. The interesting fact is that while those multiple negotiation lines were straight lines drawn between strategic points, they may in fact be military posts, mountain summits or random dots to calculate area. Those alien dots along the thick lines equal the size of the villages on such maps. This negotiation process using such maps (scale 1:100,000), reduced Palestinian villages again to solid dots on the map equal to the size of those imaginary dots, and where village life, fields or spatial domain could not be represented on such a map, consequently, they were ignored. In those cases, the scale of the map and the nature of representation played the role...
of marginalizing the Palestinian rural area and interests. This issue became clear (and problematic) when the troops tried to demarcate the lines on the ground in several cases.34

The aftermath of this cartographic exercise regarding Dayr Ayyub was catastrophic, shattering the whole village structure. According to the *Atlas of Palestine*: 28.2 percent of the village land including the forest fell on the Israeli side; 63.4 percent, including the village built up area, fell into the no man’s land; and the remaining 8.4 percent fell in the Arab side which was in practice an advance frontier.35 In reality, what had been imposed by the Israelis through the fight was endorsed by the no man’s land scheme. Dayr Ayyub villagers could no longer live in the village as it was before the war. By this arrangement, Israel ensured that no Palestinian-inhabited village overlooks this strategic valley, the Bab al-Wad junction, and the main Jaffa Jerusalem road.36

Figure 12. *Survey of Palestine* topographic map 1:100,000 with a different delineation of the Armistice line added during the 1949 negotiations, Israel State Archives, online at (archives.gov.il) tinyurl.com/wk457ga (accessed 9 March 2020).
Figure 13. *Survey of Palestine* 1:250,000 map showing the Armistice line; “Maps Delineating Armistice Demarcation Lines,” online at (unispal.un.org) tinyurl.com/y59g766g (accessed 9 March 2020).
The Diminishing Armistice Line: The Israeli Topographic Map

The 1967 war caused additional devastating consequences on the Latrun area. Directly after the occupation of the area, the Israeli army expelled the inhabitants of the three remaining villages of Latrun area – ‘Imwas, Yalu and Bayt Nuba – then began demolishing the villages, to finish the task of depopulation and erasure that had been left incomplete in 1948.

Despite the current exclusion of the West Bank from several official national Israeli maps and national plans, the West Bank appeared in a detailed topographic map series of a scale of 1:50,000. No official justification for this was provided. One could assume the justification might be that this map constituted land, topography, and natural features, and not political borders or divisions. It is quite impossible and even pointless to slice off the West Bank and to prepare a topography map for historic Palestine without it. All of the topographic features of the plain begin in the mountains: wadis, contour lines, even man-made features such as roads. Nevertheless, numerous political statements exist in the cartography of such a map that collide with the neutral technical nature of a topographic map, such as place names, delineate of Palestinian Authority areas A and B (while not delineating area C). Meanwhile the 1949 Armistice line disappeared as well.
In the Latrun area, the direct visual translation of political reality since the 1967 Israeli occupation can be analyzed effortlessly; the no man’s land and the 1949 Armistice line have disappeared. The names of the five Palestinian villages and built up areas had already disappeared as direct representation due to the erasure and demolition on the ground, especially in June 1967 by Israeli army. The route of the Jaffa-Jerusalem road was shifted north inside the no man’s land. Recent map versions show hidden lines indicating the underground route of the recently established high speed train between Tel Aviv and Jerusalem. The “cartographic blob” of Latrun area that resulted from the 1949 Armistice line had already been swallowed. The erasure of the Palestinian landscape in the Latrun area required another layer to be imposed over the ruins of the village houses, and more importantly over the village landscape, to nullify and replace the Palestinian cultural landscape identity. The Israelis stretched the “green cover” they had begun since 1948 (including forests, parks, and related recreational activities) over the landscape of the adjacent destroyed Palestinian villages to the east.

A deeper analysis of the 1:50,000 maps beyond a passive reaction of what was changed on the ground shows the active political power inherent in the message communicated visually through the map information. The new version of the 1:50,000 map shows the name of the park established in 1973 as the Ayalon-Canada park on lands from ‘Imwas and Yalu villages, and parts of Dayr Ayyub (north of the main road), with the Jewish National Fund logo imposed on it. This logo means that the Palestinian rural landscape has been incorporated into the well-known Israeli colonial transformation process through afforestation by governmental and nongovernmental bodies such the Jewish National Fund.

On the map, one can see the park features, natural cover, hiking trails, archaeological sites, water springs, even village holy sites such as shrines with the local Palestinian names such as ‘Ayn al-Balad village spring, next to the place where the village core used to stand. But the village itself, Dayr Ayyub, the core of this cultural landscape, has been erased. This cartographic manipulation was an attempt to reshuffle the Palestinian village landscape into the colonial domain with the main goal of enforcing the relationship between colonizer and land through a map for Israeli users, such as hikers, to navigate the terrain and explore related natural and historic features. An analogy could be drawn between the exaggerated and selective highlight of the archaeology layer on this map and the nineteenth-century Oriental archaeological maps. However, the Israeli map had a different practical use for the reconstructed historic layer through archaeology as part of culture and recreational practice, an exercise of power to help build the national identity and consciousness.
What is striking in general about the 1949 Armistice line, known as the “Green Line,” is how much it has become politically charged and is mentioned in any political discussions about ending the Israeli occupation or any future conflict resolution. However, since 1967 it has gradually disappeared from Israeli local maps and on the ground in the Latrun area inside the green “maze” (without real border lines, barbed wire, security fences, watch towers, or any visible markings). It has been transformed into a less visible, more complicated matrix of spatial control and separation. One can find the brutal manifestation of this matrix just four kilometers to the north of this new forest and recreational area, in the shape of the Israeli separation wall south of the Palestinian village of Bayt Likya. This wall resembles the current radical separation exercise begun in 2002 by establishing another “temporary security barrier” – a clear manifestation of the current state of conflict and colonial hegemony. One wonders how such a continuous cartographic manipulation leaves any room for the imagination regarding the next stage of this continuous colonial mission.

Conclusion

This preliminary analysis of the selected maps and aerial photographs shows the dialectic relationship between cartography and the radical transformation that occurred in rural Palestinian geography, especially in the case of Dayr Ayyub and
its adjacent vicinity. The Dayr Ayyub story is utilized as a case study regarding the visual representation of Palestinian rural geography over the last 100 years in general, in addition to being a colonial exercise of power, through maps, policies, and facts on the grounds in Palestine. Despite the specificity of its strategic location and related consequences during the Nakba, Dayr Ayyub is not an exceptional case. On the contrary it is a typical case of both: the visual representation of Palestinian rural areas, especially those that were lost and destroyed in 1948–67, and the demise of the hundreds of lost villages and erased cultural landscape during the last 100 years in Palestine.42

The preliminary analysis of maps showed that they were not technical neutral representations of geography or property in Palestine. In contrast, they were a “socially constructed form of knowledge” about landscape and embedded political power, exercised directly, by production and use, control and discipline, and indirectly through the implicit and explicit messages communicated through its symbols. I have utilized here a framework to analyze the selected maps, and to some extent aerial photography, since both are a product and a process of constructing meaning. This examination began by analyzing chronologically Dayr Ayyub’s minimal visual representation in WWI maps (and pre-WII as well) as a small dot within Holy Land geography, moving to the British Mandate’s expansive representation of rural Palestine for colonial administrative purposes of control and discipline, mainly land settlement and fiscal taxation. We then moved to the 1948 aftermath and illustrated the adverse effects on the village’s destiny of the military negotiating tactics, and the repetitive reduction of the village landscape on the war maps, that eventually resulted in the devastating effects of Dayr Ayyub falling into no man’s land. A cease-fire line crystallized in the international maps about the conflict as a border, at the same time diminishing on the ground in favor of colonial expansion tactics. Furthermore, it illustrated very briefly the politics of presentation and the exclusive Israeli cartographic narrative that nullifies the Palestinian landscape through a process of reshuffling, erasing, and relabeling its components.

This overarching analysis framework facilitates additional critical reading and tracing the power structures within the map and the photo as an archival document. The cartographic strategies determined what to present on the map surface, which order or hierarchy to present, what to silence or exclude, and how to interpret the map or photo as an archival document. This analysis was an attempt to trace the colonial power within the map structure through tracing the transformation if it dominated elements such as the military grid in WWI maps, village boundaries in British Mandate maps, and the 1949 Armistice line. In addition, it traced the selective representation and order of natural and archaeological features in pre-WWI maps and Israeli topographic maps after 1967. The inclusion of forests in the British Mandate’s village map and Israeli topographic maps showed the gradual implementation of the colonial policy of afforestation as a different ideology and magnitude over the ruins of the Palestinian landscape. The unique analysis of aerial
Endnotes
5 Nimir, Dayr Ayyub, 115.
8 Urban areas had more detailed survey and representation, as did infrastructure projects such as the Hedjaz railways (1900), Jaffa-Jerusalem Railway (1892), United States Mission to the Dead Sea among other missions that produced different representations of the landscape and human settlements.
12 The case of urban areas was quite different since more details of the urban areas could be obtained from aerial photographs.
13 In November-December 1917, after the British forces won battles at Bir Sab’a, Gaza, and the Junction Station, Latrun–Bab al-Wad became a strategic position to be captured in preparation for the next battle of capturing Jerusalem. The British army advanced as planned after a small battle in Latrun. Then it began to ascend toward Jerusalem along several routes. According to the oral history of Dayr Ayyub villagers, they left the village during the fighting at Latrun for adjacent villages such as Bayt Thul, then returned shortly afterward. See “Dayr Ayyub” [in Arabic], Wikipedia, online at (ar.wikipedia.org) tinyurl.com/v6m4okj (accessed 9 March 2020).
14 Other photographs, rather than the one presented here, was used in the analysis including November 1917 and August 1918.
15 Benjamin Kedar, The Changing Land between the Jordan and the Sea, Aerial Photographs from 1917 to the Present (Yad Ben Zvi press & MOD publishing, 1999), 12.
17 Gavish, A Survey of Palestine, PII (preface) and 36.
18 Another paper on this specific topic is in preparation.
19 The map used here seems to be a reproduction of the original 1933–34 map since it includes the delineation for the Armistice line and no man’s land.

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22 This excluded the Naqab desert to some extent.
24 Abu Sitta, *Atlas of Palestine*, 26–28. One of the technical justifications mentioned repeatedly was that the coastal plains were faster to survey due to the topography and plot size. This indicates the pressure put on the Survey of Palestine Department by many parties, especially the Zionist movement, to advance the survey as fast as possible. For details, see Gavish, *A Survey of Palestine*.
25 Forestation in this area includes additional villages, such as Bayt ‘Itab, Jarash, ‘Allar, and Sufla.
26 Safhat Wad ‘Ali Forest Reserve No. 167 in the official gazette No. 196, 1 October 1927, was declared a closed forest area; an adjacent plot called Jabal/Marah Abu Simra of the forest in Bayt Mahsir, was declared in a different gazette as Forest Reserve No. 151 which seems to include a small area in Dayr Ayyub as well; both appeared on Dayr Ayyub village map 1:10,000.
27 This term was used by the British acting conservator of forests A. Y. Goor in a 1947 report listing forest reserves by categories (31 December 1946) to describe this strategy in general not but for this specific forest.
28 According to the interview with Mohammad al-Qaysi (from Dayr Ayyub) by Palestine Remembered website, after several attacks on the village and with fighting intensified and the Arab Liberation Army fighting from Dahr Yalu area, the villagers sent the women and children to Yalu, especially at night, and the men stayed in the village during the battles; online at (palestineremembered.com) tinyurl.com/s3hcbcb (accessed 1 December 2019). According to Abbas Nimir, village inhabitants returned to the village after the end of the Latrun battles and the second truce agreed in July 1948, Nimir, *Dayr Ayyub*, 142.
29 According to Abbas Nimir, after the 1949 agreement, the Jordanian army ordered villagers to continue to leave at night and to stay in the village during the day for a while [as was the case during the fights, see n.28].
30 UN archive, Hashemite Jordan Kingdom-Israel: General Armistice Agreement, online at (unispal.un.org) tinyurl.com/v4ub7bw (accessed 9 March 2020).
33 “The ‘Green Line’: A topographical map.”
36 The Jaffa-Jerusalem road in the Dayr Ayyub area fell inside no man’s land and so was blocked and unused between 1948 and 1967.
38 The reason was that it will not be claimed back by Palestinians or Jordan in any future negotiations.
39 This was in addition to building moshavs, kibbutz or, in limited cases, repurposing the Palestinian village houses to make use of village space.
40 “Imwas,” Zochrot, online at zochrot.org/en/village/52872 (accessed 27 March 2020). The name at the establishment was Canada Park.
41 By crosschecking the area with aerial photographs, one can interpret that Israel kept most of the fertile agricultural land along the Jaffa-Jerusalem road for the same use, but for Israeli users.
42 Despite the peculiar case of Dayr Ayyub in relation to the Armistice line, all of the Palestinian villages along the green line path suffered similar loss and ruptures of their landscape in one way or another, such as Bayt Safafa, Battir, and Bayt Ikso.