

Kitchener's contribution to the study of pre-industrial installations (windmills and watermills) in Cyprus

E. Rizopoulou-Egoumenidou & A. Spyrou

Kitchener's name is well-known in Cyprus because of its connection with the first full triangulated survey and mapping of the island. Horatio Herbert Earl Kitchener (1st Earl Kitchener, 1850-1916) accomplished a great task which made a permanent contribution to the mapping and geographical / topographical study of the island. This paper examines his work from a different perspective; it focuses on specific features on his maps, which elucidate aspects of pre-industrial life in Cyprus. The time of his presence there (1878-1883) was crucial for the history of the island as it marked the end of the 300-year long period of Ottoman rule and the transition to a new era, the period of British administration.

On the 15 sheets of Kitchener's map of Cyprus are indicated district boundaries, villages with Christian, Moslem or a mixed population, and also telegraph lines and roads constructed since the arrival of the British, thus offering a view of the changing image of the new colony. Furthermore, he marked several cultural and natural features, such as vineyards, monasteries, ruins, sheepfolds, wells, springs, aqueducts and, as we will see, windmills and watermills.

We can better 'read' Kitchener's maps and appreciate his contribution to the knowledge of the cultural landscape of Cyprus and the life of its inhabitants, if we take into consideration the *'Notes from Cyprus (by Kitchener)'*, published in Blackwood's Magazine, August 1879. In the few pages written in Camp Levkoniko (Lefkonoiko), Cyprus, at the very beginning of British rule, Kitchener offers a clear view of the island and its people (Shirley 2001, 57-61). Apart from any reading done before he arrived on the new colony, Kitchener got to know Cyprus through his first-hand personal experience. His notes reveal a deep interest in everything that concerned the island as well as his talent for observation; Kitchener had eyes to see. He noticed the rapid variations of the landscape, which reflected the sudden climatic changes (with a daily variation of 50 degrees). He came to Cyprus in a year of exceptional heat, after a season of heavy rain that resulted in a good harvest of grain. In the next year, however, the wheat crop had failed; though not all over the island. He noticed immediately the importance of grain, a product indispensable for the subsistence of the people throughout the history of the island.

Another product which drew his attention was wine, and he marked areas where vines grew in profusion. Amongst the hills there were many spots: "lying completely waste, grown over with scrub, hiding the old rock-cut wine-presses, that show where in ancient times there were once fruitful vineyards" (Shirley 2001, 57). He noticed the most beautiful slopes for vines in the area of Agamas (Akamas) extending out to Cape Arnaugti (Arnaoutis), in Pafos, where old wine-presses testified to the former fruitfulness of the hills rising about 1,500 feet (460 m) above the shore. Kitchener's observation of old wine-presses, which were actually used down to the recent past, is valuable because only isolated examples of such installations have been

preserved in the area of Pafos. Kitchener foresaw the possibility to turn these hills, which were covered with scrub and only partially cultivated by a few shepherds, into green vineyards. With capital, wine might be produced and shipped from the spot without intermediate transport.

Kitchener saw the possibilities of agricultural development as soon as he set foot on Cyprus. The soil was fertile, capable of growing almost everything if carefully cultivated and irrigated. Development was a keyword for Kitchener, and he saw that the agricultural production offered the greatest perspectives: "there are many places in the island waiting for the hand of the capitalist to change them from barren wastes to their former fruitfulness. Land lies idle that would soon form splendid cotton-fields; wheat, barley, and all cereals grow in profusion. Tobacco of a very superior quality can be produced... Indigo might be grown in the warm valleys. All that is required is enterprise and capital" (Shirley 2001, 58). Furthermore, a prerequisite for the development of agriculture and the rising of the life standard in general, would be the exploitation of the natural resources of the island, which he considered as great, if properly developed. He noted especially the water resources and put forward solutions for systematic irrigation, as well as for the exploitation of wind power.

It is not accidental that he marked on the map of Cyprus both windmills and watermills used for grinding grain. He was fully aware of the importance of installations for turning wheat and barley into flour for making bread, the most substantial food for the local people. These, in addition to wine- and olive-presses, were the main installations of pre-industrial technology at the end of the 19th century, and his maps provide valuable help in their study, especially for windmills.

In Cyprus, throughout the 20th century, the term 'windmill' was applied to the metal-framed windpumps used for irrigation. Kitchener himself had noticed that, on the plains, water was found almost everywhere at 18 to 20 feet (6 to 7 m) below the surface and pointed out that "a few windmill-pumps on the plain would irrigate a farm sufficiently to make it independent of lack of rainfall..." (Shirley 2001, 57). His idea was realized a few years later; by 1900 windpumps were being imported by the British Government from Toronto, Canada (the first mention is of five Air-motors in the Famagusta district in the *Cyprus Blue Book* of 1900-1901, 398). In the following decades a Cypriot company imported windpumps from Australia and later from Argentina (Buenos Aires). Up until the 1940s, as a result, many areas of Cyprus were covered with forests of them, especially the region around Famagusta/Ammochostos, which was called 'the town of the windmills' (Rizopoulou-Egoumenidou 2001, 10).

The potential exploitation of wind power in Cyprus was a subject of great interest to scholars who visited the island in the early years of British rule. Kitchener commented in his notes: "there is no want of wind; a strong breeze springs up every day from the N.W., and very often covers the plain

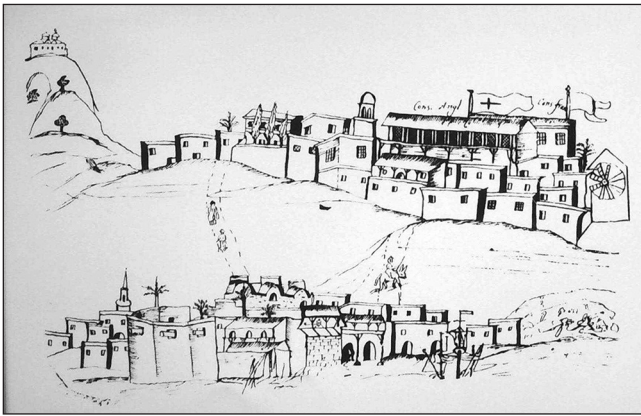


Fig. 1. View of Larnaca (Drawing by Basil Grigorovitch Barskii 1727).



Fig. 2. Windmills in Karpasia (engraving in *The Illustrated London News*, December 10, 1887, p. 696).

in a thick haze” (Shirley 2001, 57). In the same year (1879), Sir Samuel Baker was surprised by the total neglect of wind power, in a country where a steady breeze was the rule... Throughout the great plain of Mesaoria windmills would be invaluable, both for grinding purposes and for raising water. Instead of this, corn was brought on mules from great distances to the watermills of Kythrea, 13 km northeast of Nicosia (Baker 1879, 74-75). Similar comments were made later by Magda Ohnefalsch-Richter, who visited the island in 1894 and noticed that, in contrast to Rhodes, windmills were totally absent from Cyprus (Ohnefalsch-Richter 1913, 112-113).

However, corn grinding windmills *did* exist in Cyprus and were still in operation at that time, although they continued to remain hidden from scholars. Even the famous molinologist J. Notebaart did not find any trace of them when he came to the island in the early 1960s, and the information he received from official sources was also negative (Notebaart 1972, 208). Nevertheless, there were some indications of their existence; the Russian pilgrim Basil Barskii, in 1727, made a nice schematic drawing of a windmill in Larnaca (Stylianou 1957, pl. 4).

A hundred and sixty years later, in 1887, Captain Robert Holden, who accompanied the British High Commissioner, Sir Henry Bulwer, during a tour of inspection in the district of Karpasia, prepared a set of sketches, one of them depicting a group of windmills in operation. This engraving was published in *The Illustrated London News*, December 10, 1887 (p. 696), and clearly shows the tailpoles. The description which accompanies the

picture refers to the sails constructed of canvas, as well as to the solid masonry of the mill building.

On 20th-century maps of Cyprus it is almost impossible to distinguish between windmills and windpumps. However, this was not the case with Kitchener’s map as it was completed in 1882, before the introduction of windpumps; therefore, on the 15 sheets of his map (scale of one inch to one statute mile = 1:63,360) the indication ‘windmill’ is accompanied by a schematic representation of a grain-grinding windmill. This feature is found eight times all over the island, and there is also the indication ‘tower’ in two cases near the village of Perivolia in Larnaka District. Although he did not record every single windmill, this clear evidence was of immense importance for tracing the location of previously existing or still surviving architectural remains. Kitchener’s guidance led to the following results.

In the Karpas peninsula, in Ammochostos District, an area occupied by the Turkish army since 1974, a windmill is indicated by Kitchener to the northwest of Rizokarpaso, and another example to the north of Agios Andronikos.

Here, on the same spot where a windmill is marked on Kitchener’s map, the indication ‘mill’ was found on the topographical map of Cyprus (scale of two Inches to one Mile), which was compiled from about 1900 onwards and formed the basis for the preparation of the cadastral plans. Kitchener placed another windmill on his map in the Kalamia Quarter of Aigialousa, near the location of a toponym Anemomylos (windmill), and here a circular building was indicated as F.M. (Flour Mill) on a cadastral



Fig. 3. Kitchener’s map showing a windmill to the north of Agios Andronikos in Karpasia.

plan and as 'windmill ruin' on the 2-inch map. Furthermore, this site was traced on an aerial photograph in the Department of Lands and Surveys. This evidence and further research made the presence of at least six windmills in the Karpas indisputable. However, it seems that only two examples have survived; one in Archangelos Quarter near Rizokarpaso, and the other in Agia Triada, Aigialousa. The last mentioned, known as the windmill of Papa-Anemomyllaris, is well preserved to date (Papadimitriou 1992, 10, 12, 31, 64, fig. 41).

The tower is stone-built and plastered; the walls are 80 cm thick and are preserved to a height of 5.5 m. There are two doors, one with a wooden frame and a rectangular opening above the lintel. In the interior a staircase leads to a mezzanine; higher up the remains of a hearth are preserved and below it are holes in the wall all round indicating the existence of another floor; isolated pieces of wood, projecting from the walls, are all that has survived from the wooden roof.

Another example of a windmill shown on Kitchener's map to the north of the village of Lysi, in Mesaoria, the granary of Cyprus, also in Famagusta (Ammochostos) District, has fortunately survived in situ and also in the memory of refugees from the village. In his book about Lysi, S. Xystouris mentions that this mill was built in 1880 by Neophytos Kekkos; this means that the mill was brand new when it was seen by Kitchener. It was provided with sails and was used for grinding corn. A few years later, in 1887, a steam-powered flour mill was established in the village (Xystouris 1980, 123).

Another windmill is marked on Kitchener's map between Kato Varoshia and Ammochostos. According to information recorded in a book on this suburb of Famagusta, there was actually a windmill standing on a hill behind the girls' primary school. The stone tower of the mill was battered and provided with very large canvas sails, looking rather like a Dutch windmill; it was known as the 'Flour Mill of Hadjiyiorkos the Jew', and operated until 1890. The examination of the cadastral plans has revealed that in the locality of Kato Varoshia, very close to the girls' school, there is the indication 'flour mill', but without any sign of a building. There is also an Anemomylos (Windmill) Street nearby. Taking into account that there is no reference to any other windmill in the same region, we can assume that this mill coincides with the example on Kitchener's map.

The indication of another example on Kitchener's map, in the village of Krini, in Keryneia District, is the sole evidence of the presence of a windmill in the northern part of the island. No architectural relics were traced.

Moving southwards, to Larnaka District, we find the preserved building of the windmill indicated by Kitchener in the village of Xylofagou. The history of the family, to which the mill belonged, takes us back to about the mid-19th century, when the Kranidiotis family, from Kranidi, a village in the Peloponnese where many windmills are still preserved, took refuge to Cyprus. They followed the profession of millers for generations and later, from 1928 to 1975, they operated a steam-powered engine with French millstones (from La Ferté-sous-Jouarre). Later the windmill was sold to a doctor who restored it to re-use the ruined tower, distorting its original form.

In the village of Perivolia, also in Larnaka District, there were two cylindrical buildings, indicated by Kitchener as



Fig. 4. The windmill of Papa Anemomyllaris (photo by E. Egoumenidou).



Fig. 5. The windmill in the village of Xylofagou, Larnaka District (photo by E. Egoumenidou).



Fig. 6a. Windmill in Pervolia, Larnaka District (photo, Archive Cyprus Department of Antiquities).



Fig. 6b. Staircase in the interior of the windmill at Pervolia (photo, Archive Cyprus Department of Antiquities).

'towers', but as 'mills' on the 2-inch map of Cyprus and on the corresponding cadastral plans. One of them was declared an Ancient Monument by the Department of Antiquities in 1980, as a 'medieval windmill'. During my survey of the area in 2001 I found out that both windmills had been demolished. As seen in a photograph of 1984 (in the archive of the Cyprus Department of Antiquities), at that time one mill still preserved its stone-built tower to full height. The entrance and the window were framed with dressed stones and a circular opening existed high above the doorway. The tower was plastered both inside and outside, and the stone staircase in the interior was supported by an arch.

On Kitchener's map the only windmill near Larnaka is one in Kato Vlachos Chiftlik near Kalo Chorio, for which no other evidence was found. However, the existence of windmills in Larnaka is documented in other sources; the drawing made by Barskii in 1727, which we mentioned before, referenced a windmill on the citadel of the ancient city of Citium (by the Italian Giovanni Mariti in the 1760s), and the depiction of a 'solo molino' on the navigation map of the bay of Larnaka drawn by Jose Moreno, a Spanish naval officer in 1788 (Mariti (1769) 1971, 23, 159. Severis 2000, 58-60, fig. 52). In the 19th century, windmills in Larnaka are mentioned by the American missionary Lorenzo Warriner Pease. On the 16th of February 1835, Pease took a walk out to inspect the ruins of the ancient town of Larnaka (actually ancient Kition), and he saw



Fig. 7. Windmill in Anafotida, Larnaka District (photo, Archive Cyprus Department of Antiquities).

windmills "about on the ancient wall" (Severis 2002, 236-237). In the following year (1836) Pease recorded a windmill in ruins near the village of Anafotida, also in Larnaka district (Severis 2002, 549). The ruined windmill of Anafotida is shown on a photograph in the Archive of the Cyprus Department of Antiquities.

The single preserved windmill in Pafos, in the western part of the island, was not seen by Kitchener, because it was built after 1882 by Othon Trichakis from the island of Chios, who was married to a woman from Pafos.

Kitchener's contribution to the discovery and documentation of the windmills of Cyprus has been of immense importance. Based on his map, and by extending the research to other sources, we were able to prove the existence, and in many cases find the structures, of about 20 examples of these important pre-industrial installations. However, windmills were more numerous by that time, since 35 were still in operation in the Ammochostos district, according to the *Cyprus Blue Book* of 1880 (p. 350); this total drops to three in 1900-1901 (p. 398), one in 1909-1910 (p.312) and none in 1911-1912 (p. 322). Since then, windmills were ignored and forgotten as they were replaced by steam-powered mills.

The Cypriot windmills show a typological homogeneity; they all seem to belong to the Mediterranean type of cylindrical tower mills with rotating cap and vertical wheel (Moulin tour; see Vaos & Nomikos 1993, 52, 62-63), a type which has been traced from the Dardanelles to the coast of North Africa (Cobbett 1939, 458-461; Notebaart 1972, 267-343). Taking into consideration the geographical distribution of windmills on specific regions of the island, mainly the coastlines of Larnaka and Ammochostos district, which includes the Karpas peninsula, together with the data obtained from the Meteorological Service, we come to the conclusion that conditions in Cyprus were not especially favourable for the exploitation of windpower (contrary to initial expectations referenced earlier). Cyprus does not experience strong and continuous winds like those prevailing in the Aegean. This, together with other factors, explains why the Cypriots preferred to grind their abundant grain in watermills, using windmills as complementary power sources in regions where conditions allowed their functioning and where water was not adequate for the operation of watermills.

Water-driven flour mills were more numerous by far; their presence in Cyprus is documented from the 12th century onwards and over 400 examples are still preserved throughout the island, most of them in ruins; their operation continued down to the mid-20th century and in isolated cases even to this day.

In the research of the watermills of Cyprus, Kitchener's map has also been of great assistance, indicating the regions where watermills were preserved and most of them still in operation. He does not use the term watermill, but simply *mill* or *mills*, the latter in cases where more watermills were found in the same area. Being aware of the great importance of water for irrigation but also as a power source, Kitchener repeatedly mentions water sources in his 'Notes', like torrents running in steep gorges and watercourses in deep beds cut through alluvial soil and rock, as well as many springs and rivulets along the hillsides. He saw rushing streams of water that made Lefka the noted place in Cyprus for growing oranges, and valleys with bright streams along the northern slopes. Kitchener was most impressed by Kythrea, which he described as:

"one of the gems of Cyprus. Below the cliffs of the Pentadactylon a large spring gushes out of the rocks at an elevation of 850 feet above the sea. The spring is enclosed, in modern masonry, in a covered channel which collects the water from four different heads. The water is bright, clear, and slightly warm – 67° Fahr. Rather more than four thousand gallons a minute are constantly applied both summer and winter. The remains of an ancient aqueduct can be traced that once led the water to Salamis. Rushing down a steep valley in the shale hills, the water changes them up to a certain level into the most fertile banks, clothed with green of every hue, and covered with fruit trees; ... Passing along innumerable aqueducts, covered with luxuriant fronds of maidenhair fern, turning over a score of mills, the streams find their way through thick groves of oranges, pomegranates, mulberries, and other fruit-trees..." (Shirley 2001, 60).

The only other case in which Kitchener refers specifically to a watermill, is at Cape Arnaugti (Arnaoutis) in Akamas (Pafos district), where:

"a low-lying narrow plain along the shore (is) watered by several springs, one of which now turns a mill." (Shirley 2001, 57).

In this area, the westernmost part of the island, two watermills have been found in ruins.

On nine out of the 15 sheets of his map, Kitchener marked watermills in many areas, as described below.

Sheet 2: twice the indication *mill* in Ayios Andronikos region.

Sheet 5: chain of wells towards Nicosia and Kythrea, where he notes a spring and aqueducts.

Sheet 7: cape Arnaugti (Arnaoutis), *mill* south of Polis. Mill in Prodromos and Livadhia, plus an aqueduct; a *mill* between Pano and Kato Akourdalia.

Sheet 8: In Pafos, four times the indication *mill* towards Ayios Mamas Monastery. To the south the toponym



Fig. 8. The watermill of Roudias, Vretsia, Paphos District (photo by Antonia Theodosiou).

Palaeomylos and twice the indication *mill*, one of them near Ayios Merkourios. Along the river from Evretou to Sarama, north of the village Simou, aqueduct and the indication *mills*, also the toponym Mylari. A *mill* north of Loukranou (Loukrounou) and another *mill* north of Miliou near the Ayii Anargyri (Anargyroi) Monastery. In Kambou Potamos (Potamos tou Kampou), N. of Ayios Isideros (Agios Isidoros), one *mill*. Near the village of Vretsia in the area of Rhoudhia, one *mill* on either side of the river.

North of the village Khoulou (Choulou), the indication *mills* on the bank of Ayias Potamos, and one mill north of



Fig. 9. The watermill of Foini, Limassol District (photo by Naso Chrysochou).



Fig. 10. Watermill between Korakou Evrychou, Nicosia District.



Fig. 11. The watermill of Pano (Upper) Koutraphas (photo, Archive Cryprus Department of Antiquities).

the village Melamiou, near the church of Ayios Dhimitrianos (Agios Dimitrianos). South of the village Apliki (Khitono Potamos), is marked by its name the *Mylos tou Batali* and another *mill* to the south of Marathasas Potamos (river). In the area of Marathasa, to the south of the villages Kaminaria and Ayios Dhimitrios (Agios Dimitrios), one *mill* (R). Further south along the Marathasas Potamos, there are indications of two mills: *mill*, *mill*, to the north of Pedoulas village. Another *mill* is marked to the north of the village Phini (Foini). To the east, on Kryos Potamos, one *mill* to the North of Pano Platres.

Sheet 9: Starting from North, there is a *mill* and aqueduct to the south of Elea (Elia) village, another two near Petra and Ayios Georgios (Agios Georgios), also the indication *mills* to the northeast of the village Katydhata. Along Karyioti Potamos (river), one *mill* to the west of Katydhata (Katydata) and three mills between the villages Korakou and Evrykhon (Evrychou), then further south three mills in Tembria (Temvria) to the north of Kaliana village.

To the east, along Karydi Potamos, one *mill* and the name Xylomylos (wood mill). Further east, in the area of the village Amiandos (Amiantos), is mentioned the *Mylos tou Amiandou* and another two indications *mill*. Along the Vyzakia Potamos, one *mill* south of Pano Koutraphas (Pano Koutrafas) village and two near Vyzakia village. To the east,

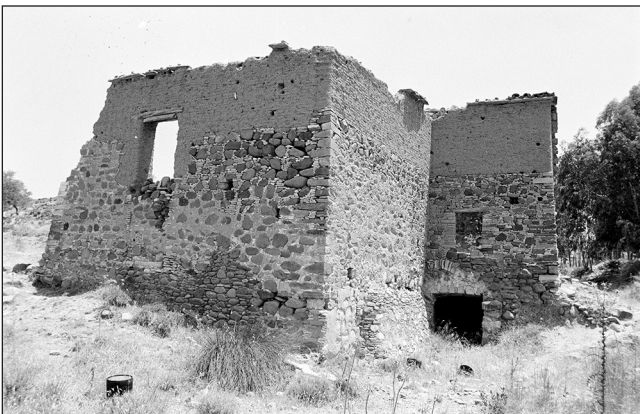


Fig. 12. Watermill in Pera Village, Nicosia District. The upper part is built of mudbricks (photo, Archive Cyprus Department of Antiquities).

south of Peristerona village and to the north of Orounta village and Ayios (Agios) Nikolaos Monastery, there is an aqueduct and four times the indication *mill* along Peristerona Potamos (Serakhis river). Along Akacha Potamos (Akaki) to the South of Akacha (Akaki) and north of Meniko, there is an aqueduct and twice the indication *mill*. Further south along *Vardali Potamos*, one *mill* to the south of Ayios (Agios) Ioannis. Along Pediaeos (Pediaios) Potamos, three times the indication *mill* between Lakatamia Chiftlik and Kato Deftera, and also an aqueduct. In Pera Politiko, twice the indication *mill* and a well.

Northeast of Pano Lefkara village, Syrgatis Potamos (river), three indications *mill* along the river. In Yalias Potamos, in the region of the villages Nisou, Pera Khorio (Chorio) and Kotchati (Kotsiatis), down to Mathiadhis (Mathiatis) village, six times the indication *mill*. To the north of Tymbou (Tymvou) once the indication *mill*, wells are repeatedly mentioned, also an aqueduct. South of the village Delikipo (Delikipos), there is the indication Muti Mylou (top of mill) and one *mill*. Along Psevda Potamos (Pevdas), Northwest of Psevda village, the indication *mill* is repeated three times and another five along Tremithios Potamos (Tremithos River) to the south of Ayia (Agia) Anna to Klavdia.

Sheet 10: It includes the Abu Bekir aqueduct and in Pasha Chiftlik a series of wells and aqueduct, also one *mill* (North of Dromolaxia village).

Sheet 13: In Pafos, along Ezousa Potamos (river), from South to North, nine mills are indicated, in one case there is the indication *mills*, close to Moro Nero village, as well as many aqueducts, also springs. To the East, one *mill* north of Eledhiou village. To the East, along Xero Potamos (Xeros River), from South to North, three times the indication *mill* and Kykkou Mylos SE of Ayia Marina (Agia Marina) village. To the East, along Dhiarrizos Potamos (Diarizos River), from South to North, four times the indication *mill*, then *Mylos tou Jilingir*, Southeast of Ayios Yeorgios (Agios Georgios), then another four times the indication *mill*, and twice *aqueduct*. Along *Kostithes Potamos*, one *mill* to the South of Ayios Theodoros, one *mill* to the SW of Potamiou, then one *mill* and *aqueduct*, to the East along another river to the south of Ayia Mavri Monastery one *mill*, to the South of Kilani one *mill*, between the villages Vouni and Lophos (Lofou) one *mill*, and another *mill* near Ayios (Agios) Therapon village.

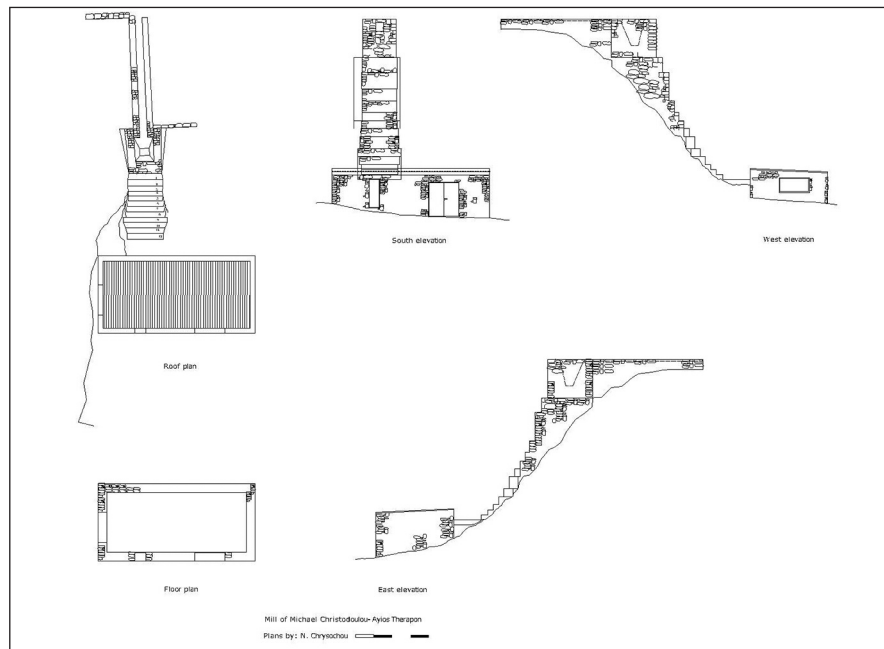


Fig. 13. Watermill near Agios Therapon, Limassol District (plans, sections and elevations by N. Chrysochou).

Sheet 14: Limassol District. Along Kouris Potamos (river), one mill south of Kantou village, and to the North *Trias Mylos*, another mill to the North, south of Khalasa (Alassa), and further North twice the indication mill north of Doros village and SE of Silikou village. Along Garyllis Potamos one mill, then the indication mills. On Kyparissia Potamos, one mill south of Dhierona (Dierona) village, on Vasiliko Potamos (Vasilikos River), twice the indication mill in the area of Kalvaso (Kalavasos), and further North one mill south of Drapia village and two more mills to the North on Megas Potamos (Mesa Potamos). Another mill is indicated to the North of Panayia Kyra (Panagia Kyra), also wells and aqueducts.

Sheet 15: On Xeropotamo Latourou, one mill SE of Alamino village. On Maroniou Potamos (Maroni River), Mylos Mavrou is indicated by its name, furthermore one mill south of Maroni village and another mill south of Machairas Monastery.

Kitchener’s intention was not to record every single mill, and in cases where there was a concentration of



Fig. 14. Watermill in Kantou, Limassol District (photo by N. Chrysochou).



Fig. 15. Part of sheet 14 Kitchener’s map with Megas Potamos (Mesa Potamos) with indications of three mills to the north of Megas Potamos (Cyprus Department of Lands and Surveys).



Fig. 16. The watermill of Kalavassos, Larnaca District (photo by A. Pitta).



Fig. 17. The watermill of Alaminos village, Larnaca District (photo by G. Philippou).

watermills, he simply marked them with the word *mills*. However, he put on his map a considerable number of mills along the most important rivers all over the island. The names of the rivers as well as those of the villages have been recorded as they were pronounced by the local people, but, although they show some differences from the standardized names found on the maps, they are in most cases easy to identify. Many mills recorded in Kitchener's map, are still preserved and several have been declared Ancient Monuments and have been restored by the Cyprus Department of Antiquities. Most of Kitchener's watermills, now in ruins, have been recorded in a volume published in Greek (Kypri, Economides and Demetrakopoulos 2020). A considerable number of them have been photographed and described within the framework of the University of Cyprus Project: *Recapturing, documenting, digitizing and promoting the Mill Heritage of Cyprus. The grain-grinding mills: animal-driven mills, windmills, watermills.* (GraMiC), which is still in progress.

Bibliography - References

- BAKER Sir Samuel White, 1879. *Cyprus as I saw it in 1879*, Macmillan and CO. London.
- Cyprus Blue Books for the year 1880. Government Printing Office, Nicosia.
- COBBETT L., 1939. *Mediterranean Windmills*. *Antiquity* XIII, 458-461.
- KYPRI Y., ECONOMIDES G. and DEMETRAKOPOULOS CH., 2022. *Οι νερόμυλοι της Κύπρου. Εν τόποις, Λευκωσία* (The watermills of Cyprus. En typos: Nicosia).
- MARITI G., (1976) 1971 *Travels in the Island of Cyprus*, translated from the Italian of Giovanni Mariti by Claude Delaval Cobham, London 1971 (α' έκδοση, Lucca 1769).
- NOTEBAART J., 1972. *Windmuehlen, der Stand der Forschung ueber das Vorkommen und den Ursprung*, Mouton Verlag Den Haag Den Haag Paris (printed in Hungary).

- OHNEFALSCH-RICHTER M., 1913. *Griechische Sitten und Gebraeuche auf Cypern*, Berlin.
- RIZOPOULOU EGOUMENIDOU E., 2001. *Corn grinding windmills in Cyprus (18th-20th cent.)*, *International Molinology. Journal of the International Molinological Society*, No. 63 (December 2001), 10-16.
- SEVERIS R., 2000. *Travelling Artists in Cyprus*, London.
- SEVERIS R., 2002(Ed.) *The Diaries of Lorenzo Warriner Pease 1834-1939. An American Missionary in Cyprus and his Travels in the Holy Land, Asia Minor and Greece*. ASHGATE, London (Volume 1).
- SHIRLEY R., 2001: *Kitchener's Survey of Cyprus 1878-1883. The First Full Triangulated Survey and Mapping of the Island*, Nicosia. *American Missionary in Cyprus and his Travels in the Holy Land, Asia Minor and Greece* (Volume 1).
- ΠΑΡΑΔΕΜΕΤΡΙΟΥ Ε., (1992). *Λαογραφικά Καρπασίας Εταιρεία Κυπριακών Σπουδών: Λευκωσία* (Folklore of Karpasia, Society of Cypriot Studies: Nicosia).
- STYLIANOU A., 1957. *Αι περιηγήσεις του Βάρκσου εν Κύπρω*, *Κυπριακά Σπουδαί*, ΚΑ', 1-158, πιν. 1-36: *Λευκωσία* (Barskii's tour of Cyprus, *Cypriot Studies*, ΚΑ, 1-58, table 1-36: Nicosia).
- ΧΥΣΤΟΥΡΗΣ S.K., 1980. *Η Κομόπολη της Λύσης. Ιστορική, Κοινωνική, Γεωργική και Λαογραφική Επισκόπηση: Λευκωσία* (The comopolis of Lysi. *Historical, Social, Agricultural and Folklore Review*, Nicosia).
- ΥΑΟΣ Ζ. and ΝΟΜΙΚΟΣ S., 1993. *Ο ανεμόμυλος στις Κυκλάδες*, Εκδόσεις Δωδώνη, Αθήνα (Windmills of the Cycladic Islands, Dodonis publishers, Athens).

E.Rizopoulou-Egoumenidou is Professor Emerita, University of Cyprus:

rizopoulou-egoumenidou.euphrosyne@ucy.ac.cy

A.Spyrou is a Postdoctoral Researcher in Zooarchaeology, The Cyprus Institute: a.spyrou@cyi.ac.ci.