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**Maps, Fields and Boundary Cairns:  
Demarcation and Resistance in Colonial Cyprus**

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## **Maps, Fields and Boundary Cairns: Demarcation and Resistance in Colonial Cyprus**

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*An important component of the administration and control of a colony by an external power was the demarcation and classification of the land and its people. This was certainly the case in Cyprus under British colonial rule (1878-1960), as three case studies demonstrate: the topographical survey of the island by H. H. Kitchener in 1878-1883; the cadastral survey of 1909-1929; and the work of the forest delimitation commission from 1881 to 1896. This was not achieved without resistance on a variety of levels. Ironically, part of the opposition came from the structure of the colonial demarcation and classification project itself.*

**KEY WORDS:** Cyprus, imperialism, resistance, cartography

### **INTRODUCTION**

On the 11th of January, 1935, Michael Yiakoumi, a goatherd from the village of Lazania, passed between the boundary cairns marking the Makheras Forest, taking with him 30 goats belonging to his fellow-villager Lazaris Michael. There was little arable land round the village of Lazania in the Eastern Troodos mountains, and its economy

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was mostly based on pastoralism. As far as the villagers were concerned, they and their ancestors had been grazing their goats in the forest since time immemorial. For Michael Yiakoumi, therefore, it was a flagrant injustice that he should be apprehended on the wrong side of the boundary cairns by two forest guards from the Forest Station at Lythrodhondas. For the two forest guards, M. Christophi and Hadji Kostis Hadji Panayioti, together with their other colleagues from Lythrodhondas, it had been an excellent day: as well as Michael Yiakoumi, they had caught two other goatherds, plus three villagers from Kapedhes taking loads of *ladjia* (*Quercus alnifolia*) for firewood and for making cart wheels. The cases were clear cut: all six men had been within the State Forest, which was clearly marked out by the boundary cairns (*CPRM*, 1935, Nos. 4, 5, 6, 24, 25, 51).

From the point of view of the British colonial government of Cyprus, there were good reasons for marking off the State Forests with thousands of whitewashed masonry cairns, and for prosecuting anyone caught grazing goats or taking wood from within them without a permit. When the British took over the administration of Cyprus from the Ottoman Empire in 1878, the island's once famous forests were in many places little better than rough scrub and brushwood, thanks to centuries of unchecked exploitation and continual goat grazing, which prevented regeneration. In the early days of British rule, imperial foresters seconded from India and Algeria produced a string of reports lamenting the state of the forests and blaming the Ottoman authorities, the inhabitants of the mountain villages, and above all, the goatherds (Dunbar, 1983, pp. 112-115; Thirgood, 1987, pp. 91-110).

The demarcation of the forests of Cyprus in the last two decades of the nineteenth century was indeed the first and very necessary step in rescuing them from destruction and neglect, and whatever its effect on individuals such as Michael Yiakoumi, the long

term benefits for the community as a whole are hard to deny. But this process of demarcation and control was not just a single instance for the protection of the forest. It was a general feature of imperial rule in the late nineteenth and early twentieth centuries, affecting every aspect of the administration of a colony such as Cyprus: taxation, municipalities, agriculture, the military, the interpretation of history, public health, and even the organization of officials' families when they went camping on Mount Troodos during the summer. By defining spatial and social units and setting the boundaries between them, the imperial powers made the land and people they ruled into a set of known objects arranged in a fixed, unambiguous grid which was easily controlled. The imperial project consisted of the making and maintenance of this grid.

There was, of course, resistance, expressed in a variety of conscious acts, systemic constraints and creative transformations. Such was the government publicity about the demarcation of the forests that Michael Yiakoumi would have been well aware of what he was doing, and the hugely destructive arson attacks on the forest by his colleagues from villages to the west had made the issue notorious, emotive and highly political. But resistance also took place at other levels. British attempts to delineate every single land holding could not cope with the complexity and detail of local land ownership, unlike the Cypriot villagers who had extensive local knowledge and an excellent communal memory for relationships and kinship lines. The imperial system could even be appropriated and turned against its creators, or else be transformed and made a part of a new independent state or identity.

Demarcation of space goes hand in hand with demarcation between people, and a map showing "Greek Cypriot" and "Turkish Cypriot" villages can exacerbate or even manufacture the division, rather than merely recording it. By analyzing processes of demarcation in colonial Cyprus, we are also investigating forms of colonial knowledge

and methods of control. It was not just fields and forests which were forced into a closed classificatory system, but the people as well. When Michael Yiakoumi and the owner of the goats he was pasturing ended up doing one and a half days' labor for the district Assistant Conservator of Forests, that was a direct result of their trespassing on colonial demarcation.

## DEMARCATIION

It is not just imperial powers who are obsessed with demarcation: spatial and social units can be imposed by internal elites as well as external colonizers. These units, however, did to some extent differ in kind. Before the colonial map, census and survey team, territorial units were often more fluid, more defined by communal relationships, kinship groups and ongoing political negotiation than by arbitrary and imaginary lines on the ground (Leach, 1960, pp. 49-51). Rather than trying to isolate specific "precolonial" characteristics, it is more appropriate to look at changes in the level of governmentality and in the nature of local perceptions of what constitutes a unit or a boundary.

A prime example of polities being distinguished by shifting allegiances and systems of etiquette rather than by fixed territorial boundaries comes from the *negaras*, the states of nineteenth-century Bali, as graphically described by Clifford Geertz (1980, p. 24):

A bird's eye view of classical Bali's political organization does not reveal a neat set of hierarchically organized independent states, sharply demarcated from one another and engaged in

“foreign relations” across well-drawn frontiers. . . . What it reveals is an extended field of highly dissimilar political ties, thickening into nodes of varying size and strength at strategic points on the landscape and then thinning out again to connect, in a marvelously convolute way, virtually everything with everything else.

This complexity and variation is the key to understanding demarcation systems before the imposition of colonial order; though even to call them “systems” immediately begins to give them spurious coherence and organization. Mental maps of the layout of a city or quarter, for example, can vary astonishingly among different informants (H. Geertz, 1980). The anthropologist can indulge in thick description to draw out the nodes and strategic points of these convoluted ties, but this was a task beyond the desires and abilities of most colonial administrators. Once they managed to grasp the principles of chiefly privileges or land ownership in one part of their domain, it was easiest to assume that the same principles held for the entire colony and impose them universally in an effort to create system and coherence (Thomas, 1994, p. 108).

Faced with incomprehensible variety and flux, the imperial project was one of imposing order. The power to govern required knowledge of the governed, but that involved more than the collection of information and the discovery of pre-existing “facts”. Colonial knowledge was more a matter of the creation of facts (Cohn, 1996, p. 4-5), and their arrangement in an ordered, systematic grid. The colony and its people were, essentially, demarcated: they were divided into districts, races, professions, cadastral plots, castes, village territories, sexes, languages, and all the other unambiguous categories of the colonial map and the colonial census. Arranged thus, and objectified as a series of fixed, easily comprehensible units (Cohn, 1987), they were known, and could be controlled.

One of the basic tools of colonial demarcation was the survey. Maps were important for land registration and property taxation, for developing communications routes and military campaigns, and for dividing the colony into administrative units, each with its responsible official. Above all, they demonstrated total knowledge and control of the land. The Board of Ordnance of Great Britain had started conducting systematic survey for military purposes in 1790. Its first imperial application was in Ireland, where between 1825 and 1846 the British army completed a map of the whole country at six inches to the (English) mile, with the principle objective of defining the boundaries of all taxable areas (Smith, 1998, pp. 72-73). By the peak of the British Empire in the late nineteenth century, systematic survey was standard in all imperial possessions, along with the claims to complete knowledge that such survey demonstrated.

To be truly complete, however, this knowledge required historical depth as well as geographical extent (Said, 1978, pp. 32-33; Anderson, 1991, pp. 174-175; Smith, 1998). When Lieutenant H. H. Kitchener finished his survey of Palestine in 1877, he proudly declared the totality of his achievement: as well as surveying 1,340 square miles and revising 1,700 square miles done by his predecessor, he had recorded 816 ruins, reported on the water supply of every village, collected 3,850 names, and investigated “all known” archaeological and geological sites of interest (Magnus, 1958, p. 22). The imperial vision is clear: like the explorers who described the territory they “discovered” in the “monarch-of-all-I-survey” mode (Pratt, 1992, pp. 201, 205), the surveyor was very much mastering his landscape.

Part of the mastering process was the imposition of units and boundaries, and their inscription on the map or even on the landscape itself. On a larger scale there were the boundaries of the colony itself, often imposed along arbitrary lines of latitude and



longitude, cutting across tribal groups and bequeathing decades of warfare and unrest even after independence. This gave rise to what Benedict Anderson calls the “map-as-logo”, where the arbitrary shape of the map can stand on its own as a symbol of the colony or its independent successor: Dutch maps of Indonesia in the first half of the twentieth century showed western New Guinea with nothing to the east of its straight north-south boundary (Anderson, 1991, p. 176).

Within the colony there was a carefully regulated spatial hierarchy. In Ottoman Cyprus there were districts, *nahiehs* (sub-districts), and villages, each with its own hierarchy of judicial and administrative officials. In British India there were Presidencies, provinces, divisions, districts, subdistricts, and *mauzas* or revenue villages, which did not necessarily coincide with residential villages (King, 1976, p. 75; Cohn, 1987, p. 240). Even the cities were divided, not just between civil lines, cantonment and native city, but according to a host of sub-divisions within the local and colonial groups. This obsessive demarcation was accompanied by a complex terminology, and *created* difference as much as *recorded* it (King, 1976, pp. 79-88; Zesimou, 1998, pp. 260-262).

Along with the spatial knowledge created for the map, there was a host of statistical, social and ethnographic information which the colonial administrators collected, arranged and redeployed in their official reports, regulations and procedures. Even a population's health could be classified and objectified: an 1896 report into “the decrease of the native population” of Fiji set out 36 causes of decline in four general groups, and sanctioned official intervention in the lives of the inhabitants to address them (Thomas, 1994, pp. 112-115). Classification became a science, that of taxonomy, deriving ultimately from Linnaean botany but applied to trading goods, islands, ethnographic and archaeological artifacts, and of course people (Pels, 1997, p. 175, with

references). As with the survey, the point about this classification was that it was total: everything had its place in the grid, and every square on the grid was filled in by the colonial taxonomist (Anderson, 1991, p. 173).

The ultimate in the colonial classificatory grid was the census, in which every individual had to have a single unambiguous place (Anderson, 1991, p. 166; Thomas, 1994, pp. 38, 111). This was clearly an imposition on anyone with several professions, mixed descent, or variable religion, though there was always the catch-all “Other” category so that everyone could have their place. The 1931 survey of Cyprus allowed nine religions, of which two were “Other Protestants” and “Others” (Hart-Davis, 1932, p. 12). By careful comparison of categories, Greek-speaking Muslims and Turkish-speaking Christians were noted (Hart-Davis, 1932, pp. 24-25), though there was never any allowance for the *linovamvaki* who changed religion according to the needs of the moment.

The census was closely tied to the survey, as it needed precise spatial categories into which it could slot its human categories. The 1881 census of Bengal used the lists and maps of revenue villages drawn up by a special officer of the Revenue Survey called the Boundary Commissioner (Cohn, 1987, p. 240). As well as practical considerations of this sort, the division of people into groups, particularly ethnic groups, for political manipulation required geographical units as part of the process of creating distinctions (Anderson, 1991, p. 174).

The survey, the collection and classification of information, and the census are just some aspects of the demarcation and control of a society by a colonial power. Knowledge and control require a division into units and the imposition of a fixed system, all of it clearly understandable to the colonizers, if not to the colonized. An army with its ranking system, uniform and discipline was a similar artificial

construction (Mitchell, 1988, p. 38), as was the creation of model housing and town planning on a European grid system, rather than allowing settlements to grow organically (Mitchell, 1988, pp. 46, 92, 164). On a more specifically political level, the policy of divide and rule worked in the same way: first the units were created and the boundaries set; then the groups could be polarized and manipulated.

## **RESISTANCE**

Unsurprisingly, there was often resistance to this process of demarcation and control. Such resistance did not necessarily dominate social life, of course: there were also acts of complicity and indifference, as well as equally important but totally unrelated behavior patterns (cf. Brown, 1996). But colonial demarcation, by definition, cut across existing social patterns and structures, and met with a wide range of deliberate or systemic acts of opposition, protest and appropriation, which any study of demarcation needs to address. These ranged from major uprisings to the ongoing minor and often private actions and decisions which constituted “everyday resistance” (Scott 1985).

At the level of conscious action, first of all, there was deliberate disobedience, such as Michael Yiakoumi crossing the forest boundary with his goats, or the Bedouins who refused to heed national borders in the Sinai and Saudi deserts. There were brigands and outlaws who defied the colonial authorities and stayed outside the system of taxation and classification. Some used violence, theft and arson not just as a means of livelihood but as a political protest, and were often mythologized by themselves or by protesters acting from within society (Sant Cassia, 1993, pp. 778-779). Rather than

being passive responses to the colonizers' initiatives, such lifestyles and the mythologies that grew round them exemplify the proactive and creative agency that characterizes much resistance to colonial regimes (Frazer, 1999, pp. 6-8).

As well as individual and conscious acts there was a more systemic resistance to colonial processes of demarcation and classification. Some of this boiled down to the simple failure of the colonial power to impose its own version of order. The "disorder" seen in the teaching system at the Mosque-University of Al-Azhar in Cairo continued to astonish British education inspectors, and the best they could do was to use it as a mirror in which they could see a reversal of their own ideas of educational "order" (Mitchell, 1988, pp. 80-81). In a face-to-face community, local kinship and land-ownership patterns could be so complex and convoluted that they were virtually impossible to tie down on paper, however determined the survey clerk with his battery of forms and categories. The Gaelic land tenure and inheritance systems of sixteenth-century Ireland, for example, were characterized by social fluidity and the ongoing negotiation of temporary contractual relationships, rather than the rigid definitions of private property and primogeniture held by the colonizing English (Delle, 1999, pp. 18-20).

A third level of resistance consists of appropriation, where groups within the local community learn the system and adapt it or use it to their own advantage. The most obvious case of this consists of newly independent states taking over the government system of their former rulers, often in its entirety. It also happened during colonial rule. Units and hierarchies imposed by the colonial rulers according to their essentialist notions of local social structure and ethnic groupings were gradually appropriated by the colonized, and even became part of their "counter-colonial discourse" (Keesing, 1994, pp. 45, 50). Shawnadithit, for example, was a Beothuk Indian woman from the

long-inhabited island which those guilty of her people's genocide called "Newfoundland". In 1829 she learnt the principles of drawing western Cartesian maps. Rather than leaving them disembodied grids of abstract geodesy and political control, however, she populated her maps with figures showing the complex paths, relationships and spatial perceptions of the Beothuk Indians (Sparke, 1998). By the 1930s, to take a broader example, political groups in India had appropriated the census system for their own purposes and distributed handbills instructing people how to answer (Cohn, 1987, p. 250).

It was not just the colonized who were subject to invasive demarcation and classification. Hierarchies based on class, race, profession and behavior were rampant within the colonizing culture, often moreso than in their homeland. This frequently led to greater discrimination and even more rigid boundaries between racial or social groups (Stoler, 1989, p. 137). Hybrids and misfits were suppressed, "poor whites" were considered inferior to their counterparts at home, and "going native" was frowned upon so severely that such individuals became outcasts, beyond the classificatory pale.

Ironically, it was from within the society of the colonizers that the most devastating resistance to demarcation came. By using this language of groups and distinctions and Others, the colonizing voice automatically allows the existence of alternative, disarming voices which undermine the single voice of colonial authority (Young, 1995, pp. 22-23). This hybrid language, which contains the resistance as well as the domination, breaks down the absolute demarcation and crosses the boundaries of culture and race.

## **THE IMPERIAL PROJECT**

When the British took over the administration of Cyprus from the Ottoman Empire in 1878, a variety of colonizing activities faced them. These ranged from setting up an administrative system and creating a police force, to imposing slaughter houses, drains and bylaws on the main towns (Schaar *et al.*, 1995, pp. 21-24). Essentially, everything had to be in its right place: soldiers and civilians, streets and sewers, the youth, the criminal, and the contagious. The imperial project was one of demarcation, whether on the ground or between categories of people. A well-governed colony was one where everyone and everything knew its place.

Examples of demarcation in late nineteenth- and early twentieth-century Cyprus are too numerous to mention, but a few suffice to illustrate its importance to colonial procedure and decision-making. Three more specific imperial projects are particularly significant because of the way they show the colonial machine at work and because of the effect they had on numerous Cypriots: the topographical survey of 1878-1883; the cadastration survey of 1909-1929; and the work of the Forest Delimitation Commission between 1881 and 1896.

During the first full summer of colonial rule in Cyprus, the military command and the civilian government began battling for position near the summit of Mount Troodos (Fig. 1). Their main weapons were the map and the boundary marker. Both groups, following the imperial prototype of the Raj, needed space for their summer camps during the annual escape from the heat of the plains. In 1887, after long argument, they tried to pin down the boundaries between civilian and military. The Survey Office of the Royal Engineers produced a map showing the “exact boundaries”, which followed stream beds rather than being “imaginary lines” joining boundary stones (SA1/1936/1887). Even so, no boundary was complete without tangible, physical

markers, and once agreement had been reached and a “proper survey” made, temporary cairns would be replaced as soon as possible with permanent boundary stones (SA1/1957/1887). According to the agreement, civilians could get permission to camp within the military area, but only if they followed military regulations, particularly regarding sanitation: only military latrine laborers could remove the night soil (SA1/1102/1888). Proper demarcation was a matter of procedure and regulations as well as physical boundaries.

>>> **Fig. 1.** Map of Cyprus showing Main State Forests and places mentioned in the text.

The importance of demarcation within an institution is demonstrated by the Government Leper Farm outside Nicosia, which was added to piecemeal by successive High Commissioners. When Sir Henry Bulwer took it on in 1891, the first thing he demanded was a proper plan. Once this had been made, its bird’s eye view enabled total knowledge and a proper arrangement of its parts. A line on the plan and boundary cairns on the ground divided it from the secular world outside. The garden, which had been suffering from “a certain want of neatness”, was divided by a fence into an area for families, women and children on one side, and single men on the other. And rather than letting people wander where they wanted, special walks were to be marked going through the trees (SA1/571/1891; SA1/629/1891).

Demarcation was more than an obsession: it was a way of ordering reality and taming the wilderness. The Cypriot landscape, its inhabitants and history could be reduced to neat sets of maps and minute papers in the government offices of each district capital. When Charles Watkins wanted to excavate in Polis in 1886, the District

Commissioner had to mark the boundaries of the agreed area and make a list of the 37 landowners to keep in his office (SA1/1771/1886). When the ruined churches in the old city of Famagusta which were government property had all been mapped, they were marked with some 150 boundary stones inscribed “G of C” (“Government of Cyprus”) and a serial number (SA1/537/1887). A café owner in the village of Pera was fined one shilling in 1902 for putting chairs on the road outside his café, in spite of a petition from his lawyer saying that this did not obstruct the traffic. As the title of the minute paper suggests (“Placing of Chairs outside Cafés”), the real crime was category trespass, rather than genuine obstruction (SA1/3410/1902).

### **TOPOGRAPHICAL SURVEY**

For the government to have total knowledge of what it controlled, it needed a system of visualizing where things were and how they were arranged: in other words, a map. In September 1878, after two months of inter-ministerial rivalry and argument in London, Lieutenant H. H. Kitchener of the Royal Engineers arrived to undertake the survey of Cyprus (Cavendish, 1992, pp. 184-197; Schaar *et al.*, 1995, pp. 24-25). Even after his arrival, arguments over the purpose of the map continued. The High Commissioner, Sir Garnet Wolseley, wanted “a rough survey for revenue purposes”, so that he could impose a land tax on the Indian model, rather than continuing the Ottoman tithe system (Cavendish, 1992, p. 190). Kitchener’s goals were much higher: he had a vision of an accurate, “scientific” map covering the whole island at a scale of one inch to the mile, showing antiquities and natural resources as well as roads and settlements.



To this would be added maps of the four main towns at 1:2500. All this would constitute, as his work in Palestine did, a declaration of total knowledge.

>>> **Fig. 2.** Map of Mathiati and area (Detail, H. H. Kitchener, 1885). Scale: One inch = one mile. Spot heights in feet. North at top.

The project suffered various setbacks, including Kitchener's resignation and departure for Anatolia, but under Wolseley's more amenable successor, Kitchener returned and finished survey work in 1883, and the map was published two years later. The finished product (Fig. 2) shows great attention to names, including localities, rivers and hills as well as villages, and records rural structures such as mills and churches. Colonial rule brings new features to the landscape, as expressed on the map, such as the gridded camp and cemetery of the 71st and 20th regiments east of Mathiati. Historical sites such as the slag heap southeast of Mathiati and ruined churches are marked, and ancient names are distinguished by Gothic script.

Even without enumeration and statistical analysis, the map has the same categorizing function as a census. Christian villages are marked with a cross following the name (e.g., Ayia Varvara), Muslim villages with a crescent (Kotchati), and mixed villages with neither (Mathiati). District and *nahieh* boundaries, such as that between the *nahiehs* of Dagh (Oreini) and Kythrea along the western side of Fig. 2, are more prominent than roads and rivers, particularly as on the original map the boundary has a tinted stripe along one side. The information is ordered, prescriptive, and complete. With Kitchener's total survey as a basis, the various government departments could continue with the imperial project of demarcation.

## TAXATION AND CADASTRAL SURVEY

One of the main practical uses of knowledge and demarcation for a colonial government was the collection of taxes. Among the plethora of taxes inherited from the Ottomans the most significant were the tithe and the property tax. In spite of the hopes of Sir Garnet Wolseley, the High Commissioner, to impose an Indian-style land tax, the tithe remained in place for many years. Paying in kind rather than cash saved the peasant an often lengthy journey to the market, and even in a poor year the farmer could not become beholden to the money lender, as the tithe automatically adjusted to the size of the harvest (Orr, 1918, pp. 82-83).

The property tax, payable on immovable property, animals, and trades and professions, was a different matter. The Ottomans had assessed each village communally, and it was up to the *mukhtar* or headman to apportion individual payments. To the British, this was clearly open to corruption, though their more fundamental objection came from having to deal with a community rather than directly with numbered individuals. This was quickly changed to the Indian system, where the state assessed every peasant and tradesman's ability to pay, and collected the money directly. This involved much more bureaucratic machinery, and also fixed the concept of private property in Cypriot society (Katsiaounis, 1996, p. 100).

Individual assessment by the state was clearly one expression of the colonial need to demarcate and classify, and it was inevitable that this should be extended to the tithe system. The land tax that Wolseley had advocated would replace the tithe with a tax on privately owned land. This clearly required the state to know how much land each individual had. The Ottomans had carried out an initial census and land ownership

survey in 1572, and a partial cadastral survey in the 1850s (Gazioğlu, 1990, pp. 123, 175-176). This was both incomplete and out of date, and in 1885 the first stage towards total knowledge of land ownership was taken, with a law making registration of land compulsory (Karouzis, 1977, p. 37). Even had this been fully acted upon, it was insufficient without a total knowledge of every piece of cultivated land, and that required cadastral survey, on a much more detailed scale than the one inch to a mile of Kitchener's map.

In 1907 the Legislative Council passed a law for the revaluation of all cultivated land, together the compulsory registration of all immovable property in the island, and this time allowed for a complete cadastral survey, which began in 1909 and continued for 20 years (Orr, 1918, p. 84; Christodoulou, 1959, p. 73; Karouzis, 1977, p. 37). The Land Registration Office with its army of clerks and surveyors became the largest government department in Cyprus, and produced a set of maps at a scale of 1:5000 covering the entire island and outlining and enumerating every plot of cultivated land. It also produced ownership plans of the towns at a scale of 1:1000 and of the villages at 1:1250, as well as handling all land sales and boundary disputes. More than any other department it demonstrated the colonial concern with the minutiae of the individual's existence, and the drive to demarcate and classify the land and its inhabitants.

>>> **Fig. 3.** Detail from cadastral plan of Muti tou Koudhounisti and area (Department of Lands and Surveys, XXXVIII.12; 1925, revised 1994).

Fig. 3 shows a characteristic example, from the Phterykoudhi river valley in the northern Troodos mountains, 6 km north of Phterykoudhi village. As with Kitchener's map, natural and artificial features are carefully recorded: rivers and streams (with

feathered arrows showing the direction of flow), springs, roads, terraces (hatched lines), lime kilns (“L.K.”; though this one is more likely to be for pitch), sheep folds (“S.F.”), and locality names. What dominates the map, however, is the network of boundaries. The heavy dashed line is the village boundary between the territories of Phterykoudhi and Ayios Epiphaios, and the single line with circles and dots is the edge of the state forest, with numbered forest cairns (“F.C.”). The cultivated land outside the forest is a patchwork of numbered cadastral plots, each number referring to an ownership document in the district Land Registry Office. Hooks link the two halves of plots crossed by streams, and most plots are less than 100 m across.

With the whole island covered at this scale and in this detail, the enormity of the task is astonishing. Rather than relying on community knowledge and self-regulation, the colonial powers had to appropriate all knowledge to itself, and make the community dependent on the central government for any land transaction or change in food production.

### **FOREST DELIMITATION**

In a matter of months after the British occupation of Cyprus, the forests became a major focus of their administrative and classificatory zeal. The issues, to the colonial rulers, were clear. To protect and preserve the forests and allow them to regenerate from their blasted state, the government had to control the indiscriminate felling, clearing, and goat grazing that had been taking place for centuries. In the short term this might harm specific individuals such as goatherds and chair makers, but for the sake of the

future and for the good of the community as a whole, the government felt it had the duty to impose restrictions according to its perspective alone.

And so began the long process of regulation, demarcation and control. In 1879 the first Forest Law was passed, which was detailed and specific about a whole range of activities. Goat grazing within the forest was prohibited, unless special dispensation was given. Characteristically, a complex bureaucratic system was set up for those goatherds who wished to continue grazing their flocks where they had been doing so for generations (Ordinance XXII of 1879, Article 26. Quoted in Thirgood, 1987, p. 119):

Every year, in the month of March, the Moukhtar of each village desiring to pasture its flocks under Section 25, shall submit to the Commissioner of the District a statement in writing, showing the number and description of the cattle and the place where it is desired to graze them; and, provided spots are available, the Commissioner of the District, with the advice of the Principal Forest Officer, shall designate tracts to which the cattle may be admitted and fix the period during which they may be grazed.

An illiterate goatherd was at the mercy of the *mukhtar* (headman) of his village, and in many cases this relationship was colored by the ongoing dispute between pastoralists and cultivators. An equivalent case was that of the chair makers of Kakopetria, where that craft was a mainstay of the local economy and required *Quercus alnifolia* from the forest. Collecting wood from the forest was now illegal, unless a special permit was obtained. This permit had nine conditions, included when and where the wood might be cut, the stamping of the chair with an official Government mark, and the payment of a due (SA1/2153/1880-3).

However detailed these regulations, they were unenforceable unless it could be proved without question exactly where the village land ended and the forest began. This

required, once again, a map with lines on it, and a system for marking the boundary on the ground. In 1881 the Forest Delimitation Law declared all uncultivated land with forest trees, scrub or brushwood, to be Forest Land; all of this, apart from privately owned land, was to be State Forest (Thirgood, 1987, p. 105). The law also set up the machinery to map all State Forests. The Forest Delimitation Commission would work its way round the island, interviewing villagers about the ownership of cultivated land, and making decisions about exactly where the forest boundaries ran. This would then be open to negotiation and objection for a certain length of time, and once all cases had been heard and decided on, the forest boundaries would be fixed on the map and marked on the ground.

The Delimitation Commission began its mission in 1881, and found it very slow work. In the village of Ayia Irini (see Fig. 1), for example, 130 separate claims had to be investigated. As part of the legal process, each claim had to be signed. The president of the Forest Delimitation Commission, the Assistant Commissioner of Kyrenia A. F. G. Law, complained that “as the majority cannot write, they make blots and smudges as their ‘marks’, all over the record” (SA1/2021/1880-3). Rather than sympathizing with an illiterate villager’s problems in dealing with a bureaucratic system, the colonial official’s sense of order and demarcation is offended. Once a provisional boundary had been settled, a notice was posted in English and Greek, or English and Turkish, declaring “The Woods and Forests Delimitation Order, 1881” and announcing that all objections had to be deposited with the Commissioner within six months (SA1/2084/1880-3).

The cadastral plan in Fig. 3 demonstrates the principles at work in the forest delimitation. The cultivated plots in the western part of the map lie on an isolated river terrace in an otherwise steep-sided and narrow valley. The forest boundary marked by

cairns 603-605 lies a few metres above the beginning of the slope leading up to Kato Muti tou Koudhounisti, a high and very steep-sided ridge-line. On the eastern side of the ridge, the same thing happens again, with the forest and the cultivated land pushing against each other. More problematic is the “sheep fold” (more likely a goat fold) marked at the locality “Mandra tou Paphiti” (“Goat fold of the Paphiot”). Goats and their herders are much more prone to cross forest boundaries than cultivators and crops.

The same principles of forest delimitation can be seen over the Makheras Forest as a whole (Fig. 4). Cultivable land tends to lie in the river valleys, so these are excluded from the forest; the Yalias valley northwest of Prophitis Elias Monastery is a clear example of this. Spurs and ridge lines, such as the long Tyrannos ridge at the northeast corner of the forest, are too steep to be farmed, so these are included in the forest. The State Forest boundary also gave way to the villages and the two monasteries, but paid no attention to the goat folds.

>>> **Fig. 4.** Map of Makheras Forest (Source: Defence Geographic and Imagery Intelligence Agency, United Kingdom, 1:50,000 topographical maps nos. 19 and 20, 1988).

When decisions on the boundaries had been taken and rulings made on the various objections, it was time to set the boundaries in stone. Seeing that these markers were the physical expression of the imperial project of demarcation, it is of considerable archaeological interest to look at them in some detail, as well as the official discussion of what they should be and where they should be sited. Initially they were just cairns of rough masonry one foot high, sited at prominent points on the boundary about a mile apart (SA1/2087/1880-3). Unsurprisingly, many were destroyed. At the beginning of

1884, there was a long discussion about cairn types, in which permanence and visibility were the two factors considered most important. The village boundary markers of India were put forward as a model: these tended to be cut stone blocks one foot square in plan and two feet long, with half the length buried in the ground and set in lime concrete. The Public Works Department was too busy to make them, so a local English contractor agreed to produce 150, though with a broader base below the ground than the Indian examples. They were to be numbered with figures three inches long, cut into the stone (SA1/334/1884).

The production of boundary cairns became a major operation, with convict labor being used (SA1/3808/1884), and constant attention was paid to making the boundaries



more visible. In 1884 trilingual notices were printed declaring that anyone found damaging boundary marks would pay a £5 fine or spend three months in prison (SA1/1271/1884). In 1885 cairns were whitewashed, with the numbers painted in black; as well as the cut stones every mile, three additional masonry cairns were added inbetween (SA1/4471/1885). Each year the Treasury allocated money for the production and maintenance of cairns. In the financial year 1895-1896, for example, 1083 new “beacons” were made, and 1586 repaired (*Annual Report*, 1895-1896, p. 48).

A good example of a masonry cairn from this period survives in the Asinou Valley, eight kilometers northeast of Kakopetria. It lies in a very visible position in the centre of a steep and narrow spur near the base of a steep ridge. The cairn’s base diameter is 76 cm, and its highest preserved height 30 cm; judging by the tumble lying round it, the original height was nearly twice that. It is well built, with large angular chunks of basalt carefully fitted so that their flattest faces are outermost and relatively flush with each other. The core consists of small pieces of rubble and earth, and there are traces of soft white plaster on the exterior. This cairn is a sizeable monument, whose construction required considerable amounts of time and skill. It was clearly intended to have a major visual and political impact on users of the landscape.

By 1896 all the main delimitations had been made, and once all the remaining objections had been heard, the State Forests were considered properly delimited and recorded. They covered some 700 square miles, about 19.5% of the surface of the island (Thirgood, 1987, pp. 113-114). The maps and boundary cairns left no room for ambiguity when it came to prosecuting transgressions and encroachments. In the financial year 1907-1908, for example, 3402 “forest offences” were reported, of which 1035 were taken to court and 943 convicted (Thirgood, 1987, p. 115).

A major part of the work of the Forestry Department continued to be the maintenance of its boundaries, as recorded each year in its *Annual Report*. In 1930, as part of a renewal of old cairns and filling in the gaps between them, 1015 new cairns were built, and 2648 repaired (*Annual Report of the Forestry Department, 1930*, p. 5). After the Second World War all new boundary marks were made of concrete, and these, which are still in use today, gradually replaced the old stone ones (*Annual Report of the Forestry Department, 1947-1948*, p. 4).

The delimitation of the forests, along with the careful maintenance of their boundaries, was partly the result of a very practical concern with their proper protection, and their current healthy state confirms the long-term value of that perspective. The way that this protection was managed, however, and especially the imposition of regulation and demarcation on the people who depended on the forest for a livelihood, was one component in the creation of a colonial system of knowledge and control. Empty spaces on the map had to be criss-crossed with boundary lines and demarcated units, each one labelled and properly known. With the help of cairns, notices, and a judicial system which punished infringement, these lines were also drawn on the landscape and on the colonized society.

### **CYPRriot RESISTANCE TO DEMARCATION**

In February, 1892, it was reported by the Commissioner of Kyrenia that a local café owner had built a wall between his house and the government Customs House. When told to stop he had refused, and so the Commissioner had to call in bureaucratic reinforcements: he informed the Chief Secretary's Office in Nicosia, and requested the Land Registry Office to determine the exact boundaries of the government land on

which the Customs House was built. This act of the café owner was technically an “encroachment”, and was aggravated by a further encroachment, the mounting of a lamp on the neighboring Quay Wall, which was also built on government land (SA1/451/1892).

Trivial as any one such incident might seem, it was the mass of small encroachments which demonstrated local scorn for the boundaries imposed by the colonial government. If a café owner needed light for his tables, he put up a lamp in the most convenient place. If a goatherd wanted to pasture his goats away from his co-villagers’ fields, he took them to the forests, regardless of the whitewashed boundary cairns put up by foreigners from outside the village. As the Confiscation and Property Registers show, Michael Yiakoumi’s infringement of the forest boundary was one out of thousands that took place every year, and the number of prosecutions and fines grew so high that the Greek Cypriot members of the Legislative Council questioned the legality of the Forest Department’s operations (Zannetos, 1910-1912, vol. 3, pp. 123-124).

Powerful Cypriot institutions, particularly the Church, could marshal arguments that the colonial government had to take seriously. As the Forest Department was trying to settle the western boundaries of the Makheras Forest (see Fig. 4), the ancient monastery which gave the forest its name tried to keep the boundary cairns as far away from it as possible. As its major economic activity was goat grazing, it also tried to keep grazing rights in the areas of its several goat folds within the forest. In 1886 the Abbot used the prestige of the church and its history to resist the advances of the British foresters, and even employed archaeological evidence. The monastery, wrote the Abbot’s secretary, had held pasture land in the forest *ab antiquo*, as was proved by a golden bull granted by Michael Comnenus; and what was more, the monastery’s goat

folds in the forest and a ruined church were tangible proof of the antiquity of the monastery's rights of ownership and pasturage. This could have been made into a strong argument in the government's own terms, but, as the Chief Secretary commented with some relief, the case was never brought to the courts (SA1/2289/1886).

Resistance to the forest boundaries and the exclusion of goats increasingly began to take on a violent form, particularly as arson. With no rain from March to October and the fierce heat of the summer months, forest fire was a real danger (as it still is): it only took a thrown cigarette end or a dropped match to burn thousands of acres of prime forest. As early as the summer of 1881, a fire in the Pasha Livadhia area near Troodos was attributed to arson, as it started in several places along the path from Kykko Monastery to Kyperounda (SA1/2128/1880-3). The mountain goatherds, who were fiercely protective of their status and livelihood (Sant Cassia, 1993, pp. 777-778), quickly realised the value that the Government attached to the forests. Arson was an easy way of striking back at what they saw as the repression of their livelihood, as well as harsh enforcement by local forest officials (Thirgood, 1987, pp. 122-123). The damage caused by such fires was exacerbated by the unspoken support of many forest villagers for the arsonists. Later in the same summer of 1881, the Principal Forest Officer P.-G. Madon complained of the "insubordination and excessive ill-will of the peasants" who refused to help extinguish forest fires (SA1/2140/1880-3).

As well as individual, deliberate resistance to specific colonial policies, there was often a more systemic resistance. Particular social institutions such as land ownership, grazing patterns, and roadside cafés, by the mass decisions of those who act within them, can maintain their inherited characteristics in the face of changes imposed from outside. For Cypriot resistance to colonial demarcation, one of the best examples is that of land ownership and cadastration.

A problem noted by the British before the cadastration project even started was that of marking out property ownership on the ground, as Kitchener, writing anonymously (see Magnus, 1958, p. 23) commented in 1879: “There are no hedges and ditches in Cyprus. The different allotments are marked, or supposed to be marked, out by stones; but as these stones have generally disappeared, the holdings are only known approximately” (Notes, 1879, p. 153). Even after the cadastral survey was finished in 1929, habits did not change, and the usual boundary between plots was a low ridge of earth between two shallow furrows (Christodoulou, 1959, p. 84). As the Land Registration and Survey Department commented immediately after the completion of the survey, “Much of the value of the cadastral survey is now lost owing to boundaries not being recognisable on the ground” (*Annual Report of the Land Registration and Survey Department*, 1930, p. 5).

A system of demarcated ownership plots relies on there being one owner per plot, as a general rule, and only one unit of ownership within the plot. This, however, was not the case. The Cypriot law of inheritance required that all property should be divided into equal shares and distributed to the deceased’s children (Christodoulou, 1959, p. 86). Each generation, therefore, plots were divided and subdivided. To compound this fragmentation, fruit trees and their produce could be owned independently of the land on which they stood, and irrigation rights could be held independently of either. When forced into a system of strictly demarcated ownership plots, the natural result of this over the generations was the complete fragmentation of land holdings. An example of this is described by Demetris Christodoulou for two villages just north of Makheras Forest (1959, p. 85):

At Argates property of less than £10 registered value held in undivided shares was in 369 lots involving 1,912 co-owners. Of those lots a field of 2 donums had 10 co-owners; an apricot tree had 11 co-owners; two olive trees had 48 co-owners. At Pano Dheftera 153 lots were owned by 2,872 co-owners; one fig tree of a registered value of £1 had 176 co-owners.

This particularly applied to *sokhórafa*, the fields nearest the village which were quickest to get to and the easiest to manure, and so the most valuable inheritable land. Fig. 5, showing some cadastral plots on flat alluvial ground on the northern outskirts of Malounda, is an example of this. Several adjacent plots of identical size are clearly divisions of larger plots, into two equal halves, or four quarters (there are four examples of this in Fig. 5), or three or more narrow strips. Plots divided into one half and two quarters show two generations of division. When this fragmentation is combined with multiple ownership, share cropping, and different ownership of land, trees and water within the same plot, it is clear that the concept of a boundary between one villager's land and the next has become meaningless.

>>> **Fig. 5.** Detail from cadastral plan of northern outskirts of Malounda (redrawn from Department of Lands and Surveys, XXIX.55; 1923, revised 1990).

In 1945 a start was made in resolving the practical problems that this fragmentation entailed (Christodoulou, 1959, pp. 87-88), though it was not until after independence in 1960 that a series of laws began to reform land ownership and inheritance, in particular working towards land consolidation (Karouzis, 1977, pp. 40-46). Land ownership, then, was one aspect of the Cypriot landscape that the colonial regime never mastered. This resistance came not from outlaw arsonists or guerilla

fighters but from the social mechanisms of the farmers and families of the Cypriot village.

## CONCLUSION

A colonial regime is by definition authoritarian. It can only exist by having and using the power to impose an alien political system on a largely unwilling society. One of the mechanisms which gives it this power consists of demarcation: the process of dividing the landscape and society into manageable units which can be known, categorized and controlled. Some of these units gave a tangible and verifiable boundary to what had previously been defined by negotiation or consensus: land ownership plots; sacred precincts; village territories; public space in the city. Others expressed an astonishingly wide range of social and political exclusions: state forests; ethnic quarters; military zones; the Club.

For the system to work these units must be absolute, with fixed boundaries and no ambiguities. Every parcel of land has to be registered in the name of a specific individual. Every individual must have one religion, one class, one profession. This meant that the boundaries had to be prominent and clearly signalled. Symbols on the map and a whole series of cairns, walls and signs on the ground made the lines outwardly visible, and created an arena for their literal and metaphorical policing.

Because of its authoritarian and absolutist character, the colonial system contained the seeds of its own collapse. However proactive your resistance, you can only cross a line when that line has been laid down. Drawing a line between forest and pasture created the opportunity for goatherds to commit the offence of forest

encroachment, where before they had merely taken their goats to pasture. The new experience of being prosecuted for crossing an imaginary line politicized the goatherds of colonial Cyprus, and taught them the powerful weapon of arson.

Local knowledge of relationships and of individual fields and trees was flexible enough to handle the complexities of land use within the community. A system of fixed plots and absolute boundaries imposed from outside, by contrast, was too rigid for its own good, and brought complexity to the point of absurdity. Trees had multiple owners, people had several levels of identity, land played different roles at different times. Even if they had wanted to, people could not force their complex and dynamic society into a single, rigid mold. Resistance to imperial rule came not only from the individual actions and shared institutions of the colonized, but from the very absolutism with which the colonizers tried to impose their rule. The net of demarcation lines cast over the island by the British caught only themselves.



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*CPRM: Confiscation and Property Register for Makheras Forest, Lythrodhondas Forest Station.* Copyright remains with the Government of Cyprus.

SA1: Unpublished Chief Secretary's minute papers, preserved in the State Archives of the Republic of Cyprus. Copyright remains with the Government of Cyprus.

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**FIGURE CAPTIONS**

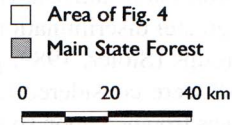
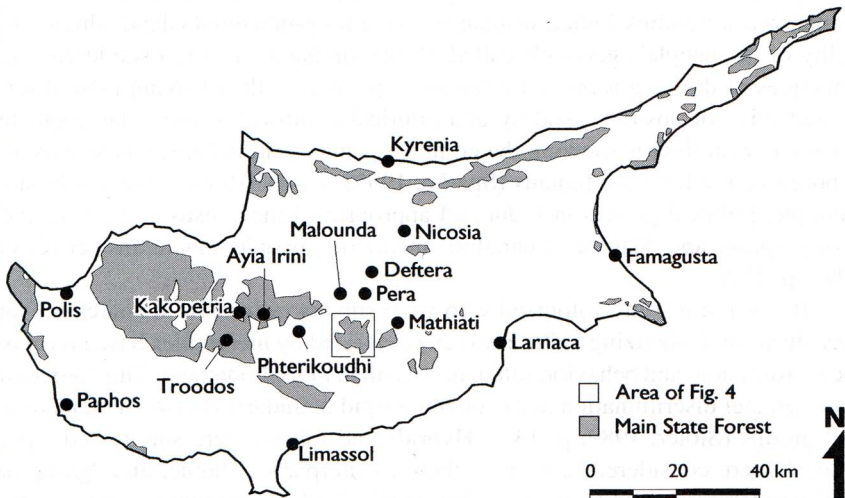
**Fig. 1.** Map of Cyprus showing Main State Forests and places mentioned in the text.

**Fig. 2.** Map of Mathiati and area (Detail, H. H. Kitchener, 1885). Scale: One inch = one mile. Spot heights in feet. North at top.

**Fig. 3.** Detail from cadastral plan of Muti tou Koudhounisti and area (Department of Lands and Surveys, XXXVIII.12; 1925, revised 1994).

**Fig. 4.** Map of Makheras Forest (Source: Defence Geographic and Imagery Intelligence Agency, United Kingdom, 1:50,000 topographical maps nos. 19 and 20, 1988).

**Fig. 5.** Detail from cadastral plan of northern outskirts of Malounda (redrawn from Department of Lands and Surveys, XXIX.55; 1923, revised 1990).





Kotschati

Church

Peró  
1369

Poupées

MILL

Kerepés

1043  
Ayia Varvara

Kolóté

MILL

Harakónes

Paléop.

MILL

Amira

Harakones

MILL

Láona

Mathaati

Cemetery

Camp

1250

Wall

Slag

Kótino-Pyr

Church  
1020



