



SZENT ISTVÁN UNIVERSITY

**GARDEN MANAGEMENT IN THE 19TH CENTURY
COUNTRY ESTATES OF HUNGARY**

PhD Dissertation Booklet

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BUDAPEST

2017.

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Architecture and Landscape Ecology**

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RESEARCH HISTORY AND STUDY OBJECTIVES

Recently the scientific study and elaboration of the versatile subject of historical gardens is realised by more and more professionals, typically from garden- and landscape historical, art historical and agricultural historical aspects. The subject of my doctoral dissertation – *Garden management in the 19th century country estates of Hungary* – was basically inspired by the fact that although it is well known that before the IInd World War, the maintenance of the ornamental and productive gardens of the residential estates were entrusted on nationally acknowledged gardeners, still we know very little about the professional and economic management of the estates under their supervision, the situation of the maintenance crew as well as the relation of the different horticultural units compared to each other and their characteristic features.

The key objective of my PhD research was to give a comprehensive characterisation on the garden management of country estates of the second half of the 19th century and by the detailed study of the management and gardening practice of a few important country estates increase our knowledge on the operation of co-eval front-edge gardening establishments.

Therefore, my studies are centred on the general landscaping aspects of the country estates – like location, size, branches of cultivation, specific components – as well as specific features of their operation within the estates, like financing, staff management and hierarchy within the personnel. Apart from the above mentioned two research lines, the specific floral elements of some important Hungarian residential estates are analysed on the basis of accessible primary sources with special regard on censuses preserved in public collections and family archives.

SOURCES OF THE RESEARCH AND APPLIED METHODS

The investigation of residential estates was obviously started with the study of relevant technical literature on manorial gardens and gardening. The exploration of the topic followed due to the complex character of the subject multiple lines. For the presentation of general garden and agricultural history context I could use recent technical literature. To focus on the subject of the dissertation I was mainly concentrating on estates located in present-day Hungary for the availability of the primary sources.

I have systematically compared listings in the available garden art inventories, censuses; furthermore, surveyed the online database for Historical Gardens of Hungary. In respect of certain selected objects, these data were compared to the information obtained from cadastral map data from the second half of the 19th century. The aim of this comparison was twofold: first, to find which of the residential centres had an adequately complex horticultural unit that could comprise the three main functionalities (ornamental garden, kitchen garden, orchard) together, or have at least two of them at hand. On a map-based survey I am comparing the horticultural units of all residential estates in the same scale, uniformly studied in 1:5,000 scale as this has proved suitable for the study of functional, land use and expansion studies and the proper comparison of the investigated units. The cadastral maps were complemented using the data of the primary (archive) sources using the so-called estate protocols, offering exact information on the ownership relations, classification by cultivation branches and the extent of the patches of ground associated with them.

The investigation of the manorial gardens by internal economic units is based, apart from technical literature and cadastral maps, on primary sources from archives like co-eval accounting and administrative documents. Therefore I have selected such residential estates where relevant information

on the horticultural units spanning several decades was preserved and available.

The third main field of my research was the study of the dendrological evidence of the ornamental gardens in respect of the analysed primary sources. As a methodological novelty, I have analysed the collected information in the form of a chronological chart, collating inventory data, lists and contemporary descriptions in a chronologically ordered table, systematically summarising data on species, varieties, year of botanical recognition and proof of occurrence in Hungarian aristocratic gardens according to the archive sources. Wherever it is possible, the frequency of occurrence of specific taxa is presented according to the inventories and listings.

RESULTS

The PhD doctoral research has brought about several new scientific results concerning the one-time horticultural units of the country estates. One of the first achievements was the identification of the horticultural units and the already perished garden architectural elements of the archducal gardens in Alcsút on the basis of the turn-of-the century description by Jenő Füredi (1904). Secondly, on the basis of the sources in technical literature and primary sources of family archives I could establish the double – functional and administrative – role of the horticultural units of the residential estates in a historical sense.

Moreover, I could demonstrate the triple role (i.e., ornamental garden, kitchen-garden, orchard) of the aristocratic garden establishments run by private estate holders of the 19th century, and their organic interdependence till the disintegration of the large estate systems. On the basis of cadastral data I could demonstrate that household gardens (kitchen-garden and/or

orchard) were present beside the ornamental gardens in all the investigated cases, but they did not survive till our days in their original function.

By analysing the accounting documents in the family archives I could recognise the structure and the hierarchy of the garden units of the country estates as an estate management unit and present new evidences in connection with the management of the gardens at three one-time residential estates (Körmend, Martonvásár, Nádasdladány) as personnel and financial resources.

The third field of my research was dedicated to the dendrological aspects of the investigated country estates. On the basis of 19th century plant lists, I have compiled a chronological table on the arboreal species mentioned in the sources, with the name of the species and the variants with the year of description and specific mentioning in the analysed horticultural units. By this chronologically ordered table I could visually present the dominant species and variants occurring in ornamental gardens of Hungary during the 19th century.

THESES

1. The term „uradalmi kertészet” (approximately, horticultural units or garden units of country estates) is a locally used technical term in use for the gardens of the aristocratic estates from the Reform Era (first half of the 19th century) till the second World War. It can be interpreted as a historical term in two ways. First, as a territorial concept as a privately owned area under horticultural operation pertaining to a country estate; the total area of ornamental gardens, kitchen-gardens, orchards and nursery gardens together. In another, practical and functional approach, an economic and organisational unit within the estate that had a complex role in everyday property management including maintenance and

development of the gardens, professional direction of the work and implementation of horticultural routines.

Horticultural units of the residential estates in the 19th century in Hungary were typically owned by the aristocracy, the church and entailed property. Their primary operative role was the maintenance and the development of ornamental gardens belonging to the estates, tillage of the kitchen-gardens and orchards under central directives. The cultivation of ornamental plants, fruits and vegetables were typically centred on the self-catering of the estate, using their own products, but instances of a commercial plant production and circulation of products was also known from several horticultural centres like Alcsút, Eszterháza, Pápa, Tata.

The gardens or horticultural units of country estates performing complex professional tasks could operate as independent economical units within the estate, with their own budget and personnel. The professional management of the gardens was managed and controlled by the head gardener. Under the management of a specific horticultural body, several units of separate management could be ranked like nursery gardens and orchards that could be situated separately from the centre of the residential estate, maybe in another municipality (e.g., nursery gardens of the Martonvásár or the Nádasdladány estates). At the administrative centres of the estates, the ornamental and kitchen-gardens immediately associated to the residence can be considered only a part of the complete horticultural unit.

- 2. Within the horticultural units connected to aristocratic residences, the three horticultural branches – ornamental garden, kitchen-garden, orchard – can be spatially separated in a cadastral sense as regards the*

planning of the estate, but in respect of operation or occurrence of their components, no clear separation can be accomplished.

On the basis of cadastral maps and cadastral records I could separate the triple articulation of the horticultural units, i.e., spatially delineate the layout of ornamental gardens, kitchen-gardens and – if existing – orchards, their extension and relation to each other in the immediate vicinity of the residence, around the castle building itself. On the basis of the studied examples we can state that the extent of ornamental gardens can be widely different; even several orders of magnitude could be observed. At the same time, the „profitable” part of the garden (kitchen-garden, orchard) is more stable, the differences in extent not exceeding six to seven-fold. The research of the primary sources in respect of the individual country estates prove that though the horticultural units aimed at separating the different branches of horticultural production, the operation of the individual branches could not run separately. Productive equipments for ornamental gardening (e.g., pineapple house at Ikervár, peach-house at Körmend) could be placed in the kitchen-garden, however, the productive plant could equally form a part of the ornamental garden as well (e.g., in the case of Alcsút).

3. On the basis of the cadastral maps and aerial photography it can be clearly deduced that from the triple articulation of the horticultural units of the country estates only the ornamental gardens survived till our days, though in essentially transformed form regarding ownership, function and spatial layout.

In certain fortunate instances, the territory of the former kitchen-gardens can form an integrated part of the ornamental garden even today, with modified function – typically as a lawn or woody green space (e.g.

Ikervár, Fertőd, Peresznye, Csákánydoroszló). In other fortunate cases the former kitchen-garden of the country estate or part of it was transformed during the architectural development of the residential complex into ornamental garden (e.g. Tiszadob, Iszkaszentgyörgy). The most typical development, however, is the disappearance of the former kitchen-garden and orchard (sometimes part of the ornamental garden itself). With passing time, these parts were detached from the original property and as a change of function, has been typically built in (e.g. Körmend, Hőgyész, Lovászpata, Gencsapáti, etc.) or transformed into agricultural area (e.g. Simaság, Dáka).

4. Wage boards for the personnel applied by the residence clearly indicate levels of hierarchy among the staff. On the basis of these data I could demonstrate the position of gardeners employed in the residential estates. In optimal cases, three levels of hierarchy could be separated comparing the wages and allowance of the gardeners to other employees of the estate.

The head gardener, as the leader of the garden management staff for production and maintenance, held a middle management status within the estate, similar to leaders of other branches like chief forester or chief hunter. The head gardener had full responsibility on the horticultural units under his direction, directly accountable to the steward. In his complex role (garden maintenance, plant production, management of manpower and direction of operations), he was a mediator between the highest administration of the estate and the personnel involved in the everyday horticultural activities and related works. The acknowledgement of the head gardener varied by the different estates as shown by the ratio of his wages to the leading senior officers of the estate (steward / supervisor); it

could be a quarter, but for some persons, half of the steward's allowances. Under the position of the head gardener we find the skilled journeyman / under gardeners who had professional training. On the lowest level of gardener hierarchy we find apprentices and unskilled garden laborers. The latter's financial appreciation was very low; their wages was about 10% of the head gardener's earnings, ranking together with the farm hands, coachmen and the herdsman.

5. *On the basis of accounting documents in the country estates we can state that the handling or management of large extent ornamental and productive gardens was separated within the management of the estate as an independent economical and operational unit. Within this framework, however, the maintenance, production and development-construction activities were not clearly separated from each other.*

The accounting protocols of the garden units of the country estates were typically produced quarterly and annually, giving evidence on annual budget planning and results. The accessible documents registered the status and the task of the staff taking part in the working process. I could prove that during the operation of the horticultural units, apart from the garden maintenance and production activities, smaller or greater construction activities took place regularly like building of gates and fences, greenhouse renovation, mending of roofs, construction of garden paths and drainage systems. That is, maintenance work and construction-development activities were not clearly separated. At the same time, for the special tasks of construction aiming at the improvement of garden elements, hands from the estate outside the gardening staff and even paid freelance professionals (like carpenters, masons, blacksmiths, glaziers and carters) were hired. The work power capacity of the permanent gardening staff was occasionally completed by, in the first half of the 19th century,

compulsory serf labour, later on by daily labourers and wage workers for semi-skilled utility works (e.g. weeding, hoeing, cleaning of drainage channels and spreading manure).

6. *The selection of outdoor arboreal taxa for the gardening establishments of country estates in the 19th century is based on the diversity of the basic species. The ratio of cultivated variants were hardly listed in co-eval plant lists with the exception of the archducal gardens at Alcsút.*

The co-eval plant lists of the ornamental gardens of the investigated country estates prove that the range of taxa for ornamental shrubs and trees during the 19th century was based on the basic species. The increase of cultivars is typical for the last third of the 19th century, resulting from a fashion of plant collecting as the botanical description of the new variants mainly took place in the middle third of the century. The ratio of cultivar diversity of arboreal species in the richest Hungarian plant collection, i.e. the Alcsút archducal gardens, is still under 50% by the end of the century. A practical result of my investigations is a summary table of the plant inventories, arranged in chronological order, containing the individual taxa, the year of their botanical recognition and appearance and frequency in the individual gardens of country estates. By the help of this reference table it is easy to estimate the occurrence of certain species and variants in the given gardens.

7. *Using the cross-table taxon frequency analysis of the plant inventories of the horticultural units of the residential estates, I could clearly demonstrate which were the generally distributed arboreal taxa in the plant use for outdoor ornamental gardens during the 19th century.*

In the analysed 19th century plant inventories (Alcsút, Ikervár, Martonvásár, Keszthely) the following arboreal taxa were demonstrated with significant overlapping. It is remarkable that on the cross-table chart

showing the agreement of taxa, the ratio of variants was negligible while the lists were clearly dominated by the Linnaean basic species described in the 18th century.

Trees: *Acer campestre*, *Acer monspessulanum*, *Acer negundo*, *Acer pensylvanicum*, *Acer platanoides*, *Acer pseudoplatanus*, *Acer pseudoplatanus*, *Acer pseudoplatanus* 'Variegatum', *Acer rubrum*, *Acer saccharinum*, *Acer saccharinum*, *Acer saccharum* subsp. *nigrum*, *Acer tataricum*, *Aesculus flava*, *Aesculus flava*, *Aesculus hippocastanum*, *Aesculus pavia*, *Ailanthus altissima*, *Alnus glutinosa*, *Alnus glutinosa* 'Laciniata', *Alnus incana*, *Betula pendula*, *Betula pendula*, *Betula pendula* 'Crispa', *Broussonetia papyrifera*, *Carpinus betulus*, *Castanea sativa*, *Catalpa bignonioides*, *Celtis australis*, *Celtis occidentalis*, *Cercis canadensis*, *Cercis siliquastrum*, *Cydonia oblonga*, *Diospyros lotus*, *Diospyros virginiana*, *Elaeagnus angustifolia*, *Fagus sylvatica*, *Fagus sylvatica* 'Atropunicea', *Fraxinus americana*, *Fraxinus angustifolia*, *Fraxinus excelsior*, *Fraxinus excelsior* 'Crispa', *Fraxinus excelsior* 'Pendula', *Fraxinus ornus*, *Ginkgo biloba*, *Gleditschia sinensis*, *Gleditschia triacanthos*, *Gymnocladus dioicus*, *Juglans nigra*, *Koelreuteria paniculata*, *Liriodendron tulipifera*, *Maclura pomifera*, *Paulownia tomentosa*, *Platanus orientalis*, *Populus alba*, *Populus balsamifera*, *Populus heterophylla*, *Populus nigra*, *Populus nigra* var. *italica*, *Populus tremula*, *Populus x canadensis*, *Populus x canescens*, *Prunus cerasus*, *Prunus mahaleb*, *Prunus padus*, *Pyrus communis*, *Quercus cerris*, *Quercus robur*, *Robinia hispida*, *Robinia pseudoacacia*, *Robinia viscosa*, *Salix babylonica*, *Salix purpurea*, *Salix repens*, *Sorbus aucuparia*, *Sorbus domestica*, *Sorbus torminalis*, *Styphnolobium japonicum*, *Styphnolobium japonicum* 'Pendula', *Tilia cordata*, *Tilia x europaea*, *Ulmus americana*, *Ulmus minor*

Shrubs: *Amorpha fruticosa*, *Amygdalus nana*, *Aristolochia macrophylla*, *Baccharis halimifolia*, *Berberis vulgaris*, *Calycanthus floridus*, *Calycanthus praecox*, *Campsis radicans*, *Caragana arborescens*, *Caragana frutex*, *Ceanothus americanus*, *Celastrus scandens*, *Cladrastis kentukea*, *Colutea arborescens*, *Conus alba*, *Coriaria myrtifolia*, *Cornus mas*, *Cornus sanguinea*, *Corylus avellana*, *Corylus avellana 'Laciniata'*, *Corylus colurna*, *Cotinus coggygria*, *Crataegus azarolus*, *Crataegus calpodendron*, *Crataegus crus-galli*, *Crataegus laevigata*, *Crataegus laevigata*, *Cytisus scoparius*, *Euonymus europaeus*, *Euonymus japonicus*, *Euonymus japonicus 'Argenteovariegatus'*, *Euonymus verrucosus*, *Euonymus atropurpureus*, *Euonymus latifolius*, *Frangula alnus*, *Genista tinctoria*, *Hibiscus syriacus*, *Hippocrepis emerus*, *Hippophae rhamnoides*, *Jasminum fruticans*, *Kerria japonica*, *Laburnum anagyroides*, *Ligustrum lucidum*, *Ligustrum vulgare*, *Lonicera caprifolium*, *Lonicera sempervirens*, *Lonicera tatarica*, *Mahonia aquifolium*, *Morus alba*, *Morus alba*, *Morus nigra*, *Morus rubra*, *Myricaria germanica*, *Paeonia suffruticosa*, *Paliurus spina-christi*, *Parthenocissus quinquefolia*, *Parthenocissus quinquefolia*, *Periploca graeca*, *Philadelphus coronarius*, *Philadelphus pubescens*, *Physocarpus opulifolius*, *Potentilla fruticosa*, *Prunus pumila*, *Ptelea trifoliata*, *Pyracantha coccinea*, *Rhamnus cathartica*, *Rhus glabra*, *Rhus typhina*, *Ribes alpinum*, *Ribes aureum*, *Rubus plicatus*, *Sambucus nigra 'Laciniata'*, *Sambucus racemosa*, *Sorbaria sorbifolia*, *Spartium junceum*, *Spiraea chamaedryfolia*, *Spiraea japonica*, *Spiraea salicifolia*, *Staphylea pinnata*, *Staphylea trifoliata*, *Symphoricarpos orbiculatus*, *Symphoricarpos racemosus*, *Symphoricarpos racemosus*, *Syringa persica*, *Syringa persica 'Laciniata'*, *Syringa vulgaris*, *Toxicodendron radicans*, *Viburnum lantana*, *Viburnum opulus*, *Viburnum opulus 'Roseum'*, *Vitex agnus-castus*, *Wisteria sinensis*.

Evergreens: *Abies alba*, *Abies balsamea*, *Cupressus sempervirens*, *Juniperus communis*, *Juniperus sabina*, *Juniperus virginiana*, *Larix europaea*, *Pinus cembra*, *Pinus nigra*, *Pinus sylvestris*, *Pinus strobus*, *Taxus baccata*, *Thuja occidentalis*, *Thuja orientalis*, *Tsuga canadensis*.

Broad-leaved evergreens: *Buxus sempervirens*, *Hedera helix*, *Prunus laurocerasus*, *Ruscus aculeatus*.

CONCLUSIONS AND RECOMMENDATIONS

In respect of the concept of the „*uradalmi kertészet*” (i.e., horticultural units and garden management of country estates) it is clear that we are facing a technical term used for a special part of the estates in Hungary, from the Reform Era (early 19th century) till the end of the IInd World War, a term loosing its relevance after 1945 by the breaking up of the large estates and nationalisation of the land. Comparing co-eval and modern garden inventories, the database for horticultural units of country estates comprises nearly a thousand items. This list can be implemental in further studies on garden inventorization and revision work.

Comparing 19th century cadastral maps and recent aerial photography I could state that the texture of the settlements can show, even by the disappearance of former gardening functions, the area of former productive or ornamental gardens. In some historical castle and garden assemblages, e.g., Fertőd, Ikervár, Keszthely, Gödöllő, Alcsút, Fehérvárcsurgó or among the less famous ones, Csákánydoroszló and Peresznye, the territorial integrity of the former gardens were preserved; so it would be possible to revive the function of productive gardens or nursery gardens beside the ornamental garden.

In the 19th century, any significant manorial garden must have had a directing head gardener and trained staff under his supervision. This staff was constantly or temporarily complemented by semi-skilled labour. In the

maintenance work of the preserved garden ensembles the greatest challenge is just the lack of this professional background. The role of the former management of these horticultural complexes is substituted by concepts like property and facility management. It would be timely to revive the complex management and maintenance aspects for the utilisation of the preserved historical garden assemblages.

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