I. Aims of the research, questions raised

In my doctoral work I attempt to analyse a distinctive variant of vine cultivation on the Great Plain that arose along the river flats in the late 19th and early 20th centuries. My investigations apply mainly to the settlements along the lower reaches of the Tisza (Szentes, Szegvár, Mindszent, Hódmezővásárhely), but for the purpose of comparison I also involved a few research spots on the central reach of the Tisza (Nagykörű), beside the Maros (Apátfalva, Makó), and villages and towns of the Bácska region now in the territory of Serbia (Martonos, Magyarkanizsa, Zenta). These enable me to draw conclusions of general validity.

The activity of communities cultivating vines and fruit on the river flats can be interpreted in a wider context in the system of interaction between human culture and the natural environment, which does not necessarily mean a one-sided projection of the theoretical approaches of a particular research trend (*cultural ecology, ethnoecology, ecological anthropology*, etc.). It is much more fruitful to depart from the phenomenon examined and elaborate a model that can be used to follow changes occurring in the utilisation of the river flats.

The articles and writings that have been published on the subject do not attempt to interpret vine cultivation on the river flats in a wider context, merely providing a description of the phenomenon. For this reason in a
certain respect my doctoral dissertation that attempts to analyse this form of farming can be regarded as filling a gap. My research can be considered as novel mainly because it is directed at interpreting the adaptation strategies of the communities farming in the areas between the Tisza and the levees in the period following the regulation of the rivers.

The working hypotheses and questions raised in my dissertation can be summed up as follows: The cultivation of vines on river flats can be considered as a peripheral phenomenon as regards its total physical extent but it offers an excellent opportunity to analyse the utilisation of land on the river flats following the regulation of the rivers. In the wider sense my dissertation attempts to interpret the connections between the natural environment and human communities, focusing principally on the elements of human culture in the interactions.

I think it is important to clarify the factors that played a role in the changes affecting the utilisation of the river flats and that led to the flourishing vine cultivation. An analysis of the responses given by communities farming on the river flats to the challenges of the natural environment, namely the periodical inundations, can also be very instructive. Another question to be answered is what economic and social factor at the turn of the 19th to 20th century determined this particular form of land use on the river flats. What were the causes that led to the disappearance of this form of farming from the great majority of the river flats in the 1970s?

It is thus not my intention to paint a static picture of the theme examined but rather to identify the socio-economic and natural factors that fundamentally influenced and shaped vine cultivation on the river flats.

II. Methods used to collect and process the material, types of sources used

I have been conducting fieldwork on the theme for close to ten years, during which I have been able to document the cultivation procedures used in the river flats vineyards that are still in cultivation, as well as the building structures adapted to the natural conditions. Most of my informants have been vine growers, many of whom still cultivate their plots. However I had to face considerable difficulties in the case of Hódmezővásárhely, Mártély and Szegvár where it was only after lengthy enquiries that I managed to find families who had cultivated vines or fruit trees on the river flats before the 1970s. In the course of the fieldwork I systematically studied the historical source material on vine cultivation on the river flats that helped to place the phenomenon in space and time. I made numerous visits to branches of the Csongrád County Archives in Hódmezővásárhely, Makó, Szeged and Szentes where I strove to collect relevant documents that could supplement the
information obtained from my informants. The local press (Mindszenti Lap, Szentesi Lap, Szent és Vidéke, Szentesi Élet, Vásárhely és Vidéke, Vásárhelyi Reggeli Újság, etc.) is outstanding among the written resources in a number of respects as local papers regularly reported on floods and flood damage on the river flats. One of the most important lessons of the research has been that in the choice of theme the exploration of archival sources has fortunately supplemented other forms of fieldwork (interviews, participant observation). Documents on vine cultivation on the river flats proved helpful principally in placing the phenomenon in time. In many cases memory preserved only in incomplete or distorted form the events of outstanding importance for this form of farming.

III. Results of the research

Research of Melinda Égető’s has shown that vine cultivation on the Great Plain, once thought to be uniform, can actually be divided into two major regions. In the region between the Danube and Tisza Rivers and the southern part of the region east of the Tisza the vine and wine culture has roots dating back to the Middle Ages and typically shows signs of autochthonous development, while in contrast in the northern part of the region east of the Tisza, in the Nagykunság region within the Hajdúság, the Nyírség and Békés County vine cultivation is much more recent. On the basis of the names used for contiguous, closed areas planted with vines, the former can be called a region of vine hills, and the latter one of vine gardens.

Vines and fruit trees were planted in the area between the rivers and the flood levees in a number of settlements along the Tisza and Maros Rivers (Szentes, Hódmezővásárhely, Mindszent, Makó, Apátfalva, etc.) in the late 19th and early 20th century. Their cultivation required special knowledge and techniques because those who farmed on the river flats had to adapt in some way to the natural environment.

The cultivation of vines on the river flats represents a new level of development in the vine culture of the Great Plain that cannot be compared in extent to the zones of either vine hills, or vine gardens. The reason for this is to be sought mainly in the fact that the form of farming I examined was located in the area between the rivers and the flood levees where it could be carried out with success only on the higher zones.

In my study I attempted to describe the phenomenon with the concept of vine cultivation on the river flats that differs fundamentally from vine cultivation in copses that is a kind of transition between gathering and plant cultivation. The cultivation of vines planted to climb up live trees consisted of thinning the crowns of the trees, pruning the vines and keeping the area around the vines free of weeds. A fundamental difference can also be seen in the cultivation procedures: the form of vine cultivation I examined combined
first spur pruning and the development of long canes, then cordon training, while vine cultivation in copses involves the special technique of training vines over trees.

Vine growing on the river flats occupies a special place in the complex system of river flats farming. In the model outlined by Tibor Bellon in the spatial respect it is linked to the second level, meaning that it is a periodically inundated area, while in the temporal respect it is linked to the period of dry farming because the area where this vine cultivation arose was created as a result of construction of the levees.

The vine cultivation on the river flats shows much similarity to the technology of viticulture and viniculture characteristic of the Great Plain wine region. This is explained by the fact that the owners planting vines in the area between the river and the levees tried to apply the knowledge that had proved successful on flood-free land. However, in many points special cultivation procedures can be observed that make it possible to use certain parts of the periodically inundated areas as vineyards.

The technology used when planting vines – planting unrooted cuttings in untilled soil – can be regarded as related to the favourable soil endowments and to the facts that because of the flooding there is no danger of Phylloxera.

The absence of manure can also be explained in some way by the special natural conditions because the fertile sediment deposited by the river makes soil improvement unnecessary.

The regular weeding of the vegetation harmful to the vines that proliferates after the floods can also be regarded as a special feature of vine cultivation on the river flats and in cases involves the use of special tools.

Occasionally the soil cultivation includes a special operation: loosening the surface that becomes hard after the floods.

The use of cane pruning may possibly also be related to the periodical inundation, but in the case of chasselas this method of pruning can be regarded as much rather adapted to the varietal character. The appearance and spread of high-trunk training can be quite clearly explained by the rising water level and prolonged flooding because it gives the canes and shoots a certain degree of protection. From our point of view the widespread use of the new cultivation procedure is very instructive because it can be interpreted as man’s response to the challenges of the natural environment and forms part of the adjustment to the changed ecological conditions.

The regular protection against fungal diseases can be explained by the microclimate because at certain times of the day intensive micro-precipitation occurs on the river flats, intensifying the danger of downy mildew infection.

Because the vineyards on the river flats are located in periodically inundated areas, it was not possible to build earthen walls as such structures would have been destroyed by bigger floods. The vine growers therefore used
a construction technique that allowed them to survive floods and repair and maintain the buildings with relatively little labour input. Similarly to the selection of an area suitable for planting vines, the most important consideration when placing structures was that the site should be relatively high above the river and so less threatened by floods. If no suitable site could be found, the growers raised mounds and built on them.

Research on the theme cannot avoid the problem of maintaining contact between the vineyards on the river flats and the owners’ homes that in many cases can be interpreted as a special form of adaptation to the natural environment. In certain periods, especially during floods or even permanently the landowners and the communities or companies grouping them had to organise ways to approach their land.

The adaptation can thus be interpreted as a response to the challenge of the natural environment, comprising the special work processes and tools characteristic of vine growing on the river flats, the creation of wall structures adapted to periodical inundation and local forms of social organisation.

I have attempted in my dissertation to provide new knowledge on the techniques of land utilisation practised in the period following the flood control. My research draws attention to the fact that after the regulation of the rivers, not only did farming continue on the river flats, but field crops also appeared on large areas. This explains why the landowning communities began partial flood control measures by building weirs in the area between the river and the levees that enabled them to protect plots from smaller floods.

In my assessment the landowning communities farming on the river flats have specific local skills and a knowledge of natural factors essential for the versatile utilisation of the river flats. This amounts to a complex strategy of adaptation based on a knowledge of natural conditions enabling landowners to exploit natural resources in the most efficient way. A thorough knowledge of the differences in elevation is an important part of this local knowledge, making it possible to create different production zones (field crops, vineyards, etc.) depending on the degree of periodical inundation. The available sources and interviews all revealed the special attitude of landowning communities farming on the river flats to the river floods right up to the present. They regard the periodically recurring floods as harmful but they are also aware that the sediments rich in various nutrients brought by the flood waters also have a beneficial effect on the crops cultivated.
IV. Summing up

Vine growing on the river flats in combination with fruit growing can be interpreted as a special activity of man adapting to the natural environment and exploiting its resources that arose and spread as a result of particular social and economic processes. It is important to remember that the growing population of the settlements examined strove to expand the areas cultivated in order to ensure a livelihood. This explains why even the areas periodically inundated by the Tisza increased in value and the landowning communities strove to apply cultivation techniques to add these areas to the flood-free land. Behind this is probably the hope of landowners that the more intensive agricultural activity would produce greater yields even though the crops were often completely destroyed by floods. Another important factor is that, despite the periodical inundation thought and judged to be detrimental, the planting of vines on the river flats must have proved to be an effective way of protecting against Phylloxera, the dreaded vine pest of the period. It was far cheaper to plant vines on the river flats because there was no need for resistant grafts because of the immunity of the soil and the periodical inundations. Radical changes occurred in land ownership of the vineyards on the river flats in the late 1960s when part of the riverside areas was transferred to the co-operative farms and as a result the cultivation of vines and fruit there was gradually abandoned. However, it continued in the settlements where the riverside plots remained in private ownership.
V. The author’s main publications on the theme:

Az avasi magyarság szőlőkultúrája [Vine cultivation by the Avas Hungarians]. Ethnographia 1999. 2.szám 415-456. (with András Simon)


Hajtástól az újborig. A szőlő- és a bor ünnepei Lendva-vidéken [From shoots to new wine. Festivals of grapes and wine in the Lendva region]. 2002. Lendva (with András Simon)


An example of ecological adaptation. The cultivation of vines on the river flats of Szentes. Acta Ethnographica Hungarica 49 (3-4) 257-268.


Az ártéri szőlő- és gyümölcstermesztés a magyarkanizsai Szigeten a 19-20. század fordulóján [Vine and fruit growing on the river flats of Magyarkanizsa Sziget at the turn of the 19th-20th century]. Bácsország 2009/3. 113-115. (with András Simon)