Landscapes of Repair: the Role of Photography and Film in Documenting the Legacy of Modern and Contemporary Architecture and Public Spaces

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Aerial Photography as a New Perspective in Planning and Rehabilitation : Regional Conceptualizations along the Danube and around Lake Balaton in Socialist Hungary

Domonkos Wettstein

Abstract

Aerial photography has also influenced the modern interpretation of the landscape and the development of modern architectural concepts. An example of this is the aerial photo series documenting the developments of the Lake Balaton Region by Hungarian architects. The modernization of the largest lake in Central and Eastern Europe, has also achieved significant recognition in the international professional history. However, aerial photos soon played an important role in ecological restoration beyond planning.

The Balaton resort project started in 1957 with a new scale and methodology of regional planning process. The project leader was Tibor Farkas, who continuously documented the transformation of the landscape by taking aerial photos from an airplane. These aerial photos provide the primary material for the research. The photos also show the interpretation of the landscape and the formation of architectural concepts. A year earlier, he had successfully prepared the regional plan for the Mohács Island recovery after floods on the Danube. In this process, he already experimented with the use of aerial photography as a design tool and used the experiences in the planning of the Balaton region. The innovative methodology of the Balaton regional plan, which he developed together with Charles Polónyi, later a member of TEAM 10, integrated the scales of architecture, urban planning and regional planning. The Balaton plan was successfully presented at international forums, including the regional planning congress in Liege in 1958 and the last CIAM forum in Otterlo in 1959. In 1965, the Patrick Abercrombie Prize of the UIA was dedicated to "Tibor Farkas and his team" for the integrated methodical treatment of landscape and architectural values.

The Balaton regional plan brought a new scale of planning not only to architects and urban planners, but also to the garden designers who worked closely with them. Over time, the modernization of the landscape also brought ecological problems to the fore. In contrast to the visual landscape interpretation of architecture, a more complex landscape interpretation of ecology was needed, which also revalued the role of architecture. The development of Hungarian landscape architecture can also be linked to the Balaton project, when earlier garden designers began to develop landscape-scale concepts, which soon resulted in the institutionalization of landscape architecture and the launch of university education.

The study points out the transformation of landscape interpretation through aerial photographs. The initial modern architectural concepts show the interpretation of the visual, monumental plasticity of the landscape, later, with the emergence of natural problems, the ecological system of the landscape came to the forefront of interpretation. This transformation in the history of ideas resulted in the reorganization of the position of architecture and landscape planning. Aerial photographs help in documenting modern heritage and understanding the processes of planning history.

Key-words: modern architecture; landscape planning; regional planning; Balaton; regional modernism.

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Introduction

Aerial photography has given a new perspective to the perception of the landscape, while also creating new tools for landscape planning and architectural design. The architectural application of aerial photography is exemplified by the experimental work of Tibor Farkas, an architect and urban planner and a pioneer of Hungarian regional planning. In 1956, he led the restoration work after the Danube flood in the Mohács Island region in southern Hungary, and then, as Chief Architect, from 1957 onward, he coordinated the regional planning of Lake Balaton, the largest lake in Central and Eastern Europe. The landscape perspective played a prominent role in both flood restoration and the arrangement of the resort area. The Balaton development sought a fragile balance between the natural landscape and modernization, and the landscape perspective also influenced architectural design. The innovative regional planning methodology, integrating the landscape, settlement and architectural scales, achieved significant results in international planning history, which is why chief architect Tibor Farkas and his team received the UIA Abercrombie Prize in 1965.[1] However, the modernization processes were later distorted by the pressure of socialist ideology and ecological problems emerged. Tibor Farkas was now focused on the rehabilitation of the landscape and worked on the search for ecological solutions. For Tibor Farkas, aerial photography represented a new perspective on planning and rehabilitation, in which the problems of nature and architecture appear simultaneously. With his aerial photographs, he sought new perspectives on the landscape, which also shaped his personal interpretation of the landscape.

By processing the personal legacy of the chief architect, it is also possible to review his former aerial photographs. In addition to the archival design documentation and personal notes, the research also processed his contemporary aerial photographs, which were taken during the 1956 Mohács Island restoration and then during the developments on the shores of Lake Balaton in the sixties and seventies. During the research, a personal interview was conducted with the chief architect, and later the heirs provided information for processing the archive. In addition to the chief architect's archive, the study also processed the design documents found in the state archives and the publications of the professional journals of the time. Based on the sources, it was possible to carry out a complex reconstruction of the historical planning processes and to explore the circumstances under which the aerial photographs were taken.

The study examines aerial photographs in the context of design history and seeks answers to the question of how new technology and perspectives influenced landscape, settlement

1 Domonkos Wettstein, "A Desire for innocence? Collectivity and recreational architecture around the lake Balaton (1957–1968)," in *East–West–Central 01: Re-humanizing Architecture: New Forms of Community 1950–1970*, ed. Á. Moravánszky, J. Hopfengärtner and T. Lange (Birkhäuser Verlag, 2016).

and architectural design? What perspectives did the chief architect seek when documenting the landscape and how did he interpret the concept of the modern landscape? The study examines the analysis of perspectives through three different case studies in the light of the chief architect's contemporary publications and personal interviews, based on which it is also possible to depict the transforming concept of landscape in late modernity.

An experimental architectural career – Tibor Farkas, chief architect

Tibor Farkas is a member of the young generation of architects who emerged after the Second World War, whose approach was already shaped by modern architecture during his university years. He was able to try out his experimental approach in various, novel tasks of the era. He was born in 1922 in Dombóvár, Tolna County, and his father worked in the construction industry.[2] He completed his architectural training at the Budapest University of Technology in 1944. After that, he worked as a private designer in Dombóvár for a short time, primarily dealing with village planning plans and settlement surveys. He developed model plans for the development of villages, which he also published in professional journals of the time. His code of conduct for urban planning plans, which was still considered novel at the time, later became widely spread. From 1948, he worked for the National House Building Cooperative in Budapest, and then in 1950 he became a member of the Construction Science Association. At that time, he worked closely with Béla Sámsondi Kiss and, experimenting with the material of fiber-reinforced concrete, they worked on the design of material-saving residential buildings.

However, in 1951 he returned to town planning and headed the town planning department in the state planning company Mezőterv. The group was later transferred to the Town Planning Company (VÁTERV, then VÁTI). The main profile of this socialist state planning company was to solve town planning tasks outside the capital. They primarily prepared town planning plans for rural settlements, but in addition to town planning they also had an office dealing with regional planning and architectural and historical issues. Tibor Farkas headed the regional planning office. His first works included smaller town planning plans (Harangod, Karcag, Keszthely, Monoricsárda, Tiszalök), but in 1956, after the Danube ice flood that caused unexpectedly great damage, he was given the task of regional planning for Mohács Island. It was then that he began to deal with regional planning that went beyond the scale of the settlement. In 1956, he participated in the Budapest revolution against the Soviet occupation as a workers' council chairman. From 1957, he was involved in the newly launched Balaton development. He led the preparation of the first comprehensive Balaton Regional Plan and was also appointed the region's first Chief Architect. In 1965, he received the UIA The position of chief architect was abolished in 1968 as a result of economic policy reforms, and he continued to fight for

2 "Urbanisták", Sources for the biography of Tibor Farkas, accessed March 10, 2025, https://urbanistak.hu/farkas-tibor/

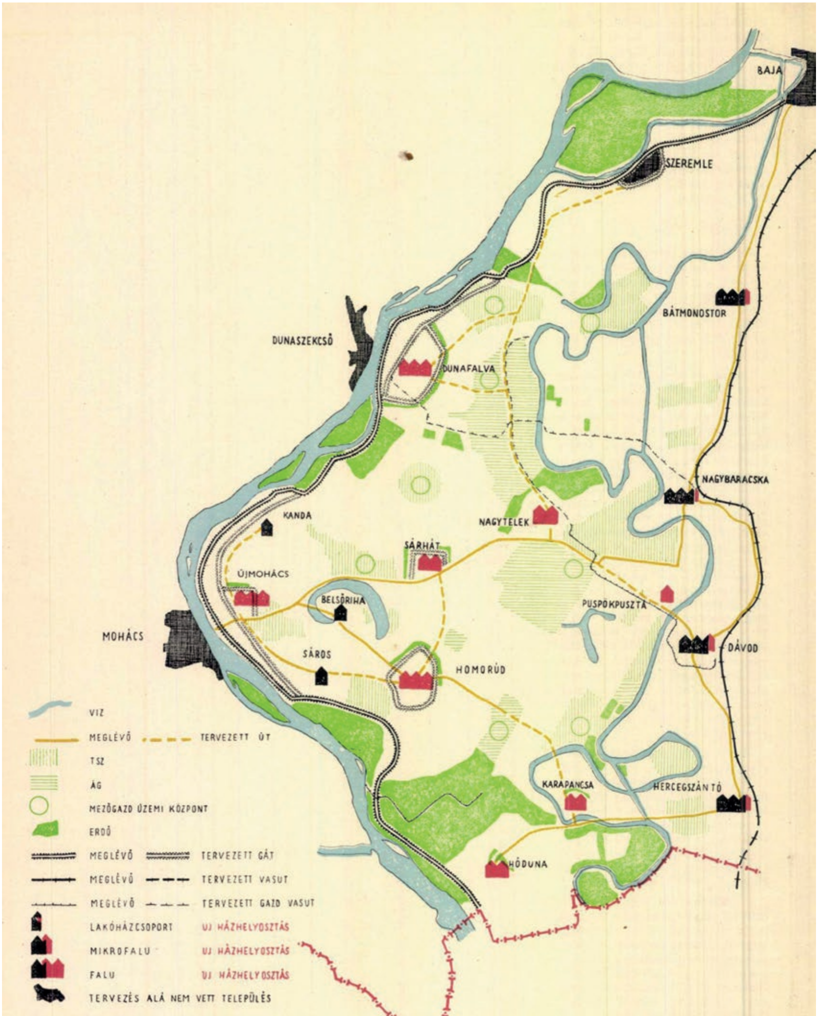
the validation of the professional aspects of Balaton development. He was the initiator of the Balaton Central Development Program, which he had already begun to develop within the framework of the National Technical Development Committee. He held the position of secretary in the transforming Balaton development organization, the Balaton Inter-Ministerial Committee.

However, in 1972, in protest against the increasingly distorted development processes, he resigned from all positions related to Lake Balaton. After that, he mainly dealt with international regional planning tasks and participated in the Thermal project financed by UNESCO. However, in 1979, he received a new assignment to remedy the ecological crisis that was developing at Lake Balaton, and until his retirement in 1983, he supervised experiments related to the rehabilitation of the landscape as a ministerial commissioner. He died in Budapest in 2015. Throughout his career, he created at different scales and in different areas of responsibility, and an experimental approach is a constant feature in his work. After his early experiments with woven concrete materials, he changed scales and dealt with landscape-scale tasks of regional planning, which had no precedent in Hungary before. He developed pragmatic, yet innovative solutions, including the use of aerial photography in landscape planning.

Landscape dynamics of flooding: Flood restoration along the Danube

Tibor Farkas first used aerial photography during the restoration after the 1956 Danube flood. The use of the technique for planning was necessitated by an emergency situation, but the discovery of the possibilities inherent in the new technique clearly demonstrates Tibor Farkas's experimental approach. An ice flood occurred at the beginning of 1956. As the contemporary publication compiled by the planners draws attention to, although ice floods were a common phenomenon on the Danube at that time, due to the unfavorable weather conditions, the 1956 flood caused great destruction in the southern section of the Danube's Hungarian course. The Danube froze over a 940 km section from Vienna to Orsová, but the melting did not start from the south, but from the west, from the upper course, which increased the damage. Due to the extremely cold weather in March, the previously exploded ice floes froze again, forming blockages. The water rose due to the ice jams and overflowed the riverbed, causing dams to break in several places. The flood reached 20 settlements, completely inundating 4 settlements, and 748 km^2 of agricultural land was submerged. The situation was particularly critical on Mohács Island, as the low-lying area was completely submerged. 4,000 people had to be evacuated from the area through the icy water.

[Fig.1]
Regional Plan, Mohács Island. Source : Farkas, Tibor and Károly, Polónyi. „Beszámoló a dél-magyarországi árvízsújtotta területek újjáépítéséről." *Magyar Építőművészet* 5, no. 9 (1956): 266.



Mohács sziget általános terve. Készült a Várostervben Farkas Tibor irányításával. A tervezésben résztvettek: Zsitva Tibor, Csillag József építészmérnökök, dr. Jókuti Ferenc agromérnök, Szerdahelyi László mérnök, forgalmi szakértő, valamint a Mesteriskolások részéről Bérces István, az Építőipari Műszaki Egyetem részéről Faragó Kálmán és Major Jenő

The flood defences were still in progress when on 6 April 1956 the Council of Ministers ordered the start of the restoration planning. The planning was entrusted to two young architects from VÁTERV, chief designer Tibor Farkas and Charles Polónyi. The pair had worked together during the first period of the Balaton development, but Charles Polónyi later took up work in Africa, became a member of the TEAM 10 group and had an international career.[3] The young designers had no experience in restoration planning, and in addition, they were given an extremely tight deadline for planning the new settlements, so that they could start the layout immediately after the flood had receded, so they had to be ready by 23 April. In their retrospective, the designers summarised the circumstances of the planning work as follows:

> Among the planning tasks, Mohács Island was the most significant. Due to its size, soil composition and special location, it represents an independent unit. Its problems had to be solved in relation to the environment and within itself, taking into account the current situation, the characteristics and the development opportunities. We did not have enough time to prepare the necessary studies to solve the task, which also had the character of regional planning. We had to be content with the data of the Central Statistical Office, the map material that was difficult to find and proved to be unusable in many places, especially in terms of altitude. We were unable to obtain aerial photographs, which would have been of great help in such a case.[4]

It was not mentioned in the publication at the time, but an interview with Tibor Farkas earlier in the research revealed that the published maps were not usable for military and national security reasons. Because of the nearby Yugoslav–Hungarian border, the official maps were encrypted for military reasons. At that time, Yugoslavia led by Tito was considered an enemy country and in order to prevent espionage, the altitude data of the maps published for civilian purposes were distorted. Tibor Farkas and Charles Polónyi then decided to take their own aerial photographs in an emergency. The receding flood precisely outlined the high places where new settlements could be established. Charles Polónyi wrote about this in his old age memoirs:

3 Ákos Moravánszky, "Peripheral Modernism: Charles Polónyi and the Lessons of the Village," *The Journal of Architecture* 22, no. 4 (2017): 662–88, https://doi:10.1080/13602365.2016.1204076.

4 Tibor Farkas and Károly Polónyi, "Beszámoló a dél-magyarországi árvízsújtotta területek újjáépítéséről," *Magyar Építőművészet* 5, no. 9 (1956): 262–276.

[Fig. 2]
Aerial Photos, 1956. Mohács Island. Source : Archive of Tibor Farkas

...we didn't have the necessary data, no contour maps, not even aerial photographs. We had to watch the flood recede from a small training plane to find out which were the highest points in what appeared to be a completely flat area.[5]

The methodology of the plan integrated several scales, from the regional scale, through the settlement scale, to the architectural plans. This multi-scale methodology prepared the later plan for the much larger Balaton region, also prepared under the leadership of Tibor Farkas and Charles Polónyi. Finally, based on various maps, on-site surveys made during the flood and self-made aerial photographs, they were able to prepare the necessary base maps only with difficult work:

> When the water receded, the boundaries of the deeper areas could be accurately marked. The work was done from a boat, in the water, in rubber boots, at a time when even the population could not return to the island. This part of the work required sacrifice and hard work, but it paid off handsomely during the planning and marking out. The planner thus had a basic map available on which everything that had to be taken into account in the planning was recorded, including remaining house foundations, fruits, water features, etc.[6]

The two planners shared a pragmatic approach, but their different professional horizons emerged when developing the settlement plans. Charles Polónyi already had extensive international knowledge and wanted to apply the theories of modern urban planning to settlement planning issues. In his memoirs, he mentions the idea of the Garden Hungary as the planning concept, where the medieval settlement structure was recalled, where the settlements were settled in such a way that the lands could be reached on foot.[7] Tibor Farkas, on the other hand, based his plans for the new settlements more on the site conditions and the experiences of aerial photographs.

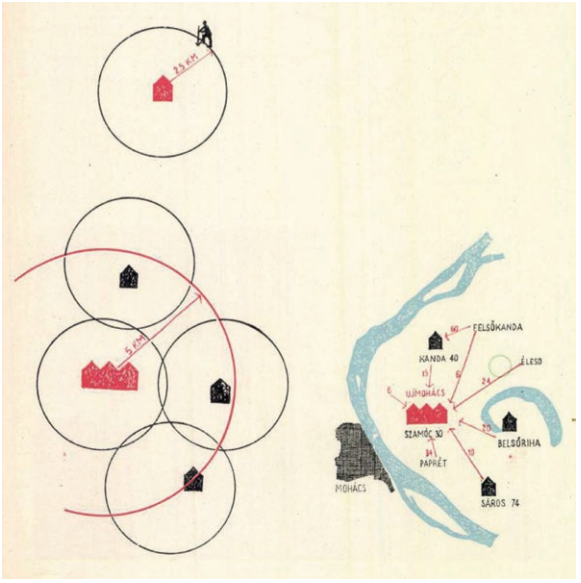
5 Károly Polónyi, Építész-településtervező a perifériákon. Polónyi Károly retrospektív naplója (Budapest: Terc, 2000), 22.
6 Farkas and Polónyi, "Beszámoló a dél-magyarországi árvízsújtotta területek újjáépítéséről", 262–276.
7 Polónyi, Építész-településtervező a perifériákon. Polónyi Károly retrospektív naplója, 22.

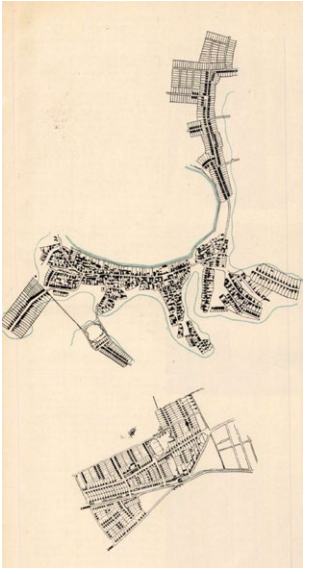
In the report of the time, they also summarized their planning experiences.[8] Although the works were still ongoing when the report was written, they were already able to articulate the experiences of the special planning process of post-flood restoration. In this, pragmatic decision-making on site played a prominent role, which was also vividly illustrated by the use of aerial photography.

> In this case, we had to put speed ahead of detailed solutions and the finesse of the design. Therefore, we must accept any criticism that may arise in this regard, because we felt that our most important duty was to immediately provide the plans for the new life. (...) Despite great difficulties, our architects who are leading the construction work are doing a selfless and exemplary job. Few people know about this work, and consequently few appreciate it. In this case, it is not a matter of ordinary design and construction management, but much more. Our architects have to create something good and beautiful on site from the available materials. They still have to overcome many obstacles before the project is fully completed this year.[9]

In the archive of Tibor Farkas, the research found and processed the reduced images of the flood aerial photographs. Although the quality of the images is not very good, the process of the flood receding can be clearly seen in the photo series. The idea of taking aerial photographs was brought to life by an emergency situation, and the new perspective had a great impact on Tibor Farkas and Charles Polónyi, as their recollections also show. At that time, photographs still served as a functional tool for providing data, and there was no aesthetic compositional intention in setting the perspectives. As a result, the images only provided information for mapping the topography at that time, and did not yet influence the creation of architectural concepts. Although the structures of the settlement plans and the formal designs of the architectural plans do not show any connection with the perspective of the aerial photographs, they gave the planners a meaningful impression of the landscape as a whole and of experiencing the new perspective of regional planning, which could also determine their later tasks.

8 László Mányoky, "Tervek és valóság Újmohácson," *Magyar Építőművészet* 7, no. 6 (1958): 169–179.
9 Farkas and Polónyi, "Beszámoló a dél-magyarországi árvízsújtotta területek újjáépítéséről", 262–276.





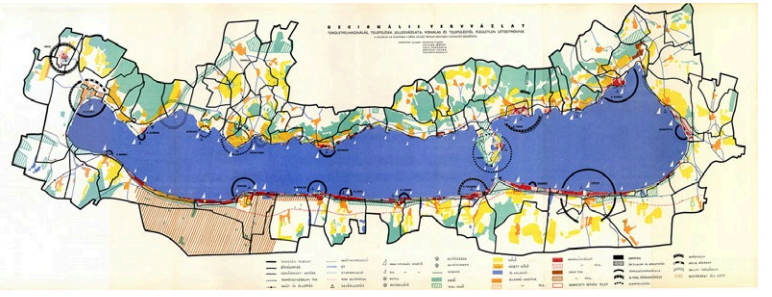
Landscape transformation processes: regional planning in the Balaton region

In the regional planning of the Balaton resort area, not only technical-infrastructural planning, but also the aesthetic evaluation of the landscape became a determining element of the concept creation. In this task, the landscape perspective was valued, which made its impact felt in both landscape planning and architectural design. Aerial photography played a prominent role in the implementation process of the plan, which now served not only to supplement the technical data provision, but also to visually evaluate the architectural solutions. The regional planning of the Balaton coast started barely a year after the Mohács Island restoration. In the meantime, the 1956 revolution and war of independence against the Soviet occupation broke out in Budapest, and after the uprising was crushed, the new socialist government announced a comprehensive social consolidation program. The development of the Balaton coast, which serves as a recreation area for society, became a prominent element of this consolidation program. In 1957, a new regional organization, the Balaton Management Committee, was established to develop the lakeshore, which had a backward infrastructure and was unsuitable

[Fig. 3]
Aerial Photos, Mohács Island. Source : Archive of Tibor Farkas

[Fig. 4]
Regional Plan, Mohács Island. Source : Farkas, Tibor and Károly, Polónyi. „Beszámoló a dél-magyarországi árvízsújtotta területek újjáépítéséről." *Magyar Építőművészet* 5, no. 9 (1956): 264 and 273.

for serving the needs of mass tourism.[10] Tibor Farkas was appointed the first chief architect of the Balaton shore and the head of regional planning. He had to develop both tasks in a pioneering manner, without precedents.[11] He was assisted in his work by Charles Polónyi, the chief engineer of the southern shore of the Balaton Management Committee.



Similar to the restoration after the Danube flood, the work on the Balaton shore had to be carried out under tight deadlines and with limited financial and technological resources. This time, the work also began with a survey of the landscape, and in just one year, by 1958, the first regional plan for the Balaton shore was prepared. The planning methodology, integrating concepts on a landscape, settlement and architectural scale, was similar to the Mohács Island plan, but this time a comprehensive plan had to be developed for a much larger landscape unit. When planning the resort landscape serving recreation, the preservation of the natural values of the landscape and the landscape role of modern infrastructure were considered important.[12] The visual appearance and aesthetic evaluation of the landscape played a prominent role in the concept. On the lake shore, which was already significantly overbuilt at that time, strict protection of the undeveloped areas of the landscape was determined so that the continuous green areas could remain untouched. Within the settlements, new areas suitable

10 István Kisléghi-Nagy, "A Balaton-táj fejlesztése építészeti szempontból; tárgyalási alapul szolgáló javaslat a MÉSZ részére," *Magyar Építőművészet* 6, no. 1–2 (1957): 51–52.
11 György Kőszegfalvi, "A regionális tervezés fejlesztésének néhány kérdése," *Településtudományi Közlemények* 26 (1977): 57–68.
12 Imre Oromos, "Planung für das Erholungsgebiet am Balaton-see, Ungarn," *Garten und Landschaft*, no. 9 (1966): 285–287.

[Fig. 5]
Regional Plan, Balaton, 1958. Source : Bérczes, István, Tibor Farkas, István Kisléghy Nagy and Károly Polónyi. „Beszámoló a Balatonfejlesztés egyéves munkájáról." Magyar Építőművészet 7, no. 4–5 (1958): 145.

for development were designated in such a way that the new development would fit into the composition of the landscape. Tibor Farkas expressed his landscape concept vividly in the development documents:

> The entire Balaton landscape could be compared to a great work of fine art, a monumental sculpture of lasting value. During the development, we strive not to detract from these with new buildings, but to highlight their existing values.[13]

Tibor Farkas's perception of landscape shows the vision of modern landscape design in the twentieth century. He views the landscape primarily as a visual value, and not yet as an ecological unit. As a plastic work of art that the architect, as the shaper of the landscape, can further develop with sculptural tools. All this is strongly connected to Le Corbusier's perception of landscape, which was also reflected in the design and composition of the buildings on the shores of Lake Balaton.

13 Tibor Farkas, *A Balatonkörnyék fejlesztéséről*, Manuscript, 1968.07.29. Source: Farkas Tibor archive.

[Fig. 6]
Aerial Photo, Tihany, Balaton Region. Source: Archive of Tibor Farkas

When designing the buildings, modern architectural design was adapted to the traditions of the region.[14] As chief regional engineer, Charles Polónyi also designed several new buildings on the southern shore, emphasizing the sensitive touch of nature in his concept. He also took landscape aspects into account when designing the freestanding buildings in the embrace of nature. He developed an innovative structural system for serving beaches, campsites and restaurants, which became adaptable to different locations and functions through the variable use of a prefabricated element set. The solution not only enabled an economical and fast construction method, but also adapted to the landscape environment.[15] By combining light V-shaped roofs, it became a characteristic solution for the architecture of the Lake Balaton coast of the era.[16] Charles Polónyi also presented the project at the CIAM congress in Otterlo in 1959.[17] At the waterfront viewpoints and harbors, buildings with expressive mass-shaped reinforced concrete shell structures were designed, which further interpreted the dynamics of the landscape in an abstract way. Landscape composition was also prioritized when designing larger holiday buildings and hotels. The horizontal strip-like holiday units were counterpointed with vertical tower hotels. This dynamic mass formation, which further shaped the character of the landscape, came from the concept of modern architecture.[18] At the same time, in the historical parts of the settlement that were important for tourism, they adapted to the local architectural traditions. Around the Benedictine abbey on the Tihany Peninsula, or on the volcanic Badacsony vineyard hill, the buildings were adapted to the tradition of vernacular architecture. The traditional mass form was used to shape the new buildings, with great emphasis on the use of local materials, especially volcanic stone. The topographical formation of the buildings also appeared, when the new building units were shaped by taking over the forms of the landscape and adapting them to the terrain. The chief architect also refers to the sensitive consideration of the landscape character in his note from 1966:

14 Tibor Farkas, "Visszaemlékezések: Ahogy én látom a Balatonügy 30 évét I. rész," *Magyar Építőművészet* 37, no 2 (1988): 44–47.

15 Charles K. Polónyi, *An Architect-Planner on the Peripheries: Case Studies from the Less Developed World* (Budapest: P&C), 1992.

16 Simon Mariann, "Hungarian See Promises a Rich Summer: Collective Good and Economic Interest in Socialist Leisure Architecture." in *Proceedings of the 2nd International Conference of the European Architectural History Network*, ed. H. Heynen and J. Gosseye, J. (Koninklijke Vlaamse Academie van Belgie voor Wetenschappen en Kunsten, 2012), 480–484.

17 Oscar Newman. *CIAM 59 in Otterlo.* Stuttgart: Karl-Krämer-Verlag, 1961. (in the series of Dokumente der modernen Architektur edited by Jürgen Joedicke)

18 Polónyi Károly, "Visszaemlékezések." *Magyar Építőművészet* 37, no. 3 (1988): 5–9.

[Fig. 7]
Aerial Photo, Badacsony, Balaton Region. Source: Archive of Tibor Farkas

In terms of scale and architectural approach, we strive for modesty, in the spirit of maximum modernity within our capabilities. In the future, we do not wish to compete with the character of the coastline, which stems from its dimensions, but rather we want to preserve it and at the same time develop it in a modern form, and express one of the main attractions of the Balaton landscape, its generally soothing, more intimate character.[19]

The principles of landscape, settlement and architectural composition enhanced the landscape perspective, which was also reflected in the official representation of the development. Film announcers and press reports of the time liked to take aerial photographs of small aircraft flying parallel to the waterfront. The aerial photographs could simultaneously show the characteristic features of the landscape, the undulating water surface and the new modern buildings lining the shore. The modern aesthetic perspective developed by the designers also determined the representation of the development. The perspective of the aerial photographs also suited the modern architectural character: the new perspective of the landscape emphasized modernity and prioritized the scale of the landscape form instead of traditional historical architectural forms.

19 Tibor Farkas, *Rövid áttekintés a Balatonkörnyéki regionális munkáról.* Manuscript, 1966. Archive of Tibor Farkas.

The results also attracted recognition at international forums, including at the XXIV. Congress for Housing and Townplanning in Liege in 1958, and in the first half of the sixties, numerous architectural delegations came to see the results.[20] As a result, the development won the UIA Abercrombie Prize in 1965. The landscape perspective was also emphasized when the prize was awarded. The value of the plan was believed to be discovered in the unity and harmony of the natural landscape and the architectural solutions. In addition to photo series showing the buildings, publications published in foreign trade press also included aerial photos that convey the landscape perspective.

Aerial photo series taken during this period can also be found in Tibor Farkas' archive. The special feature of the series is that they were not made to order, but were taken by him himself, similar to the Mohács Island photography with a small plane. However, the quality and composition of the image series differ significantly from the shots taken during the Danube flood. While the aim of the photographs taken while flying over the flood was not to evaluate the aesthetic of the landscape, but to obtain topographic data, the aim of the photographs of the Balaton landscape was to evaluate the aesthetic of the new building complexes and development opportunities. Although the composition of the images shows that the chief architect was not a professional aerial photographer and the movement and swaying of the aircraft influenced the adjustment

20 Peters Paulhans, "Kritische Anmerkungen von Paulhans Peters über Architekten von Ungarn," *Baumeister* no. 2 (1964): 99–140.

[Fig. 8]
Aerial Photo, Tihany, Balaton Region. Source: Archive of Tibor Farkas

[Fig. 9]
Aerial Photo, Siófok, Balaton Region. Source: Archive of Tibor Farkas

of the image sections, the composition of the images clearly shows an attempt to evaluate the visual aesthetics of the landscape. He never depicted the individual new developments up close, simply looking for an aerial view of the mass composition, but always presented them in a wider section with the mountain ranges in the background. In the photos, he also looked for the landscape unity that he had already formulated at the beginning of the planning, when creating the concept. At the same time, he used the photos not only for documentation, but also for planning. The archive contains a number of aerial photos to which he had attached a transparent tracing paper. He edited the contours of the new installations onto the tracing paper, often examining the installation options that fit the landscape in several different versions.

Based on archival design documentation, reports and aerial photographs, it became possible to reconstruct the landscape perception of Tibor Farkas and his team. As we can see from the previously quoted description, he interpreted the landscape primarily not as an ecological, but as a visual phenomenon, and landscape design as an artistic creative process that creates a new plastic composition. This perception primarily reflected the modern architectural perception of the era, while rules were already formulated for the protection of natural areas. However, the protection of natural areas did not yet appear as a solution to ecological problems, but as a means of providing a landscape experience that ensures recreation. Aerial photography as a planning and evaluation tool expresses this kind of visual architectural perception.

New Perspectives for Landscape Rehabilitation: Documenting Ecological Problems

The last series of aerial photographs from 1972 in Tibor Farkas' archive shows the transformation of perspectives. In addition to new development areas, he increasingly placed emphasis on the shrinking of natural areas. The series of photographs included images in which he no longer sought new modern architectural works, but documented the distortions caused by overbuilding. This kind of change in perspective is related to the changed attitude of the era, the emphasis on ecological problems.

The modernization of the landscape gained new momentum after the reorganization of Hungarian economic policy in 1968. The organization supervising the development was transformed, and the position of chief architect was abolished. Despite the narrowing of his powers, Tibor Farkas tried to create a new institutional framework to control the development processes.[21] On his initiative, the Balaton Central Development Program was established, which continued the priority construction projects on the lakeshore, and he was given a secretary

21 Domonkos Wettstein, "Deformations of the vacationscape: The mechanism of changing effects on the Balaton landscape after 1968," *Architektúra & Urbanizmus* 50, no. 1–2 (2016): 38–55.

position in the Balaton Inter-Ministerial Committee, which ensured coordination. Despite the institutional framework, he could no longer control the processes of landscape development. Increasingly larger areas were filled along the waterfront to create new construction areas, which, however, resulted in the artificial shaping of the landscape and the disappearance of natural waterfront ecosystems. Meanwhile, the former historical vineyard and orchard areas also began to be sold and developed for weekend houses. In protest against the increasingly distorted landscape, Tibor Farkas resigned from all his positions in 1972.[22]

The increasing development of the landscape also caused ecological problems in the early 1970s. Soil-binding plants disappeared from enclosed gardens that were removed from agricultural cultivation, which resulted in erosion of the hillsides. Not only were the historical agricultural sectors of the landscape, such as viticulture and fruit growing, pushed back, but the quality of the soil was also significantly damaged. The appropriate infrastructure was not built for the holiday homes built in the former orchards, and there was no adequate sewage drainage. While the crisis of the hillsides outlined an increasingly complex set of problems, the deterioration of water quality posed an increasingly greater challenge on the lakeshore.

22 Tibor Farkas, "Visszaemlékezések: Ahogy én látom a Balatonügy 30 évet II. rész," *Magyar Építőművészet* 37, no 3 (1988): 10–13.

[Fig. 10]
Aerial Photo, Zánka, 1972. Balaton Region. Source: Archive of Tibor Farkas

[Fig. 11]
Aerial Photo, 1972. Szigliget, Balaton Region. Source: Archive of Tibor Farkas

The problem was therefore not primarily aesthetic. Although Tibor Farkas' aerial photographs clearly show the visual problem of excessive development, which is an important aspect in the case of the holiday landscape, the problems directed attention towards a new scientific field, the complex approach of ecology, instead of searching for an architectural solution.

New disciplines emerged, which also transformed the perception of the landscape. The arrangement of the Balaton landscape was no longer dealt with by development-oriented architecture, but by landscape architecture that prioritized rehabilitation. For the new perspective of the landscape, it is worth comparing the previously presented concept of architectural landscape and the concept of landscape of the newly formed landscape architecture. The domestic pioneer of the new landscape-scale discipline was Mihály Mőcsényi, who also participated in the arrangement of the Balaton coast in the sixties.[23] As a university professor, he published his concept of landscape in 1968:

> Landscape is nothing more than the contradictory, and therefore dialectical, unity of the interactions between nature and society. Landscape is, on the one hand, the material condition of society's life, and on the other hand, the bearer of high-level visual-aesthetic qualities. Therefore, it is also the objectified history of the interactions between man and nature – manifested in the material world shaped by man.[24]

Based on the definition, we can see that landscape architecture no longer primarily interpreted the landscape as a visual value, but as a complex ecological system, in which the role of man in shaping the landscape is also present.[25] This new approach later also influenced the approach to architecture. Mihály Mőcsényi created his own summer house by recultivating an abandoned quarry in Balatongyörök, located on the northern shore of the lake. The place focused attention on the treatment of landscape wounds and became a meeting place for the Hungarian and international landscape architecture profession.

23 Annamária Gerzánics, "A tájrendező. A szakma kiterjesztése a táji léptékre," in *MM_C Mőcsényi Mihály egy polihisztor tájépítész. Tanulmányok és esszék Mőcsényi Mihály életéről*, ed. S. Bardóczi, A. Gerzánics, and K. M. Szilágyi (Budapest: Terc, 2021), 267.

24 Mihály Mőcsényi, "A táj és a zöldterület fogalmi problémái a tájrendezés nézőpontjából." *Településtudományi Közlemények* 21 (1968): 66-76.

25 Mihály Mőcsényi, "Egyedi tájérték - Mőcsényi esszék 14." Építészfórum, 19.03. 2013, accessed March 10, 2025, https://epiteszforum.hu/egyedi-tajertek-mocsenyi-esszek-14

The new perception of the landscape also influenced Tibor Farkas's approach. In 1979, he received a new assignment, as a ministerial commissioner, he had to understand the causes of the deterioration of water quality.[26] Their joint experiments with landscape architect Sándor Plósz confirmed that the deterioration of water quality was caused by the excessive modernization of the landscape. The stream beds around Lake Balaton were concreted in the spirit of modernization, while the artificially filled banks protected by concrete dams caused the natural wildlife to disappear from the lakeshore. The reed beds on the lakeshore played an important role in cleaning the river waters arriving at the lakeshore, but in their absence, streams poured their water into the lakebed without purification, which quickly caused eutrophication, i.e. an increase in the organic matter content of the water. When Tibor Farkas took his last series of aerial photographs in 1972, he was only aware of the problems, but his sensitivity to the natural environment gradually transformed his previous architectural interpretation of the landscape towards a more complex ecological perception of the landscape.

26 Tibor Farkas, "Visszaemlékezések: Ahogy én látom a Balatonügy 30 évet III. rész." *Magyar Építőművészet* 37, no. 4–5 (1988): 90.

[Fig. 12]
Aerial Photo, 1972. Révfülöp, Balaton Region. Source: Archive of Tibor Farkas

[Fig. 13]
Aerial Photo, 1972. Zánka, Balaton Region. Source: Archive of Tibor Farkas

Conclusions

The modern photography technique of aerial photography opened up a new perspective for architectural design, which also influenced the modern architectural design of the twentieth century. All this can be clearly traced in Tibor Farkas' multi-scale design work. After the initial functional, topographical data provision, his aerial photo series already appear as an aesthetic point of view. The points of view taken from the aircraft were well suited to the vision of the modern development of the resort area, where the new building units were conceived as a unity with the natural landscape. In addition to documentation, aerial photos also served as a planning tool, and the further editing of photo perspectives also had an impact on the creation of new compositions. From the seventies, distortions of the landscape also appeared in aerial photos, and photography no longer appeared primarily as an aesthetic point of view, but as a critical tool. In the contours of the natural landscape, instead of the expected natural experience, the harmful consequences of overbuilding appeared. The perception of landscape of the era also transformed, moving from a modern architectural vision of "monumental plasticity" towards the recognition of the systemic connections of ecology. The consequences of excessive modernization opened a new perspective on the landscape and directed attention towards an ecological perception.

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