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# LANDSCAPE TRANSFORMATION IN RURAL AREAS

CONNECTIONS BETWEEN THE CHANGES OF THE FUNCTION AND THE CHARACTER OF THE SMALL VILLAGES ON THE EXAMPLE OF THREE MICRO-REGIONS

## PHD DISSERTATION BOOKLET



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### **1. OBJECTIVES**

The main objective of my work was to **analyze the changes of the functions and the character of the villages that are caused by the processes of the 20<sup>th</sup> century**. Before that I wanted to **define the rural settlements** in order to make a Hungarian database for this work. With the help of this database I already could **sketch a statistical review on the actual type and strength of the specialization of the villages**, and the special changes in the landscape and in the settlement structure that can be connected with the special functions. For the **detailed analysis** I needed to choose **pilot areas**, where it was possible to point the **causes of the actual processes** and to make a **forecast for the expected changes** in the near future. In my work I searched answers for the following questions.

A. Questions related to the definition of the rural areas:

- P1: How can I define the rural areas from the landscape architecture aspect in Hungary, so what is the definition for rural areas?
- P2: How, with the help of which kind of data, database can I define the rural settlements from the landscape architecture aspect in Hungary?
- P3: Taking into account the high rate of settlements get the city status, the cities has always an urban character?
- B. Questions related to the changing functions of the settlements:
- P4: Which typology can be used the best from the landscape architecture aspect that reflects the changing functions and character of the villages at the same time?
- P5: Which specializations happened in the rural settlements in the 20<sup>th</sup> century, and how far the processes went by the millennium in Hungary?
- P6: What kind of settlements and what kind of areas had the most intensive change in the land use?
- C. Questions related to the pilot areas:
- P7: What kind of impact have the forces coming up-to-down and from bottom-up on the transformation of the functions and the character of the settlements? How it is possible to make advantage from the European efforts for integration?
- P8: How could the settlements rated detailed and spectacular in a micro-regional context taking into account the sustainable development?
- P9: Which are the land use tendencies that can cause a general problem in the case of the planning challenges in rural areas?

### 2. METHODONOLOGY

At first I had to create a database of the Hungarian rural settlements in order to make a Hungarian overview of the changes of the functions in the villages. Because of the limited data types I also worked with pilot areas to make detailed analysis of the defined processes.

### 2.1. THE SETTLEMENTS OF THE DATABASE

In order to make a Hungarian review I had to define the rural settlements in Hungary. After the review of the literature I made up my database of those 2725 villages in Hungary that have living zones only with low density.

While all area is unique, I didn't think it would be enough to work with only one pilot area. The first figures of my database showed that in Hungary the western ring of the agglomeration of Pécs (12 settlements) is the area, where all the main types of the villages can be found close to each other.

While I could take part more international projects that was connected to the Transylvanian Firtos area (20 settlements), I pointed out that area as well. In order to be able to make international comparison, I wanted to choose a pilot area from Western-Europe. I was searching for an area, where the Hungarian culture can be a common basement for this work, therefore I choose an area in Burgenland, in der Wart (7 settlements).

The three areas are in common because of the dominance of the Hungarian / Szekler inhabitants and more minorities at the same time: in Hungary Germans and Romas, in Transylvania Romas and Romanians, in der Wart German and Croatians.

#### 3.2. METHODS

I examined the settlements with three methods. With the help of the national database I could make analysis based on statistical data and aerial photos. In my work I can sketch a static view on the years right after the millennium, while because of the different methods of the former censuses it was not possible to make comparison to see the changes form one decade to another, and more up-to-date data on the level of the settlements were not available.

I created a typology for the villages from the point of view that which function they have. This typology is based on the estimation of the strength of the agricultural, the industrial, the dormant and the resort functions with the help of a few indicators. I made a description of all the types from the following point of views: demography, employment, land use, landscapeand settlement structure. I analysed the pilot areas throughout the demographical processes, the landscape evaluation, the actual economical activities and the highest values of the area with the help of the up-to-date and historical maps, aerial photos, literature, archive photos, and field trips. After the general description I focused on the impact of the agricultural, the industrial, the dormant and the resort functions on the land use, the settlement structure, the plot arrangement, the architecture and the main problems of the landscape- and settlement structure. I estimated of the expected future profile based on the field trips, general resources, and the results of the SCENAR 2020 and SENSOR projects.

Among my objectives I wanted to work out a method that points the natural resources of the given settlement, and that how the local people use these resources and how they built up their social and economical sectors on this basement. I also wanted the method to be easily overviewed with the opportunity of detailed examinations and micro-regional compartments. In the case of the settlements, where the traditional methods couldn't sketch out a clean profile for the future, I tried to find a breaking-out point with the help of this method named comparative resource pyramid.

### **3. RESULTS**

Along my statements and the adoptability of the results in this chapter I summerize the results of the village typology and the analysis of the pilot areas.

### 3.1. RESULTS RELATED TO THE VILLAGE TYPOLOGY

The most significant function in Hungary is the dormant function without growing. This function spread out all over the country except the Great Plain, it became dominant in the Transdanubian with morsel settlement structure made of small villages. The dormant function joins in most of the cases with resort function, but it appears along all the other basic functions as well.

The growing dormant villages has grown with 30% on average in the last 20 years, the biggest expansion appeared by the villages that has also some resort function. The dormant function is far the weakest at the Great Plain.

The agglomeration of Budapest, Győr, Pécs, Szombathely and Székesfehérvár has sketched out, but there are one or two settlements by almost every county capital, which became a popular destination for those, who want to move out from the city. The rate of the villages, where the resort function has modified the settlement structure is under 3%. The resort function based on weekend houses is located at the Balaton and at the Dunakanyar resort area, while this function based on guest nights forms groups in the Mátra and in the Bükk.

By now there remained only 120 settlements in the country with significant local employees in the agriculture. Most of these villages are located at the Duna Tisza köze and the southern part of the Duna mente, in the Körös Maros köze and in Külső-Somogy. This function hardly ever joins with another basic function.

There are only 24 villages with pure dominant industrial activity. This fact confirms the statement of Pál Beluszky that the industrial activity joins with urbanism, so this kind of villages sooner or later turns into cities. These settlements disperse steadily in the country. As the agricultural function, neither this function joins with other kind of significant activity.

*Demography:* The size and the commuting have a converse proportionality.

<u>Employment</u>: The rate of the local employees in the first and second sector in the villages with dominant agricultural or industrial villages is 35-50%. The commuting is lower than the country average. The industrial villages can employ the most people from the neighbouring villages. The commuting is higher than 65% on average in the country. In the villages with dominant dormant function there is only a slight local employment. At the resort places the employment structure meets the country profile, only in a few resort areas appear stronger third sector.

Land use: The changes in the land use related to the villages with different functions are summarized in the Table 1. While the dormant villages without growing collects more than 60% of the rural settlements, this type of the villages has very similar rates and tendencies as the country. The rate of the non-cultivated areas is a bit lower than in the case of the growing settlements, while new residential areas were not built-up. The significance of the forms of the land use that need much human work has dropped, although at the resort places not so dramatically as on average. The arable lands and the meadows have dropped with a few percent. The grazing grounds haven't changed significantly. The proportion of the forests is growing in the case of all the main types.

<u>Settlement structure:</u> The structural changes of the dormant villages are quite significant, but the strongest impact is related to the dominant resort function based on weekend houses. The characters of the old and new parts usually don't harmonize with each other. 

 Table 1 Changes in the land use related to the dominant function

 Dormant villages: A – growing, B – not growing.

 Resort villages: A – based on weekend houses, B – based on guest nights.

 FO – forest, ME – meadow, GG – grazing ground, GO – garden-orchard, GR – grape, AL – arable land, NC – non cultivated area

 (Source: KSH, edited by the author)

 FO
 ME
 GG
 GR
 AL
 NC

		FO	ME	GG	GO	GR	AL	NC
1971	Agricultural	15 %	5 %	9 %	2 %	2 %	57 %	7 %
	Industrial	20 %	6 %	9 %	4 %	3 %	49 %	8 %
	Dormant A	16 %	5 %	8 %	5 %	5 %	55 %	10 %
	Dormant B	19 %	6 %	8 %	4 %	2 %	53 %	8 %
	Resort A	22 %	6 %	9 %	3 %	3 %	43 %	11 %
	Resort B	28 %	5 %	9 %	4 %	2 %	45 %	8 %
	Rural average	18 %	6 %	9 %	4 %	2 %	53 %	8 %
2000	Agricultural	19 %	3 %	9 %	1 %	1 %	56 %	12 %
	Industrial	24 %	4 %	10 %	1 %	2 %	44 %	14 %
	Dormant A	20 %	3 %	7 %	2 %	2 %	49 %	17 %
	Dormant B	23 %	4 %	9 %	1 %	1 %	49 %	13 %
	Resort A	25 %	4 %	8 %	2 %	3 %	38 %	20 %
	Resort B	31 %	3 %	10 %	1 %	1 %	39 %	13 %
	Rural average	22 %	4 %	9 %	1 %	1 %	49 %	14 %

The streets of the agricultural villages on the Great Plain forms orthogonal structure. Depending on the grown plants the parallel streets can be quite far from each other, but the newer streets lay much nearer than in the village centre. The average size of the villages in the Transdanubian is smaller than on the Great Plain, here the one-street layout is spread. The plots stretch long behind the houses in each case.

The industrial sites join either the residential areas, either the location of the natural resources. These settlements usually have new residential areas: the new parts are usually created by regular forms, while the old parts have irregular structure that meets the requirement of the natural givens.

### General problems related to the landscape and the settlement structure:

Agricultural villages the changes of the function and the character of the residential areas with low density outside the centre parts of the settlements.

Industrial villages creation of puffer zones depending on the type of the activity, the recultivation of the former mines, in the case of high volume activity the creation of new residential areas in harmony with the older parts, in the case of former industrial activity searching for new function for the useless residential zones.

Dormant villages In the case of growing settlements the contrast between the old and the new residential areas. In the agglomerations an additional problem is that the villages join in growing.

Resort villages the future of the expansive areas of weekend houses without frequent use, the join of the built-in areas of the villages. In the case of the settlements based their resort function on guest nights, usually after a while the growth of the supply became higher than the demand that causes special modification in the settlement structure that can be hardly fit in another profile if once the demand of the tourism drops.

#### 3.2. RESULTS RELATED TO THE PILOT AREAS

The most important tendencies of the land use in the pilot areas can be seen in Table 2. The processes without control can cause problems in each case.

Tendency of	In der	Baranya	Szekler-
the land use	Wart	County	land
Join in growing	~	✓	✓
Appearance of new part of the settlement, without any harmonization to the older parts	~	~	~
Disappearance of land use forms that need much human work	~	✓	~
Decreasion of extensive land use forms	~	✓	~
Extension of uncultivated lands		✓	✓
Extension of forest			~

 Table 2 Most important tendencies of the land use in the pilot areas (edited by the author)

The join in growing of the settlements is a global problem. In the Hungarian and in the Transylvanian area this process expected to be stronger and stronger in the future. There is a lot of effort to avoid this phenomenon, but the efficiency of those is very different.

The appearance of the new parts of the settlements without any harmonization to the older parts is just as widespread problem as the join in growing. The structure of these new areas, the plot arrangement and the architecture are very different from the traditional solutions, but these new parts in the different pilot areas in the different countries are very similar to each other.

The disappearance of the land use forms that need much human work that also brings the decrease of the landscape diversity points out the changed lifestyle at all the pilot areas. In Hungary the former vineyards turned to resort places or residential areas, while in the Firtos area they are simply not cultivated anymore.

The decreased landscape diversity can be seen also in the extensive forms of the land use. In Burgenland and in the southern part of the Hungarian area the intensive forms dominate, while in the northern part of the Hungarian area and in Transylvania because of the problems of the cultivation a part of the farmers stop their activity.

The extension of the uncultivated lands appears only in the northern part of the Hungarian area and in the Firtos region. This process is caused by the above mentioned problems of the farming activity and the negative demographical tendencies, first of all the leaving for the urban areas. The extension on of the forests shows up only in the Transylvanian area, it is brought by the stop of the cultivation.

### 3.3. STATEMENTS

Reflecting the questions I formed at the beginning of my work my statements can be divided into three groups, related to the definition of the rural areas, to the changing functions of the settlements and to the pilot areas.

A. Statements related to the definition of the rural areas:

- S1: The relation between the cities and the villages changed a lot in the 20th century that made the definition of the villages difficult. The quantitative definitions are mainly based on popular density, but the character of these settlements can be very different. I created a definition for rural settlements taking into account linguistic analysis of the word 'rural', the parameters of the OTÉK, and the descriptive definition of László Dorgai. According to this definition created by me, a settlement is 'rural' if it has living zones only with low density (zones with the character of the traditional 'villages' or of the 'garden-cities'). Because of the internal contradiction of the settlements with a centre of high density and significant inhabitants at the peripheries at the same time, I created the definition of the rural part of a settlement. I used this definition for those parts of the settlements that has at least 30 inhabitants, low-density flat structure, physically isolated by green surfaces from the parts with high-density and for the areas dominated by farms.
- S2: The local building code and the regulatory plan as instruments under the influence of the local governments have the greatest conformity with the actual ways of the development and the ideas for the future on the given settlement. The plans on higher level classify the villages according to the popular density therefore they cannot help to define the rural settlements according to the definition I created. In 2008 I collected the available local building codes of the villages with inhabitants between 1000 and

10000 people, and with the help of these documents I defined the rural settlements of Hungary according to my definition. With the help of the Gazetteer of the Hungarian Central Statistical Office from 2001 I defined the Hungarian settlements that have rural part along a dense centre. The data appointed that these rural parts were created by the influence of the farming activity in different scales, slightly also by the moving in the neighbourhood of the industrial sites and into the wine-yards. The significant number of the rural parts of the settlements point out the morsel structure of the Hungarian settlement structure.

- S3: After I analysed the local building codes of **our cities with less than 10000 inhabitants**, I realized that **95% of them have a centre with high density** the other 5% is made of our youngest cities. According to the processes of the settlements developed to a city earlier, expectedly these ones also will develop their centre with a high-density urban character. This fact points out that when a settlement is classified as a city from a village, the transformation of the settlement gets speed, and in a few years they gain their character as a small town. This process shows itself partly in the higher density of the living zones of the given settlement.
- B. Statements related to the changing functions of the settlements:
- S4: I classified the villages according to actual strength of their working, living and resort functions. This classification is ideal from landscape architecture as well, it shows that the main types harmonize themselves with the main landscape types. According to the classification I made the main types are the followings: agricultural villages (agricultural landscape), industrial villages (industrial landscape), dormant villages (residential landscape) and touristic villages (touristic landscape). The analyzed typologies are based on geographical, social or economical indicators, therefore they have different classes, although the typology made by Pál Beluszky in the beginning of the 1960's is close to it.
- S5: The classification of rural settlements drew the following situation at the millennium in Hungary: **The agricultural function dropped dramatically**, only 120 villages have still significant agricultural function. On the other hand **the dormant function spread so much that the commuting goes over 60% average, and this phenomenon shows up more that 75% of the villages.** Far the greatest group is the group of the villages with significant dormant function without any growth of the

settlement with more than 800 items in this class. The settlements with only tourism could form only a marginal group that shows that the resort function can have only an additional role in the life of the settlements.

- S6: The land use statistics show the significant changes in the land use only in the case of the growing settlements. In the case of the depopulated villages this process doesn't appear in the statistics, but the analysis of the pilot areas showed also significant changes in the land use. The root of this process is the spread of the non-cultivated lands, that cannot followed in a proper way in the database yet because of the missing detailed and up-to-date data.
- C. Statements related to the pilot areas:
- S7: After the analysis of the pilot areas I concluded that the new parts of the settlements have very much in common, and they don't reflect the local traditions of the given settlements, because the new, dominant function form the character, which comes from the global trends not the local specialities. The transformation process of the pilot area in Burgenland dated earlier than the Hungarian site, the processes that already formed the Hungarian settlements, appeared only in the last years in Transylvania.
- S8: I worked out and tested on the 39 settlements of the three pilot areas the comparative resource pyramid. This is a method for rating the settlements included environmental, social and economical viewpoints at the same time. Its table in the background gives the opportunity for detailed analyses, meanwhile the graphical outlook makes it possible, to compare the given settlement with the neighbouring ones in a micro-regional context.
- S9: The join in growing of the settlements, the appearance of new part of the settlements, without any harmonization to the older parts, and the disappearance of land use forms that need much human work are global tendencies that show up all the pilot areas. The decrease of extensive land use forms appears in the western areas, while the extension of uncultivated lands can be seen in the eastern countries.

Some of my results can serve as an aid in the planning process on the level of the settlements and of the micro-regions. Another part of my results can be a basement for further researches or can be used in the education.

Adaptability in planning:

- AP1: More attention for the **rural parts of the settlements** can ensure the **place in the planning process in larger scales** these peripheral residential areas which have an essential role in the maintenance of the landscape.
- AP2: The classification of the settlements based on data of the census 2001, especially the joining functions, can give a help for ensuring the balanced development and the more efficient cooperation of the villages.
- AP3: The comparative resource pyramid can be a new aid in the micro-regional planning.
- AP4: The description of the global processes that have an impact on the character of the settlements can help to avoid the typical problems during the planner period, the best practices can show some examples for the opportunities of the optimal usage of the local resources.
- AP5: Because of the limited data during the description of the changes of the land use the statistical data can be only an aid for the planners, this fact has to be taking into account both at the development and the regulatory plans.
- AP6: The analysis of the relation of the pilot areas offers an opportunity for **the areas located to the east to be aware of the positive and negative effects of the expected processes** and to be ready for the changes.

Adaptability in research:

- AR1: The **definition of the rural areas from the landscape architecture aspect** helps to stress the **importance of the preservation of the values of the rural areas** that has a bigger and bigger role with giving new functions to the architectural heritage.
- AR2: The types, the number and the size of the **rural parts of the settlements** gives a detailed picture on the settlement structure and can give a help for **working out a methodology for the areas that can maintain through a shared plan**.
- AR3: The acceptance of the fact that every city will form its urban character sooner or later can help to value from a landscape architectural point of view the current practice of turning the villages into cities that can be questioned from functional aspect.

- AR4: The **typology of the villages** based on the functions they have, along that it enriches the field of the village typologies, **can be a connection between the landscape architectural and the economical approach**.
- AR5: The definition of the rural settlements based on the data 2008 and the rural parts of the settlements based on data 2001 is a good basement for making a comparison with up-to-date data when the types of the data will give a chance for such a work.

Adaptability in training:

- AT1: The definition of the rural settlements and the rural parts of the settlements can be used to form the ideas of the students.
- AT2: The **data of the Hungarian review of 2001** that used a classification that meets the basic types of the landscape and the **general statements** related to the database can be used also in the education.
- AT3: The structure and the principles of the **comparable resource pyramid** can be **an example for the rating of the settlements** for the students.

### 4. CONCLUSUIONS

My conclusions can be divided into three groups: related to the main processes forms the rural areas, to the changing functions of the settlements in Hungary and related to the pilot areas.

### Conclusions related to the processes forms the rural areas:

The settlement forms of the city and the village those were stable throughout centuries because of several impacts rooted in invents of the industrial revolution has changed significantly since the 19<sup>th</sup> century. The change got a new rhythm in the middle of the 20<sup>th</sup> century and lasts even nowadays. Partly this change partly the widespread specialization of the villages makes the definition of the rural areas and the rural settlements hard either from a qualitative either from a quantitative point of view.

The question appears if it is good to cleave to the traditional city / village categories or would it be more useful to create new terminologies. I think this problem mainly comes from that territorial development approach that has its final level rather at the groups of the settlement than the single villages. I don't think this is a fortunate tendency, because it's

inevitable that the stable cooperation of the groups of the settlements must have a far more significant role than nowadays, the groups of settlements as solely forms of maintenance cannot reflect a lot of local problems and opportunities as well.

#### Conclusions related to the changing functions of the settlements in Hungary:

So many settlements turned into dormant villages without growing that this type dominates the country profile. Groups of growing dormant villages show up only around a few big cities. Groups of villages specialized at other functions are located to a few landscape unit. The strongest effects on the landscape structure are related to the resort places and to the growing dormant villages. The decline of the agricultural sector causes not so significant modifications because of the more and more intensive land use and the mechanization, though the changes of the forms of the land use can have great visual effects as well.

The loss of functions of the villages in the last 100 years is significant. Though the demand for the resort function was far smaller, most of the villages could supply living area and working place at the given settlement. At the beginning of the 20<sup>th</sup> century among the 12 thousand villages of the historical Hungary only 500 specialized themselves that didn't reach the 5% of the settlements. Contradictory by 2000 more than 75% of the villages got impacts that modified significantly the future profile of the given settlement.

The villages with strong specialization are usually successful economically or socially, but their surroundings are transformed heavily and their natural resources are under a great pressure. While the motor of the development of these settlements generally comes from outside, these systems can be very vulnerable. Taking into account this fact, it is an interesting data that only 30% of the significantly specialized villages have more functions.

While there is quite few connections related to the productive functions, the dormant and the resort functions appear in very variable combinations that show that these functions are only additional ones.

### Conclusions related to the pilot areas:

Taking into account the processes that appear in different periods and the forecast of the changes of the next decades show that the landscape transformation of the western area is ahead of the Hungarian territory, while the Szekler region is looking forward the processes which are already dominant in Baranya County. This fact gives an opportunity for some area to analyse the positive and the negative effects of the probable processes.

The modifications that appear all the pilot areas are caused by global effects that are very hard to avoid by the settlements. One of the most outstanding examples is the new parts of the settlements that are usually not integrated into the entire village. What more, their specialities formed by the special functions that forms similar structures in the different countries on different level of the development, different history and different culture in the background.

The differences between the settlements at the pilot area in der Wart were significantly smaller than in the other pilot areas that roots into the equally high level of the infrastructure and the impacts coming from outside to form the future profile of the settlements.

### **5. PUBLICATIONS RELATED TO THE TOPIC**

#### Articles, English:

SALLAY Ágnes EGYED Adrienn (2011) Ethnicity and landscape. In.: Acta Universitatis Sapientiae. Agriculture and Environment. Vol 3. Suppl. pp. 210-217. Sapentia Erdélyi Magyar Tudományegyetem. Kolozsvár. (Cluj-Napoca)

EGYED Adrienn (2010) "Winners" and "losers" of the Balaton Recreational Area in the year of the recession (2009) Agrár- és Vidékfejlesztési Szemle Volume 5. 2010/1 supplement. pp. 226-230 A folyóirat CD melléklete. Hódmezővásárhely

### Articles, Hungarian:

EGYED Adrienn (2011) A területhasználat változása a 20. században kárpát-medencei példák alapján. (Changes in Land Use in the 20th Century Based on Pilot Areas Situated in the Carpathian Basin) In.: E-tudomány 2011/3 pp. III1-III9. http://www.e-tudomany.hu/etudomany/web/uploaded\_files/Egyed\_Adrienn\_lt.pdf

FILEPNÉ KOVÁCS Krisztina EGYED Adrienn (2011) Ökológiai hálózatok rehabilitációja és a zöldúttervezés kapcsolata Magyarországon. (Reviving of Natural Networks in Hungary) In.: Tájökológiai Lapok 2011/1 pp. 73-85. SZIE Környezet- és Tájgazdálkodási Intézet. Gödöllő.

### Conference proceedings, English:

EGYED, Adrienn (2011) Viewpoints for rating the resources of the villages. Spring Wind Conference pp. 101-108 Doktoranduszok Országos Szövetsége. Pécs.

EGYED Adrienn (2011) Comparsion the special resources of villages settled in mountains and valleys. pp. 68-73 Turizmus szerepe a területi fejlődésben IV. Nemzetközi Konferencia kiadványa. Gyergyószentmiklós (Gheorgheni)

EGYED Adrienn (2011) Changes in land use in the 20th century based on pilot areas situadted in the Carpathian Basin. XVII. Nemzetközi Tehetséggondozási Környezetvédelmi és Vidékfejlesztési Diákkonferencia CD kiadványa. Szolnok.

EGYED, Adrienn (2010) Valuable landmarks and mind mapping. Spring Wind Conference pp. 120-123 Doktoranduszok Országos Szövetsége. Pécs.

EGYED, Adrienn – MIKHÁZI, Zsuzsanna (2010) Landscape transformation at tourist resorts around Lake Balaton pp. 613-620 Proceedings of Fábos Conference on Landscape and Greenway Planning 2010. Budapesti Corvinus Egyetem, Tájtervezési és Területfejlesztési Tanszék. Budapest.

EGYED, Adrienn ¬ FILEPNÉ KOVÁCS, Krisztina (2010) Reviving of natural networks in Hungary pp. 607-612 Proceedings of Fábos Conference on Landscape and Greenway Planning 2010. Budapesti Corvinus Egyetem, Tájtervezési és Területfejlesztési Tanszék. Budapest.

EGYED, Adrienn (2010) Regulations for unique landscape features cadastre: theory and practice in Hungary pp. 13-16. 7th International Conferenc of PhD Students ¬ Agriculture Miskolci Egyetem. Miskolc.

EGYED, Adrienn ¬ SALLAY, Ágnes (2010) Role and possible tracks of thematic roads in the Firtos region pp. 106-112 Turizmus szerepe a területi fejlődésben III. Nemzetközi Konferencia kiadványa. Gyergyószentmiklós (Gheorgheni)

EGYED Adrienn (2010) Impact of village formation on the character of the settlements XVI. Nemzetközi Környezetvédelmi és Vidékfejlesztési Diákkonferencia CD kiadványa. Mezőtúr.

EGYED, Adrienn ¬ SALLAY, Ágnes (2009) The tourism as the motor of the development in a micro-region around the Firtos Hill. pp. 114-122 Turizmus szerepe a területi fejlődésben II. Nemzetközi Konferencia kiadványa. Gyergyószentmiklós (Gheorgheni)

### Conference proceedings, Hungarian:

EGYED Adrienn (2009) Tájalakulási tendenciák vidéki térségekben. (Tendencies of Landscape Transformation in Rural Areas) 12. Tavaszi Szél konferencia kiadványa. pp. 85-90 Doktoranduszok Országos Szövetsége. Szeged.

EGYED Adrienn (2009) A vidék új szempontú megközelítése. (A New Approach to the Definition of Rural Areas) A Tudomány Hete konferencia kiadványa. (In press.)

Dr. SALLAY Ágnes MIKHÁZI Zsuzsanna FILEPNÉ KOVÁCS Krisztina Dr. CSEMEZ Attila EGYED Adrienn (2009) Turisztikai desztinációk táji adottságainak optimális használata. (Optimal Use of the Landscape atTouristical Destinations) CD kiadvány.

### Chapter of book, English:

SALLAY, Ágnes MIKHÁZI, Zsuzsanna FILEPNÉ KOVÁCS, Krisztina EGYED, Adrienn CSEMEZ, Attila (2009) Optimal use of landscape conditions of tourist destinations. 4th International Conference "Creativity and Innovation in Managing Uncertanity and Risk in Tourism Theory and Practice" című konferencia tanulmánykötete (In press.)

### Chapters of book, Hungarian:

EGYED Adrienn – JOMBACH Sándor (2010) Tájalakulási tendenciák előrejelzése a Firtos térségben. (Forecast for the Tendencies of Landscape Transformation in the Firtos Region) Mesterségek a székely közösségekben. Molnár István Múzeum Kiadványai 2. pp. 67-78. Székelykeresztúr

EGYED Adrienn (2010) Táji értékek és mentális térképezés. (Landscape Values and Mind Mapping) 4D Könyvek. Ormos Imre Tudományos Ülésszak LOV 2009. Tájépítészeti tanulmányok pp. 143-150. Budapesti Corvinus Egyetem, Tájépítészeti Kar, Budapest.

EGYED Adrienn (2011) Az üdülési formák negatív táji hatásai, ezek csökkentésére irányuló eszközök a tervezésben. (Negative Impacts of Tourism on the Landscape and the Instruments for minimize these impacts in Planning) In.: Sallay Ágnes (szerk) Tájtervezés és területfejlesztés. Egyetemi jegyzet. pp. 129-140. BCE-TTT. Budapest.

EGYED Adrienn (2012) A burgenlandi székelyek nyomában. Az őrvidéki székelyek táji lenyomatainak vizsgálata (Search for the Szeklers in Burgenland. Analyzation of the Impacts of the Szeklers on the Landscape in der Wart.) pp. 241-254. In.: Sófalvi András, Visy Zsolt (szerk) Tanulmányok a székelység középkori és fejedelemkori történelméből. Énlaka ¬ Székelyudvarhely.