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Land Use Changes in the Rural-Urban Fringe of Kecskemét after the Economic Transition

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ABSTRACT

This paper examines the land use changes of the Hungarian rural-urban fringes after the economic transition through the case study of Kecskemét. After describing the basic characteristics of the rural-urban fringe, the authors distinguish five important factors specific to Hungary, which influenced the ongoing processes of the fringe. These factors are the restructuring of the land ownership rights, the role of the municipalities as land-owners, the privatization of the hobby gardens, the decreasing role of agriculture and the local residents' alienation from the rural traditions. The case study, Kecskemét's historical heritage as a former oppidum with a well-developed tanya network led to the formation of a special relationship between the countryside and the city and is still influencing the development of the fringe. After the economic transition, the new processes appeared in four phases in the rural-urban fringe of Kecskemét. The expansion of the retail stores, upper class migrants, transportation network and greenfield industrial investments affected each part of the fringe differently. In the northern part of the fringe traditional landscape and land use remained dominant, while in the western part of the fringe, more radical changes occurred, and resulted in chaotic land use. The transformation of the rural-urban fringe in Kecskemét has not ended yet. To lessen the negative effects, stronger community control and more consequent regulations are needed in the future.

1. INTRODUCTION

The rural-urban fringe is a transitional zone between the central city and the countryside characterised by rapid land use changes. In the Western countries, the changes in the rural-urban fringe started decades ago, and the processes of this area are quite well described. In Hungary, drastic transformation of the fringe only started with the political and economic transition. The ongoing processes of the rural-urban fringe, although resembling to those experienced in the western countries, were slightly modified by the special social and economic circumstances. The aim of this paper is to provide a survey of the transformation processes in the rural-urban fringes of Hungary through the case study of Kecskemét, a county seat city in Hungary. To achieve that, the study gives a short overview of the theoretical concept of the rural-urban fringe and of the historical development of Kecskemét, a former market town with a unique relationship with its countryside. The analysis of the changes which took place in the fringe of Kecskemét relied on the field research implemented by the Great Plain Research Department of the Centre for Economic and Regional Studies (CERS) of the HAS (Hungarian Academy of Sciences) in 2010. The authors also took the results emerging from previous studies (e. g. [1]) into consideration.

2. A SHORT THEORETICAL OVERVIEW OF THE RURAL-URBAN FRINGE

The Dictionary of Human Geography defines the rural-urban fringe as *"a zone of transition between*

the continuously built-up urban and suburban areas of the central city and the rural hinterland" [2]. The rural-urban fringe can also be described as part of a continuum from rural areas unaffected by urbanization to the core built-up area of the regional cities. In this view, the rural-urban fringe is the innermost of the transitional zones (rural-urban fringe, urban shadow, rural hinterland) of this continuum [3].

Some of the studies divide the rural-urban fringe into inner and outer fringe. In the inner part of the rural-urban fringe, the transformation into urban space is in an advanced stage, where most of the land is under construction or zoned for urban purposes. In the inner fringe, most of the area is going to be converted to urban-oriented uses eventually.

In the outer part of the fringe, rural land uses are prevailing mixed with new urban-oriented elements. Besides maintaining its agricultural functions, the rural-urban fringe can be the place of recreational activities and the destination of suburban migration too. The rural-urban fringe is also the location of urban activities which require a lot of space (cemeteries, greenfield investments) and/or are a nuisance for the city's inhabitants (e.g. wastewater treatment plant). Some changes are clearly visible, while others can be more difficult to perceive, like local residents' changing expectation about the future, which affects both land and agricultural investments [3].

The origins of the concept of rural-urban fringe date back in the 1930s. Herbert Louis, a German geographer in 1936 [4], and T. L. Smith in 1937, in a discussion of the urban fringe of Louisiana [5], were the ones who used the concept first.

In the 1930s, the rural-urban fringe gained not only scientific, but public and political interest too. In the UK, quick changes in the fringe aroused public concern, and ultimately led to the acceptance of the Green Belt Act in 1938 [4].

This early example highlights that the fringe is characterized by rapid land use change and land use conflicts. Cristopher Briant described the rural-urban fringe as "an arena in which a variety of forces and processes operate to influence the structure and dynamic of human activities" [6]. Depending on the local circumstances, on the local actors and on the local/regional policies, there is a wide variety of possible land uses and landscapes (fig. 1).

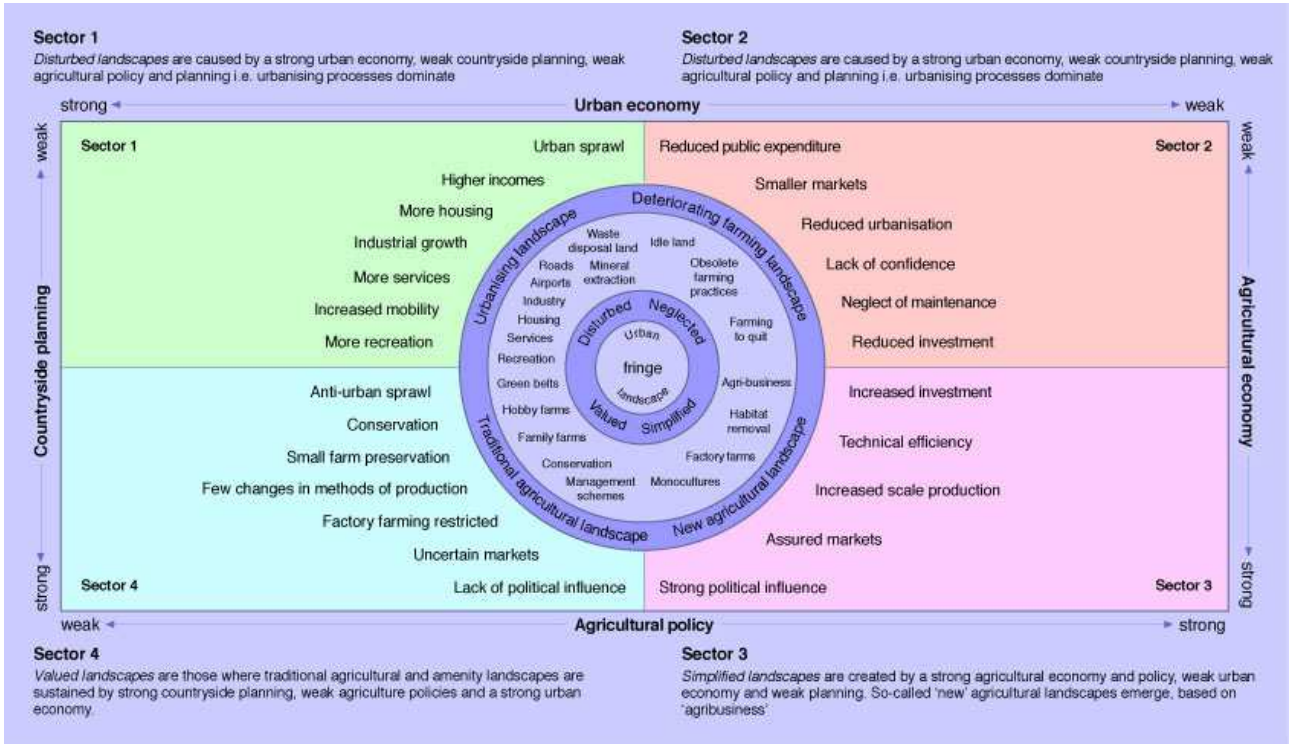

Fig. 1. Possible landscapes and their characteristics in the rural-urban fringe [7].

A strong urban economy accompanied with weak countryside planning results in a *disturbed, urbanizing landscape* (fig. 2) characterized by intensive urban sprawl. Weak urban economy accompanied by weak agricultural economy results in a *disturbed, deteriorating farming landscape* with halted urban sprawl and deteriorating agricultural production. The landscape is neglected, the share of fallow land is high. These areas often became the destination for the low-class migrants from the city. A strong agricultural economy with a strong agricultural policy also causes the transformation of the original landscape, giving place to a so-called *"new agricultural landscape"*. These simplified landscapes are characterized by monocultures, highly profit-oriented agribusinesses with a large-scale production. Finally, if in a strong

urban economy the actors realize the importance of preserving the traditional landscape and implement strict countryside planning policy, *valued, traditional agricultural landscapes* with family farming and diverse land use continue to exist.

Fig. 2. Disturbed landscape in the rural-urban fringe of Kecskemét.

In addition to the globally observable attributes, the rural-urban fringes in the former socialist bloc have some unique characteristics too. The economic, urban and rural policies of the socialist era altered the course of development; the administrative control strongly influenced the processes of the rural-urban fringe. The political and economic transition brought quick changes both in country-level and in the rural-urban fringe. These changes were quite uncontrolled and chaotic. The changes following the economic transition are described in a row of studies [8], [9], [10], [11].

The authors' opinion is that in the case of Hungary, five important country-specific factors can be described, which have influenced the changes in the rural-urban fringe after the economic transition:

1). The quick and unregulated restructuring of the land ownership rights after the transition. The Hungarian Compensation Act provided vouchers for those whose belongings (land, houses or assets) were collectivized after the Second World War. The vouchers connected to land by auctions. Part of the land of the former cooperatives was distributed between the members. During the compensation procedure, the lands of the rural-urban fringe quickly became private property without any community or planning control. Since some of the new owners lacked the sentimentality of a multigenerational farmer, a part of the land in the closest vicinity of the built-up area is quickly revaluated and used for urban-related purposes.

2). The local municipalities gained possession over some of the land and assets in their territories. The municipalities often quenched their need for income sources with the selling of their properties. The municipalities located in the vicinity of cities could profit the most from selling empty lots after building out the basic utilities [1]. In conclusion, the actions of the municipalities supported the extension of suburbanization. The quick disposal was partly responsible for that the property of the municipalities could not become an important local development factor for the community. The property rights of the most valuable territories soon fell into the hands of private investors, which came with benefits and downsides too.

3). The privatization of the hobby gardens surrounding the city. During the socialist era people could only have one house, one holiday home and one hobby garden, so possessing a hobby garden was an important way of asset increasing [11]. Even though part of them was only leased, they were privatized at the end of the socialist era. The privatization came with the change of building regulations too. Most of these hobby gardens lied in the most valuable, innermost part of the rural-urban fringe, and soon converted into low-density residential areas (fig. 3).

Fig. 3. Hobby garden zone in the rural-urban fringe of Kecskemét (Máriahegy).

4). The decreasing role of agriculture in rural population's life. After the economic transition, the former agricultural structure based on large state farms and cooperatives fell apart. Because of their integrative role, the disappearance of the large farms negatively affected the agricultural production of the small household plots too, which were privately owned even during the socialist era. The privatization of the food industry also worsened the family farmers' situation. Because of the reduced profitability of the traditional agricultural activity, the owners often sold the land obtained during compensation instead of maintaining agricultural production.

5). Local residents' alienation from rural traditions. This process cannot be measured directly, but can be observed through a wide range of geographical processes. Residents' alienation from their own locality is connected to society's low environmental consciousness, to weak and permissive community planning and to the inefficiency of the NGOs involved in local development. This alienation made the traditional

restraints virtually nonexistent and ultimately legalized the view "with money, you can do everything". The realization of this view resulted in chaotic land use patterns, an overall degradation of the environment, the disharmonic transformation of the rural landscape, and the sharp distinction of the different groups of society using or living in the same locality. A wide range of the aforementioned problems and conflicts can be observed in on our case study, in the rural-urban fringe of Kecskemét.

3. THE HISTORICAL DEVELOPMENT OF KECSKEMÉT

The city of Kecskemét is located in the Great Hungarian Plain, in the middle of the Danube-Tisza Interfluve, close to Pusztavacs, the geographical center of Hungary. It is the county seat of Bács-Kiskun County. The last census in 2011 counted 111,411 inhabitants in the city. During its development, this city has formed a special relationship with its countryside.

The city was first mentioned in 1353. Not much later, the sources already mentioned it as an oppidum (market town) [12]. The Hungarian medieval law made a distinction between the civitas (royal free city) and the oppidum. A civitas resembled the medieval cities of Western Europe, while oppida usually lacked stone walls, and had only limited autonomy. Kecskemét did not get civitas rights, but as an oppidum, it functioned as a weekly marketplace for its surroundings. During the Ottoman rule, the settlement structure drastically changed in the occupied territories. The former denser network disappeared and the remaining population concentrated into the relative safety of few bigger oppida. The remaining oppida's area excessively increased: Kecskemét, for example, had around a quarter million hectares of own and leased land, some of it was eighty km from the town. Most of this vast area was used for extensive cattle-breeding; in the 16th century, living animals accounted for 90 percent of the Hungarian export [13]. After the end of the Ottoman rule, the significance of the extensive cattle-breeding decreased. The growing demand for cereals in Western Europe led to the increase of the arable land, but in the former Ottoman Hungary, the extremely scarce settlement network consisting mainly of oppida remained. The necessity stemming from this contradiction largely contributed to the wide scale spread of the unique dispersed settlement system of the Carpathian Basin, the tanya system. The tanyas formed only one half of a divided settlement system; they were connected with close bonds to their original market town. The tanya-owners had a house and lived part of their life in the core built-up area of the market town. Later, mainly in the 20th century, this special connection weakened. The same tanyas were getting more similar to the typical scattered farms, and from the distant parts of the tanya-system, independent municipalities were formed. In case of Kecskemét, nine villages became separated from the city during the 20th century. Despite changes in its past, the oppidum heritage is still present in Kecskemét. The county seat still serves as a marketplace for the family farmers of the city and the surrounding villages, contributing in the upkeep of the traditional agricultural landscape in some parts of the fringe. A significant part of the population lives outside of the built-up area boundaries in the remaining tanyas (fig. 4), which widely influences the recent changes in the rural-urban fringe.

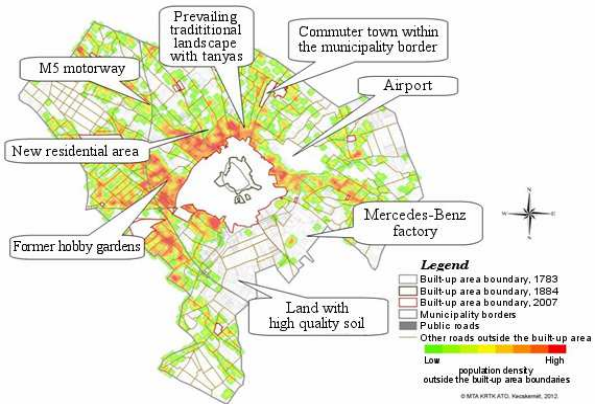

Fig. 4. Present state of the rural-urban fringe of Kecskemét.

4. LAND USE CHANGES IN THE RURAL-URBAN FRINGE OF KECSKEMÉT AFTER THE ECONOMIC TRANSITION

The new processes, following the economic transition, appeared in four phases in the rural-urban fringe of Kecskemét (fig. 5).

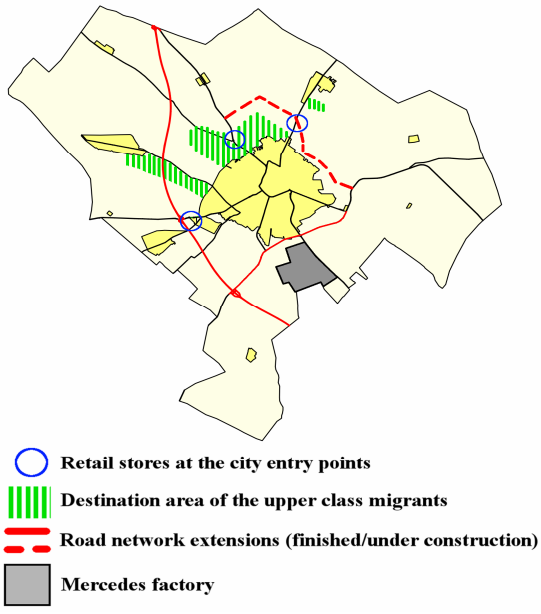

Fig. 5. Spatial distribution of the transformation processes of the rural-urban fringe of Kecskemét.

These phases are overlapping, and the processes related to them are still ongoing. At first, the stores of several *global hypermarket chains* (Tesco, Metro, Auchan) *settled within the limits of the built-up area,* where the main roads are entering the city. These retail stores not only provided easily accessible shopping opportunity for the middle and upper class residents who moved to the surrounding countryside, but they also reduced the demand for local agricultural products with their cheaper import products, thus further strengthening the process of the urban sprawl.

In the second phase, *the wealthy residents moved outside from the built-up area to the fringe,* occupying the land in a disproportionate share with their ostentatious mansions. This process came with self-segregation. This self-segregation can be best illustrated with the picture of a villa taken on two different occasions (fig. 9). This phase is a typical example for the formation of the disturbed landscape (fig. 2) where higher incomes and the demand for better housing accompanied with weak city planning. Kecskemét modified its regulatory plan more than a hundred times since the transition. Between the population census of 2001 and 2011, the number of inhabitants living outside the built-up area boundary increased from 13,732 to 17,281, constituting 15.5% of the total city population.

In the third phase, another *large part of the fringe was occupied by the M5 motorway,* which is part of the E75 European Route, and by the roads connecting it to the already existing system. These new roads caused that the city expansion took up an octopus-like shape, which is a typical form of the urban sprawl. However, the planned construction of the northern section of the bypass road is deferred, leaving the local actors in a state of uncertainty mixed with investment anticipations.

Fig. 6. The Mercedes factory under construction [15].

The recently carried out *investment of the Daimler-Benz Concern* marks the fourth phase of the ongoing changes in the rural-urban fringe. The company chose Kecskemét for the site of its new factory and has already spent more than 1 billion euro for the project (fig. 6) [14].

This greenfield investment took place outside of the traditional industrial sector of the city, at the other side of the bypass road, which ought to limit the expansion of the city. Moreover, the company occupied 441 ha from the most valuable agricultural area surrounding the city, which was once under the joint control of the whole community because of its high quality soil.

These phases affected each part of the fringe differently, creating a very diverse spatial pattern. The northern sector of the fringe – maybe because of the deferring construction of the bypass – is the area in the direct vicinity of Kecskemét where the original tanya network is best preserved. According to a survey including almost 600 properties (table 1), most of the tanyas harmonised with the traditional landscape.

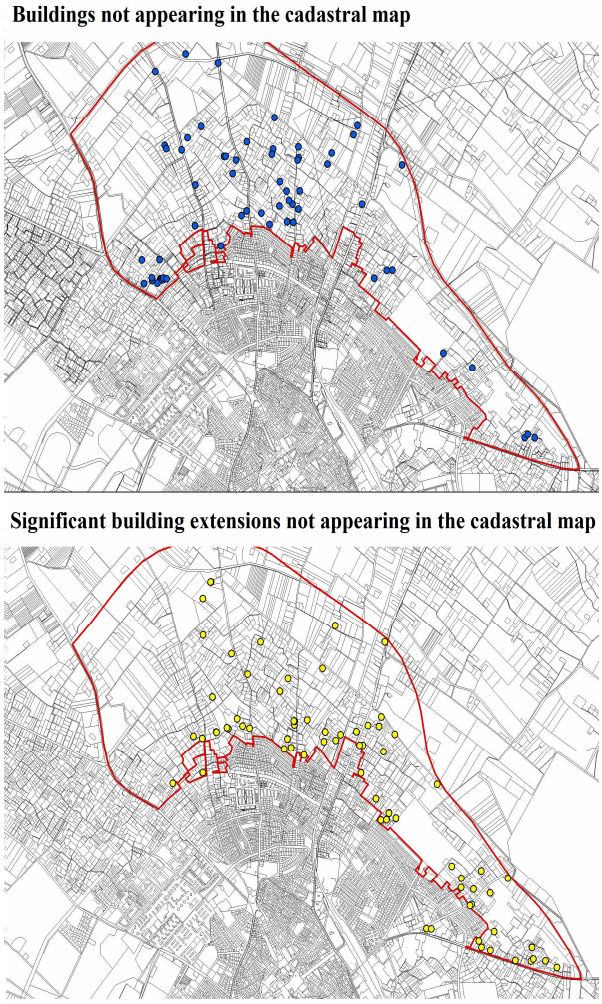

Fig. 7. Buildings and building extensions in the northern sector of fringe not appearing in the cadastral map.

The bigger part of the tanyas are still producing fruit or vegetables. Some of the old buildings have recently undergone renovation. This area is particularly popular for migrants seeking traditional values. Nevertheless, the overall low quality and weak power of the building permission procedure and

building control has led to a large number of buildings without permission in the area, not appearing in the cadastral register (fig. 7).

Table 1. The state of tanyas in the northern part of the fringe.

	Number	(%)
Total number of properties surveyed	589	100
Condition of the property		
Well looked after	184	31.2
Average	271	46.0
Quite neglected	96	16.3
Absolutely neglected	38	6.5
Appearance of the property		
Traditional tanya harmonising with the landscape	381	64.7
Average property with mixed characteristics	104	17.7
Property, land use foreign to the landscape	101	17.1

This chaotic land use is more expressed in the western part of the rural-urban fringe. The map of a part of the area (fig. 8) displays various land use types extant in the close vicinity of each other.

This area, besides the rainwater reservoir built in second half of the eighties, had originally recreational functions. After the economic transition, a discount retail store settled here first. Following that, various types of residential complexes were built in this part of the fringe, amongst them are gated communities, which only appeared in Hungary after the economic transition. One of the gated communities consists of villas for the upper class. Next to it, the Arboretum gated community consists of apartment buildings for the middle class. On the other side of the road, the streets of the Holland village are still open for the outsiders, but the outermost buildings of the Széchenyi residential complex are also surrounded by high fence and function as a gated community [16].

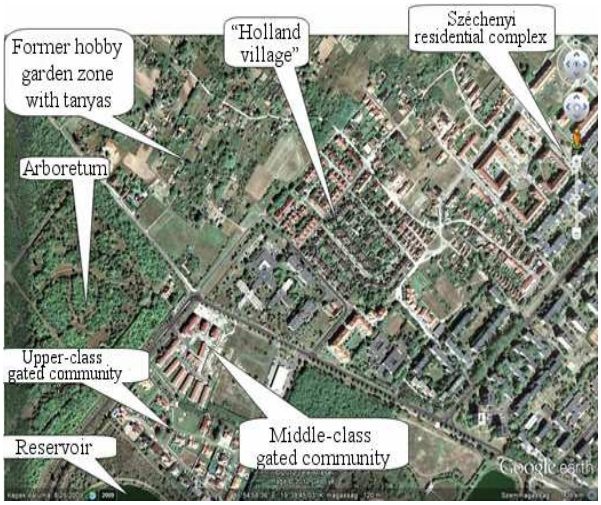

Fig. 8. Map of the western part of the rural-urban fringe.

To their west, there is the former hobby garden zone (Máriahegy, Úrihegy). Before the Second World War, vineyards and tanyas dominated the area. Even after the collectivization, market-oriented farmers prevailed [17]. Later, a part of the land – more than a thousand parcels – was transformed into hobby gardens (with an average area of 800 m²), which were given for lease to people living in the city's residential complexes. The resulting chaotic land use and ownership structure make any kind of comprehensive spatial planning intervention almost impossible nowadays. There is no regulated street width, some of the streets have no names and the residential directory is imperfect. Most of the old owners have already given up on gardening, but still do not want to sell their property. Some of the owners hope that the city will eventually grow into the area, and they can sell their – often only inherited – hobby garden for a better price.

Until then, only ragweed grows in the neglected gardens, making life harder for those who suffer from allergies. In the newest city regulatory plans, a few hundred hectares of the area was zoned as a potential built-up area – keeping hopes up for a large investor. Since there is no community source for dispossession, this uncontrolled condition might prevail for a long time.

Fig. 9. Hobby gardens and villas in the same neighborhood.

The newly-built houses in the hobby garden zone make the future regulation even more difficult. After the economic transition, a lot of people chose to build in the former hobby garden zone, since they already owned parcels here.

Also, the electric network is well built-out, and they can get water from drilled wells (often from deeper water deposits, without permission), while they hope that eventually good roads will also be built. This led to the present situation, in which the 12 m² outbuildings of hobby gardens and old tanyas still clinging to agriculture are in one neighborhood with the luxury houses of the upper class (fig. 9). It is noteworthy that

the owners of the villas did not take into account the possible devaluation of their high-priced estates in such an unregulated area.

5. CONCLUSION – IS THERE MORE SPACE?

The results of this research prove that during economic transition, similar processes took place in the rural-urban fringe of Kecskemét and in Hungary like in the Western European countries three or four decades ago. However, the extreme nature and spatial concentration of the changes distinguish the case study from the western examples. Several factors conducted to the fast pace of change like the decreasing significance of agriculture, the quick transformation of land ownership rights, the absence of environmental consciousness and weak community planning and control.

"Just look over the fence. There is more space here." An interview with the managing director of Mercedes-Benz Manufacturing Hungary illustrates that the transformation of the rural-urban fringe in Kecskemét has not finished yet. The building complex of the factory covers only a part of the purchased land presently, but the company has plans for further expansion [14]. The proposed construction of the northern section of the bypass road to 2015 will also bring additional changes, and it will affect the least disturbed part of the fringe the most [18]. In the future, stronger community control and more consequent regulations are needed to lessen the negative effects of change and to aim toward a more sustainable rural-urban fringe.

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