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A GEOGRAPHICAL ANALYSIS OF DISABILITY, A SOCIO-SPATIAL PHENOMENON

Theses of the Ph.D. dissertation

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I. Rationale for choosing the topic

By the early period of the 21st century, disability has become a major and increasingly important global issue (UN 2011; WHO 2011). Disability and several of its accompanying conditions may be understood as serious social problems, but these conditions are inseparable from the social space and from certain spatial processes. In line with the above-mentioned facts, a number of factors support the relevance of a critical social-geographical research of disability. Out of these factors, this paper considers three groups important to emphasise: geographical theory, demography and social-welfare.

The study of disability from a *geographical theory* aspect does not have long traditions. However, in the past three decades there has been a constant growth in the extent of such research (PARK, D. C. et al. 1998; IMRIE, R. – EDWARDS, C. 2007; CROOKS, V. A. et al. 2008; WILTON, R. D. – EVANS, J. 2009; CASTRODALE, M. – CROOKS, V. A. 2010; KNOX, P. – PINCH, S. 2010). This growth is illustrated by the fact that while previous studies on disability had been part of health geography, most recently the *geography of disability* (disability geography or geographies of disability) has been all the more considered to be a separate sub-discipline.

Nevertheless, it can be concluded that globally there is a significant discrepancy between the concentrations in the conditions of disability and the representation of the topic in geography. On the one hand, two-thirds of those people who are categorized as disabled has, already from the end of the eighties, lived in developing countries; a fact that has not changed significantly since then (ABBERLEY, P. 1987; QUINN, G. et al. 2002; WHO 2011). In fact, based on certain sources, this ratio is already close to eighty percent (O'REILLY, A. 2007; UN ENABLE 2008). On the other hand, most of the research conducted on the geographies of disability comes from a 'Western' (Western European, North American) context. Consequently, studies that examine the relationship between disability and space are mainly absent not only in the above-mentioned developing countries, but also, for example, in Central and Eastern Europe.

A fundamental component in the *demographic* factor is the number of disabled people and the change in their numbers. Already in the late 1980s, the global population of disabled people was more than 500 million. (ABBERLEY, P. 1987; DESPOUY, L. 1991 in OLIVER, M. J. 1999). This number has increased later on (see e.g. QUINN, G. et al. 2002, an estimate of 600 million people). By today, based on some sources, this number exceeds one billion i.e. more than 14% of Earth's total population should be considered to be disabled in some respects (WHO 2011). In 2001, in Hungary, 577 006 people identified themselves as disabled i.e. more than five percent of the total population. By 2011, this number went down to 456 638, but by that time, in addition to the disabled category, the Hungarian Central Statistical Office (KSH) had already set up the category of 'people with chronic illnesses' in which a total of 1 648 424 people had classified themselves. Therefore, disability is not a domestic affair within a narrow social group, but affects society as a whole and, in fact, at least in certain stages of life, disability concerns eventually almost everyone.

An underlying aspect of *social-welfare* is that the living conditions of a disabled person are generally less favourable than their non-disabled counterparts living with similar demographic characteristics (e.g. gender or age). This is quite a normative statement, though, at the beginning of the 21st century, disability and poverty are still closely linked conditions (SMITH, A. M. 2002; UN 2011; WHO 2011). However living conditions cannot be adequately described by concepts such as poverty that focus merely on income situations, possession/lack of possession of material goods or the satisfaction/non-satisfaction of basic needs (GIDDENS, A. 2008).

Even today the life-situation of a significant part of people living with disabilities is still characterized by poverty, powerlessness and socio-spatial marginalization, even in countries

that are economically more developed than Hungary. According to GLEESON, B. (1998), to put an end to the above-mentioned situation two requirements must be met: first, put an end to material deprivation and second eliminate socio-spatial exclusion. That is why, in this research, it is considered necessary to examine which factors contribute to the increase in socio-spatial disadvantages for people with disabilities in Hungary.

II. Aims and research questions

This paper has three fundamental goals for research: a theoretical, a practical-empirical and a political. By the *theoretical* aspect this paper refers to the illustration and development of theories, concepts and terms that so far have had little or no use in Hungarian geography. On the one hand, the Hungarian social geography knowledge is apparently missing those theoretical components that are already known in the international literature and are closely related to the geography of disability and disability as a condition in general. On the other hand, due to the lack of such knowledge, there is no experience in Hungary with the applicability of these theories. Therefore, in this paper there is a significant emphasis on the discussion of scientific theoretical issues.

1. What are the possibilities for an interpretation of disability and what conceptual approaches may be used to describe this phenomenon?
2. What methods are there in the social geography of disability research that have not yet been used in Hungarian geography?
3. Based on the international literature, what are the main issues that occur in disability geography?

From a *practical-empirical* point of view, the main objective is to offer this paper as an example for a type of research that, in spite of its relevance, has not yet been conducted in the history of Hungarian geography. In this paper it is important to explore more and more of those features of the Hungarian social space that cause the disadvantaged position of people living with disability and contribute to the preservation of their disadvantaged position. In addition to that, this paper interprets and analyses the findings in the framework of a critical approach of social geography. Similarly to the previous one, this is a complex issue as it is important to see how, in different scales, the disadvantaged position of people living with disabilities is articulated and reproduced.

1. What correlations can be found in the regional distribution of disability and other socio-economic factors?
2. How are those urban spaces produced that are inaccessible for disabled people and what obstacles can be found in the urban environment?
3. In this respect, how can the different spheres of social space be described (e.g. work environments, public spaces and home)?
4. On the level of individuals and groups what role does disability have in the shaping of bodies and identities?
5. What are the effects of these spatial patterns and shapes on the quality of life for people living with disability and on the spatial practices employed (e.g. survival strategies, political action)?

The main point of the *political* objective is to contribute on a long-term to the improvement in the living conditions of those people who are considered disabled and are in a

disadvantaged position. Also, the aim of the research activity is to initiate change in the social conditions that cause the unfavourable situation. In a narrower sense (i.e. from a 'geography politics' aspect) this paper aims for the strengthening of disability research in general and the support of the critical standpoint in Hungarian geography. By providing answers to the questions listed above, this paper shall make an attempt to achieve these aims.

III. Methodology

To answer each of the research questions, fieldwork as well as off-field activities (LETENYEI L. 2006), quantitative and qualitative analytical methods have been used.

1. Methods used to fulfil the scientific theory objective

When developing the theoretical framework of the study, an analysis of secondary sources had been carried out. As linked to the given topic, within the objective of scientific theory, the discussion of each issue is based on the analysis of international (English language only) and to a lesser extent Hungarian literature. Due to the interdisciplinary nature of the topic, this paper relies on the results of geography and other sciences and, in addition to the literature, law material, reports, policy and planning documents had been used as sources.

2. Methods used for the examination of the macro-level correlations of disability and other social phenomena

The statistical methods employed fall into three major categories: descriptive statistical calculations, linear correlation operations and global and local spatial and cross-correlation calculations. By using data from the *Hungarian Central Statistical Office* (KSH) and the *Hungarian Regional Dataset* (T-STAR) analysis had been carried out on two specific dates: 2001, 2011 and on various regional levels: national, county regional, micro-regional and town. Out of the above-mentioned regional levels, in this paper, the micro-regional level has a special role.

Within the framework of *descriptive* statistical analysis, specific indicators have been calculated from datasets of metrics used to describe socio-economic characteristics. These metrics had been selected from the metrics used to calculate the complex indicator measuring the development/underdevelopment of a micro-region, and used by the TEIR system for spatial analyses. A particular role is assigned to those calculated indices that are linked to health damage or disability. For 2001, the number of those who declared themselves as disabled per 1000 permanent residents was given, but for 2011 there had been no such data available on a micro-region level. Consequently, two alternative variables have been used: the number of mobility-impaired persons receiving transportation benefits per capita of 1000 residents and the number of persons receiving disability and rehabilitation care per capita of 1000 residents.

After that the *linear* (Pearson's) *correlation* coefficient (r) values have been calculated from the individual indicators. Considering that from the value of the coefficient one can make assumptions on the strength and direction for the connections that exist within the datasets, an opportunity has been presented to explore the connection between the datasets that describe disability and a series of selected spatial datasets. Such information was also important later with the performance of other examinations.

As a third method, *regional auto- and cross-correlation* calculations have been used. The spatial auto-correlation of global and local Moran's I measure (ANSELIN, L. 1995; TRAN, H. – YASUOKA, Y. 2001) has been calculated for each of the three above-mentioned indicators. This method allows the detection of rules or randomness in the spatial distribution of a variety of social conditions (NEMES NAGY J. 1998, 2009; DUSEK, T. 2004). With *cross-*

correlation calculations, it has been investigated how datasets describing disability are related to indicators of other datasets. These latter ones had been specified by the linear correlation values obtained previously: it included those indicators into the calculations that had indicators specific to disability and illustrated the highest significant correlation values.

3. Methods used for the examination of the subsystems of social space and urban spaces

To answer the questions listed under this heading, the paper relied on qualitative methods, namely narrative and semi-structured interviews. The interviews were conducted between 13 April 2010 and 2 October 2012 together with supervisor Judit Timár[1]. During the research, within the framework of 70 interviews, 74 people were interviewed. The interview partners were divided into two groups: health-impaired people (54 people) and 'experts' (25 people); five people belonged to both groups.

Since the relevant research questions have been examined *in the scope from the viewpoint of disabled people*, this group is over-represented among the interview partners. In the case of this research, the strategy of selection was the existence of health damage which classification could come from either an official diagnosis by the authorities or the co-existence of symptoms experienced by the individual. The subjects of the *expert interviews* were people who, at the time of the survey, occupied leading positions in governmental or non-governmental organizations and had significant experience in policy issues related to health damage and disability. In this way, these experts had a somewhat different point of view from the above-mentioned people living with impairments.

IV. Summary of the research results

Results developed from the theoretical objective

1. Based on the analysis of the literature, it can be concluded that in social sciences the phenomenon of disability is defined in a wide variety of ways. The foundations defined by each of the main trends are structured within the frameworks of *models.* A large number of these models are adapted by human geography and, even more, this discipline has extended the results of the models and created new ones (GLEESON, B. 1999; WILTON, R. D. – EVANS, J. 2009). This paper has classified the models of disability into three categories: individual, social and biosocial models.

A general characteristic of the *individualistic* models is that they derive disability from the level of the individual and do not attribute a significant role to the environmental components. Within this group, because of their importance, this paper shall discuss in greater detail the *(bio)medical* model which model explains the cause of disability with a person's physiological and health status (OLIVER, M. J. 1990a; ABBERLEY, P. 1991; BARNES, C. 1992; FINKELSTEIN, V. 1998; BARNES, C. – MERCER, G. 2004; IMRIE, R. 2004; WILTON, R. D. – EVANS, J. 2009). In addition to the above-mentioned models, this paper discusses the following ones as individualistic models: models based on *moral* or religious perceptions (KAPLAN, D. 2000; NIKORA, L. W. et al. 2004; JACOBSON, D. 2006: 110; SHAKESPEARE, T. 2006), the personal tragedy model (OLIVER, M. J. 1990a, 1990b, 1999; BORSAY, A. 1997), the expert or rehabilitation model (KAPLAN, D. 2000; NIKORA, L. W. et al. 2004) and the consumer-based model (NIKORA, L. W. et al. 2004).

Unlike the above-mentioned models, the *social* models move the focus from the individual to the social environment and explain the subordinate status of disabled people with the characteristics of society. Within this group, this paper has identified two major trends: a *British* trend that mainly relies on Marxist foundations (FINKELSTEIN, V. 1993;

[1] Four interviews have been conducted by the supervisor of the author of the dissertation, 55 by the author and 11 jointly by the supervisor and the author.

ABBERLEY, P. 1999; OLIVER, M. J. 1999; BARNES, C. 2000) and an *American* trend that relies on the results of functionalism and symbolic interactionism. Within each trend, this paper has discussed two subtypes separately: in the former case the affirmative model (SWAIN, J. – FRENCH, S. 2000), in the latter case the minority group model (HAHN, H. 1985, 1986, 1994) has been discussed.

The third group comprises of *cultural* models. To refer to these models, this paper uses the term biosocial as a general reference term (WATSON, N. 2004; PHILO, C. 2009). This model combines elements from the individualistic and the social models thus takes into account the individual bodily experiences as well as maintaining the critical attitude towards the social environment. Due to its complexity, this paper considers that the biosocial model offers the most appropriate approach to a geography-based research on disability and thus this model is employed during the empirical research for this study.

2. As the second scientific theoretical issue is considered, this paper has concluded that within the human geographical study of disability there is strong emphasis on the critical perspective. As during the progression of the study a critical approach has been followed, these standpoints also draw more attention during the literature review on disability geography. To set up the boundaries of science taxonomy, the scope of research that has not been considered to represent the critical approach has been separated. In this way, the literature has been discussed in two groups: *pre-critical* and *critical* (although the latter is also labelled by some authors as post-positivist and by others as interpretive). Representatives of the former studies examine disability as a spatial phenomenon by focusing on the spatial distribution and the spatial behaviour and activities of impaired people. This group does not strive to change the existing social relationships. On the other hand, the representatives of the latter group fundamentally believe that in order to eliminate the disadvantageous situation of disabled people, radical social changes are necessary, mainly in the capitalist forms of production and (re)distribution.

3. As regards the research topics, the pre-critical and critical studies are somewhat similar, but upon the analysis of the literature, it becomes clear that there is a significant shift in the emphasis regarding the issues and there is a difference in their relationship to critical social theories. Within the pre-critical group, three trends have been identified: geographical epidemiology and disease ecology (HUGG, L. 1979; MAYER, J. D. 1981; LOVETT, A. A. – GATRELL, A. C. 1988; HUNTER, J. M. 1992; MCCOY, J. L. et al 1994), behaviourist geography and spatial mobility research (e.g. GOLLEDGE, R. G. et al. 1979; GOLLEDGE, R. G. et al. 1991, 1997; VUJAKOVIC, P. – MATTHEWS, M. H. 1994; MATTHEWS, M. H. – VUJAKOVIC, P. 1995; VUJAKOVIC, P. et al. 1995; JACOBSON, R. D. – KITCHIN, R. M. 1997; MATTHEWS, H. et al. 2003; BEALE, L. et al. 2006) and the geography of cognitive and mental health (e.g. GIGGS, J. A. 1973, 1975, 1986; JOSEPH, A. E. – HALL, G. B. 1985; PHILO, C. – WOLCH, J. 2001). Although in its choice of topics the latter demonstrates similarities to the disease ecology trend, the questions it raises in relation to the macro- and micro-level examination of institutions or the process of deinstitutionalisation make this a distinctive trend.

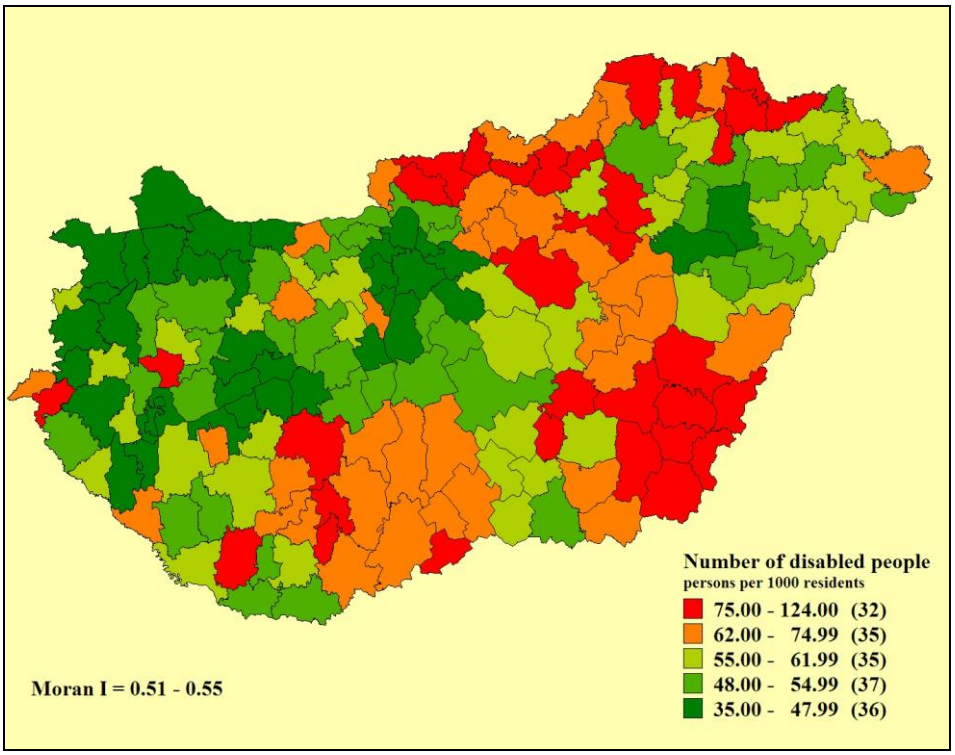
By relying on the literature, five subgroups have been determined: the first one examines the physical accessibility of urban spaces, the exclusion of disabled people and the issue of 'design apartheid' (IMRIE, R. 1996, 1998, 2001). This subgroup studies the underlying practices behind the above-mentioned facts for example within the designer or architect profession. The second subgroup is practically the historical materialist theory of GLEESON, B. (1999). The third subgroup refers to post-structuralist studies (e.g. KITCHIN, R. 1998; ANDERSON, P. – KITCHIN, R. 2000; KITCHIN, R. – LAW, R. 2001), the fourth to research employing psychoanalytic theory (e.g. DEAR, M. et al. 1997; WILTON, R. D. 1998, 2000,

2003), the fifth to feminist studies (e.g. MOSS, P. – DYCK, I. 2003; CROOKS, V. A. – CHOUINARD, V. 2006; CROOKS, V. A. 2010).

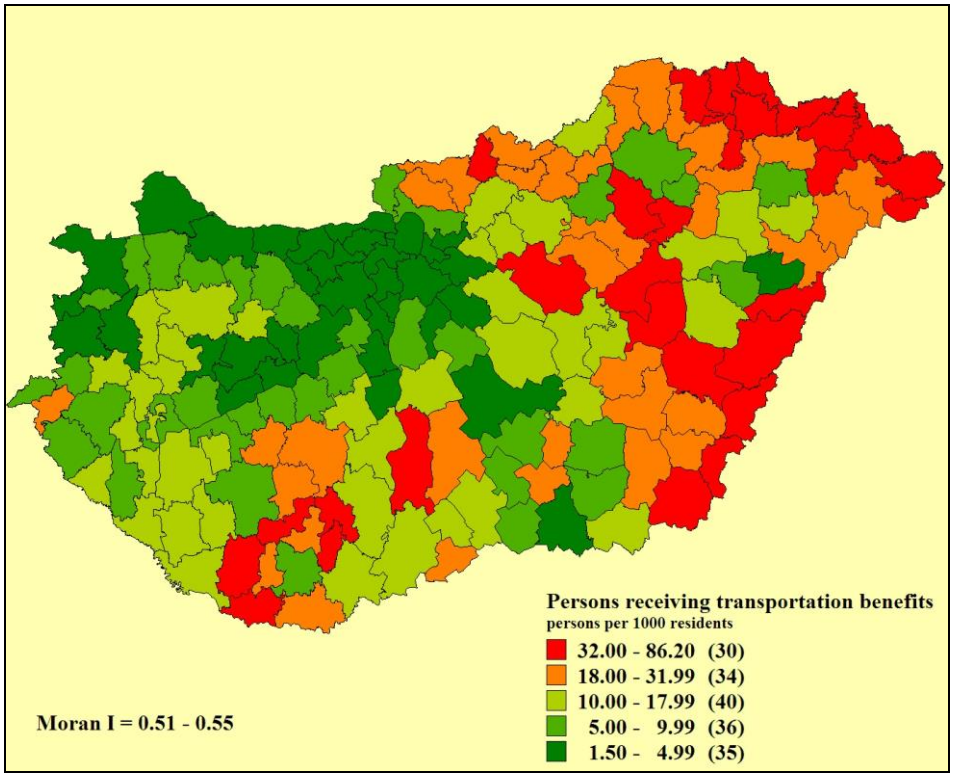
Results developed from the practical-empirical objective

1. Based on the mapping of the 2001 and 2011 data and the spatial autocorrelation studies, there is a noteworthy concentration in the spatial distribution of disabled and impaired people. In both years under scrutiny, the spatial structures that illustrate the impaired and the disabled people show several correspondences with the differences in the regional development. In the more developed regions, such as Budapest and its agglomeration, and in the Northwest Transdanubia region there is a lower ratio of people living with disability. In contrast with that, in the less developed parts of the country, such as *Békés County* or the outer periphery in the north and north-east this ratio is substantially higher (Map 1-3). In line with the results of the statistical analysis and the cartographic presentation, it can be stated that in Hungary the recognized association between the differences in the regional development and the spatial distribution of disabled people is also apparent: people with disabilities are over-represented in the less developed regions (ABBERLEY, P. 1987; DAVIS, L. J. 2001; BRAITHWAITE, J. – MONT, D. 2009).

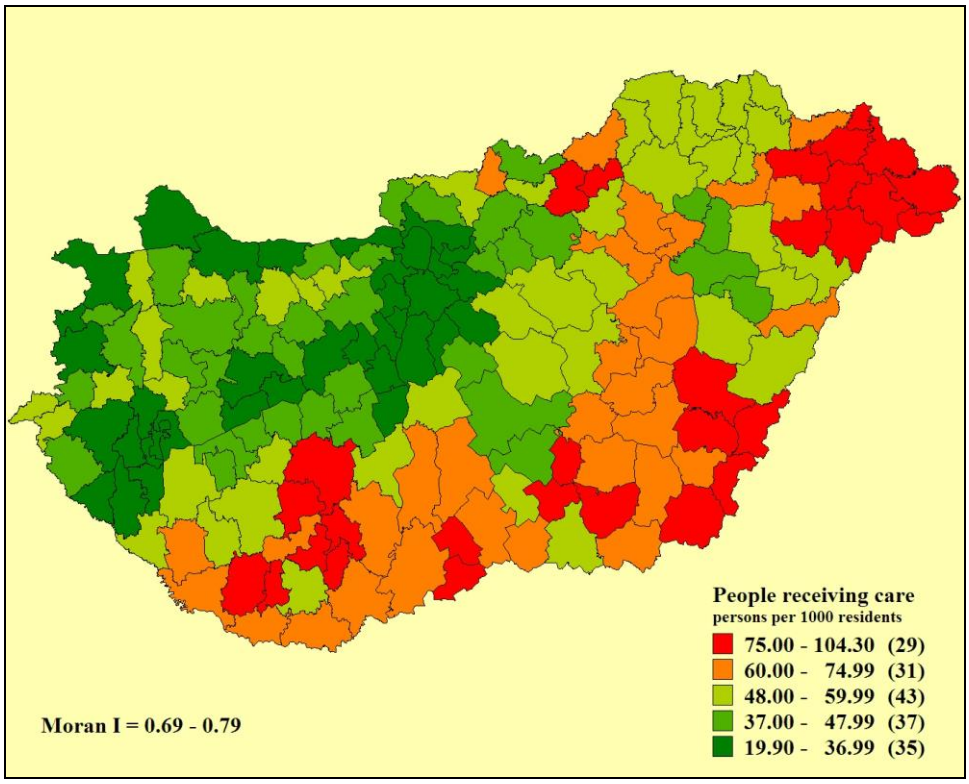
The comparison of the spatial structure of disability and the indicators of various other development spatial structures confirms that there is a correlation between disability and economic development. On an average of more than 60 percent of the indicators, the calculation of the linear correlation coefficient resulted in a significance level not higher than 0.01. As regards the significant values, it may be stated that, in general, with the dataset of the so-called positively evaluated indicators there is a negative linear inclination, while with the dataset of the usually negatively evaluated social development indicators there is a positive inclination. In 2001, the strongest positive correlation with the number of people living with disability were related to data linked to the healthcare sector, the social field and employment, while the strongest negative correlation were related to data linked to the economy (mainly entrepreneurship), demography and housing. From the 2011 data it can be seen, as the positive correlation indicators are considered, that the importance of the employment-related indicators had increased, but the ones related to the healthcare sector and the social field had maintained their positions. As the negative coefficients are considered, it can be seen that, in addition to the demographic and housing indicators, there are infrastructural ones as well. For 2001, based on the spatial cross-correlation results, there was positive relationship between the ratio of people living with disability and the ratio of the unemployed and those who possess a Prescription Exemption Certificate. On this basis, there is a high unemployment rate and a high rate of people with Prescription Exemption Certificates in micro-regions that are situated next to micro-regions with a high rate of disabled people, and vice versa. It should be noted, however, that these values are relatively low (none higher than 0.4), and that these values are lower than the extent of the spatial autocorrelation of the ratio of people living with disability. On the 2011 datasets not even a weak or moderate cross-correlation (that may be similar to the ones above) can be concluded in spite of the fact that the Pearson's correlation was stronger than with the datasets from 2001.



Map 1. The average number of people who refer to themselves as someone living with a disability in a micro-region per 1000 permanent residents (175), 2001
(Source: KSH data; calculated and edited by the author)



Map 2. The average number of mobility-impaired persons receiving transportation benefits in a micro-region per 1000 permanent residents (175), 2011
(Source: KSH data; calculated and edited by the author)



Map 3. The average number of people who receive disability and rehabilitation care in a micro-region per 1000 permanent residents (175), 2011
(Source: KSH data; calculated and edited by the author)

2. For a disability-focused study of the Hungarian social space the model by GLEESON, B. (1999) has been applied as an analytical framework. GLEESON has defined four important nodes of the social space of disability in early capitalism: workplace, institution, street and home. For the purpose of the analysis in this study, certain changes have been made in the naming and the content. The following four sub-systems of social space have been studied: spaces of paid employment (open labour market and sheltered employment), institutional (healthcare) spaces, public and semi-public spaces, and domestic spaces. This framework is suitable for the study of urban space because GLEESON himself has used this framework to make analyses on the examples of capitalist cities.

This research illustrates that in Hungary today, due to several factors, urban spaces and the urban environment contributes to the marginalisation of disabled people. With the assistance of the interview survey, and the policy documents, a number of components have been identified that are looked on as barriers in the social participation for impaired people. These components fall into three large groups: the physical and social configuration of each space, the content and effectiveness of legislation and political activity, and social attitudes and the nature of everyday interactions.

3. Components of the social space are in many respects similar to those described by GLEESON, B. (1999), but there are local characteristics. The *spaces of paid employment* is the primary centrifugal sphere of the social space of disability where exclusion plays a significant role – mainly in the *open labour market.* One reason for this fact is the discrepancy between the physical design of workplaces and the bodily characteristics of people living with disability. The interview partners have mentioned several cases where the interaction between some physical elements of the workplace and their impairment hindered their work process.

The social structure of work places is also an important factor. During the interviews, it has come up several times that the spatial and temporal frameworks of the capitalist production are not always compatible with the capacities of the health damaged body. The attitude towards health-damaged people, for example from the part of the employers, is also worth mentioning because the interview partners have also reported several cases where they were at a disadvantage in the labour market due to a discriminative attitude related to their bodily state.

Within the sphere of paid work, a special role is allocated to work places with *social and sheltered employment* that offer more favourable conditions to workers with health damage than the open labour market. However, research carried out in this study highlighted that these spaces are constantly changing during the interaction of the processes at different scales. Such course of processes include for example the global economic recession, changes in the national resource allocation of social employment, national and local political party struggles, local governments' strategies for the management of unemployment, the behaviour of businesses with an interest in social employment or the survival strategies of the marginalised and impaired people. This study has demonstrated that due to the effects of the various courses of actions, social employers may be forced to move closer to the open labour market conditions thus compromising to meet the original objectives.

In addition to the 'special' sealed units that engage in the care and rehabilitation of the seriously health-damaged people, this study looks also at the general health and social care spaces as *institutional spaces*, which together formulate the complex social space of the institutional sphere (MANION, T. – FLOWERDEW, R. in PHILO, C. – PARR, H. 2000). Unlike the spaces of paid work, the above-mentioned spaces are significant centripetal nodes. For example, by the interview partners, it has been generally stated that within the everyday spatial practices, healthcare spaces have an increased role. Based on the reports of the interview subjects, the physical design did not always meet their bodily needs. The social structure of institutions is fundamentally hierarchical, characterised by unequal power relations between healthcare professionals and patients. The interview partners have mentioned several examples to this fact. What makes institutions particularly important is the fact that they function as sites of healthcare categorisation and hence exert significant influence on the identity and material living conditions of the interview partners.

In Hungary, following the change of regime in 1990, people living with disability have become increasingly regular participants in the *public and semi-public* spaces of social life. In line with the documents reviewed, the central government aims to support this process by promotions of accessibility. Nevertheless, according to the experience of the *interview partners*, there are still many barriers in these spaces. In addition to the physical design, the interview partners have emphasised, in many cases, the existence of disadvantages deriving from social interactions. In line with what has been told, the nature of these interactions may be affected by factors such as the visibility of their impairment to the environment, types of bodily behaviour, prejudices against disabled people and the recognition of impairment by the individual and his environment (during their studies, similar findings had been reported by BUTLER, R. – BOWLBY, S. 1997).

Based on the interviews, the *domestic space* is paramount to several people living with impairment because there is an increase in the amount of time these people spend at their home. Furthermore, their home is normally the space over which these people have the strongest control. On the other hand, the respondents said that this ability of theirs is significantly reduced by those physical elements that have been designed for 'able-bodied' people, the financial constraints of people living with impairments and the lack of government support and regulation. For some interview partners, due to the above-listed factors, the home environment is not only a scene of control, but also a place of helplessness and confinement

(for similar results see e.g. GILDERBLOOM, J. I. – ROSENTRAUB, M. S. 1990; DYCK, I. 1995; GLEESON, B. 1999, 2001; CROOKS, V. A. 2004, 2007).

4. The interview partners have developed different *identities* in relation to their health status and disability. Some of these identities are positive and liberating, while some of them are negative in nature. All of the respondents looked at themselves as someone living with impairment, but not everyone interpreted this condition in the same way. In their way of thinking the healthy/sick dichotomy is general, and their self-classification into one of the two groups is significantly influenced by the category of their own impairment and their relationship to civil organisations representing people living with disabilities.

In contrast to the impaired status, the majority of the respondents has rejected having a disabled status. This paper suggests that the main reason for that fact is the dominance of the medical model which looks at disability as the individual's defect and thus the term leads to mostly negative associations.

In addition to the above-mentioned factors, each subsystem of the social space may play an important role in shaping identities. Social activities that are considered useful and carried out in the spaces of paid work have positive effects on self-esteem, while discrimination from work results in negative impacts. Through the process of categorisation, institutional spaces may also affect an individual's identity. As regards public spaces, based on the feedbacks of the interview partners, it can be concluded that by taking on the fact that one has health damage and making the social environment aware of that fact are important steps towards a positive disability identity.

5. In connection with the issues related to the quality life and the spatial practices of the interview partners, this paper emphasises the survival strategies and resistance activities of those involved. The first term is clarified by this study as accepting the official disability classification to increase income. The research results suggest that this strategy has become prevalent not only because of the occurrence of health damage, discrimination from the labour market and the poor performance of the local economy, but also, up until now, the practice of the institutional sphere played an important role by encouraging the disabled status thus increasing the number of inactive earners so managing unemployment. Therefore, the author of this dissertation is on the opinion that the above-mentioned fact shows a definite (post-socialist) model of the production of impairment and disability. In addition to the resistance activities of the individuals, with the ever stronger powers of the civil society, a collective disability-policy action is becoming increasingly important in Hungary. However, this study has concluded that even in the case of the nominal disability movements, the income situation may be a greater mobilising force than cultural submission. Also there is the risk that disability movements may fall under the influence of forces of party politics, which can easily risk the original objectives of the movement, and may only strengthen the ableist nature of society rather than eliminating that.

Lessons learned from the political objective

It has been the political objective of the researcher to offer this study as a long-term contribution to the improvement in the living conditions of those people who are considered disabled and are in a disadvantaged position. Also, the aim of the researcher has been to initiate change in those social conditions that are responsible for the unfavourable situation. From this single study, it would be pointless to expect the implementation of change hence it is more appropriate to point out a long-term research program. The accomplishment of this program is the creation of a just society in which ableism is no longer a factor in the formation of social space. It is the hope of the researcher that with the critical examinations

and research results presented in this study a contribution has been made in the direction of the above-mentioned changes (for the positioning of the researcher's standpoint see: KITCHIN in TIMÁR J. 2009).

V. Potential applications of the research results

The results of the study can be applied in a variety of ways both in a theoretical and in a practical sense.

- The theoretical results of this research can be used in disability studies, geography and other disciplines as well. Up until now, there have been few studies in Hungary on theories related to disability geography. The set of theories assembled in this dissertation may serve as a starting point for further research and scientific discussions.

- The theoretical results may also be used by people with disabilities and organisations representing their interests. Reason for that is that the application of critical social theory may facilitate a change in the attitude of society and the reduction in the dominance of medical approaches. In addition to that, it may provide an opportunity for people living with disability to better understand the causes of their disadvantaged situation thus encouraging them to take political action.

- The research methods employed in this study may generate a controversy and this may lead to the making of new research techniques and a better understanding of disability and especially the spatial qualities of disability.

- Both the quantitative and the qualitative research may provide useful results for the areas of social policy, regional and settlement development. For example, the macro-level analysis may expand knowledge on regional inequalities with new points, while the mapping of barriers in urban areas may assist in the operations of planned developments.

- The results of the interview survey may be of interest to the leadership of urban municipalities. For instance, information on public spaces may assist in changing social views thus increasing the tolerance level of a town's population towards disabled people.

- The practical-empirical results may benefit the employers' group who may have a better understanding of the views and needs of people living with impairments. In the long-term this may facilitate an increase in the employment of people living with disability.

- The qualitative survey may also provide useful results for groups in the civil society and people living with disability who may use the information obtained for their activities in the future. In this regard, those parts of the paper that elaborate on political activity and resistance techniques may be particularly informative.

VI. Possible directions for further research

In line with the theoretical framework, methodology and empirical research of the study, several directions of research may be chosen.

- For the theoretical study of disability, mainly western interpretations had been used. In the future, it may be useful to study the phenomenon of disability in different contexts.

- In this paper, during the review of the previous literature of the geography of disability, the focus was primarily on critical trends. Consequently, it may be important to examine what characteristics are there in today's non-critical trends and their relationship to the critical trends.

- From the point of view of methodology, the quantitative study may be further expanded by including new indicators into the process of the analysis or by relying on other methods such as regression models.

- The qualitative research may be extended to other parts of the country and beyond the borders of the two counties: *Békés* and *Csongrád*. For example, the comparison of data from surveys that have sources in sample points found in regions with different levels of economic development may provide significant results.

- The extension of the temporal scale may be important and to carry out a temporal comparative research. In the opinion of the researcher, it may also rightly be of international scientific interest to compare the social space of people with disability as it was under the socialist state and as it is under capitalism.

- It may be useful to better involve each social group (e.g. employers) into the empirical studies, and extend the study to other actors, for example medical professionals or representatives of the architectural profession.

VII. Publications in the topic of the dissertation

1. **FABULA SZ.** 2009: A fogyatékkal élők térhasználatának néhány problémája Békéscsabán. – In: BELANKA CS. – DURAY B. (szerk.): IV. Alföld kongresszus (2008. nov. 27-28.): Helyünk a világban – Alföldi válaszok a globalizáció folyamataira. MTA-RKK ATI, Békéscsaba, pp. 148-152.
2. **FABULA SZ.** 2010a: Az esélyegyenlőség és a fogyatékkal élők helyzetének területi különbségei Magyarországon. – Jelenkori társadalmi és gazdasági folyamatok, 5. 1-2. pp. 39-43.
3. **FABULA SZ.** 2010b: A magyarországi fogyatékkal élők hátrányos helyzetének néhány területi, települési vonatkozása. – In: CSAPÓ T. – KOCSIS ZS. (szerk.): VI. Településföldrajzi Konferencia (2009. dec. 3-4.): A településföldrajz aktuális kérdései. Savaria University Press, Szombathely, pp. 204-215.
4. **FABULA SZ.** 2011a: Az ellenállás terei (?) – A megváltozott munkaképességűek szociális foglalkoztatása körüli konfliktusok Békés megyében [CD-ROM]. – SZTE TTIK Gazdaság- és Társadalomföldrajz Tanszék, Szeged.
5. **FABULA, SZ.** 2011b: Challenges for Hungarian Geography: Perspectives of 'Disability Studies' in Hungary. – Forum Geografic, 10. 2. pp. 235-243.
6. **FABULA SZ.** 2012a: A sérült emberek társadalmi kirekesztődésének és a hozzáférhetőség problematikájának földrajzi vizsgálata települési léptékben. – In: NYÁRI D. (szerk.): Kockázat – Konfliktus – Kihívás: A VI. Magyar Földrajzi Konferencia, a MERIEXWA nyitókonferencia és a Geográfus Doktoranduszok Országos Konferenciájának Tanulmánykötete. SZTE TTK Természeti Földrajzi és Geoinformatikai Tanszék, Szeged, pp. 212-227.
7. **FABULA SZ.** 2012b: A szociális foglalkoztatók mint „terápiás helyek" kritikai vizsgálata. – In: PÁL V. (szerk.): A társadalomföldrajz lokális és globális kérdései. SZTE TTK Gazdaság- és Társadalomföldrajz Tanszék, Szeged, pp. 231-241.
8. **FABULA, SZ.** 2013: Body politics and urban spaces: disabled people's encounter with and resistance to disabling urban environments in Hungary. – In: ILIES A. – KOZMA, G. – KOVÁCS, Z. – POPA, N. (eds.): Regional development and cross border cooperation. Editura Universitatii din Oradea, Oradea, pp. 10-20.
9. TIMÁR, J. – **FABULA, SZ.** 2013: Whose Identity Politics? – Lessons for Emerging Critical Disability Geography in Hungary. – Geographica Helvetica, 68. 3. pp. 171-179.

VIII. Other publications

1. **FABULA SZ.** – PÓCSI G. – PAP Á. 2011: Beszámoló a Magyar Földrajzi Társaság 64. Vándorgyűlését követő külföldi tanulmányútról. – Földrajzi Közlemények, 153. 3. pp. 313-316.
2. **FABULA, SZ.** 2014: Report on the 2014 Annual Meeting of the Association of American Geographers. – Hungarian Geographical Bulletin, 63. 2. pp. 224-228.
3. **FABULA, SZ.** – Horváth, D. – Kovács, Z. 2014: Urban Policies on Diversity in Budapest, Hungary. – University of Szeged, Szeged.