

Geography of disability as a challenge of XXI century

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Abstract. *The development of the world and its diversity in terms of spatial, landscape, culture, social forces to develop new areas of science or to deal with new aspects of world by the existing fields of science. All around the world there are many handicapped people. New approaches to the issue of disability have emerged expanding the scope, methodology and research focus to include more geographical diversity of life experiences and interactions in both urban and rural environments. This paper introduces the issue of impairment, its definition and geographer's interest in this subject and also two non-geographic models of disability that are connected with the development of the spatial model and have created the geographic point of view on disability*

Keywords: *disability, geography, spatial relations, medical and social model*

Introduction

In recent year's geographers has extended the breadth of interests in spatial problem into a new set of areas "ranging from interpretation of satellite images of the earth and the building of global models, to an examination of the internal processes that contribute to spatial ability and spatial competence. In addition to an expansion of the range of scales at which geographic research has been undertaken, there has also been an elaboration of the behavior settings and population sub-groups with which geographers deal" [1: 63]. Over the past decades there have been many debates and geographers have to take some steps towards understanding the topic of disability, because there have been a problem "both within disability studies and geography about how disability issues should be researched and who should conduct such research" [2: 61]. Recently research has presented disability as a characteristic of the population that inevitably leads to marginalization and spatial exclusion from otherwise normal social arenas and spaces within the built environment [3]. Like many other research on topics related to race or gender, analyzing the marginalization of disability requires new perspective on old topics like "the body", "the home" and "the workplace" in the context of spatial. That is why a new question arises that addresses the new area of science - "geography of disability".

The aim of this paper is to present the issues of disability in the field of geography. Nowadays this is very important because of the size of the phenomenon of disability, where according to the WHO, more than 650 million people have some kind of impairment. The article presents definitions of disability and provides current debates in disability research with the biggest emphasis on geographical studies. Additionally two non-geographic models of disability alongside other methodologist and points of view of "geography of disability" will be presented. Much of this article comes from the work written by scientists, who actually have experience in this area, in many cases and even personal experience with disability.

The problem with defining disability

There has been a historical continuum of the meaning of disability. There were various aspects of disability. From the Moral point of view where a disability is a sin and shame; Medical where disability is a defect or illness cured which can be cured by medical research; Rehabilitation which believes that disability is a deficiency to be cured by rehabilitation science; to Social model where it is believed that disability is caused by society's barriers to including a disabled person as a fully integrated with citizens.

Disability is a concept that appears in both colloquial and official language – all kinds of legal documents, scientific publications, etc. Despite the fact that disability is widespread, it was not so far consistently defined and classified. There are many problems with a clear clarification of the definition of disability. Both in literature and in daily life there are various terms associated with impairments. An explanation of this phenomenon is difficult, as it is reflected in various spheres of life: health, social, economic, emotional, psychological or legal. Dysfunction should be understood as a relationship between human health – taking into consideration his age, gender and even education – with the environment [4] (Figure 1). Handicap is therefore a function of the relationship between disabled person and their environment and it occurs when disabled persons encounter cultural, physical or social barriers which prevent their access to the various systems of society which are available to other healthy citizens.

The most common terms that are used interchangeably with disability are primarily: incapacity, invalidity or crippling. The United Nations uses these definitions:

Incapacity – any kind of efficiency loss or irregularity in the construction or functioning of the organism in terms of psychological, psycho-physical or anatomical [5].

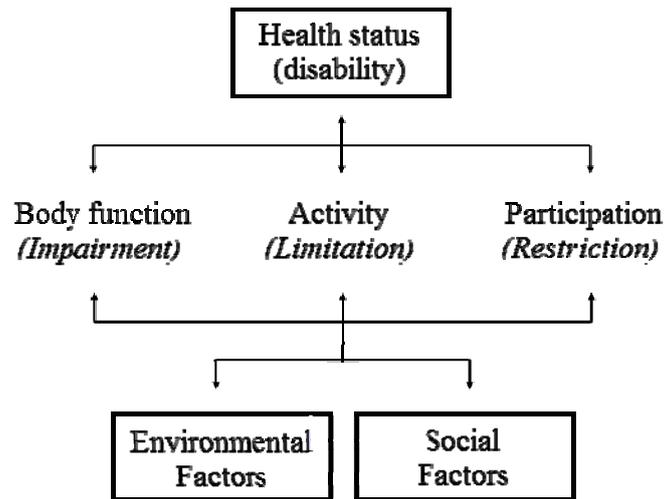


Fig. 1. Relationship between health and environment

Disability – is a disability resulting from the inability and limitation of conducting lifestyle characteristic of a healthy human being. According to the definition of Majewski [6] as a disabled person he recognize a person who suffers from considerable difficulties and unpleasant consequences on the daily personal, professional or social life, arising from damage or a reduction in the efficiency of the body.

Invalidity – a condition triggered by an illness or disability. Most often it is said about him, when the duration of this condition is more than six months. The result is a total or partial inability to work, caused by long-term or permanently impairment of hearing, vision, limb damage or decrease of the intellectual capacity [7].

Crippling – full or significant reduction in activity of an organ or a particular part of the body.

Due to its pejorative connotation when defining disabled or crippled it is better to use words: “person with disability”, and for health defects term: “disability”. Darcy [8] also distinguishes between the concept of “disabled person” and “person with disabilities” by explaining that the first one clearly underlines the dysfunction (disabled person), while the second one focuses on man (person), and then on disaster that unfortunately happened in his life (with disabilities).

Generally speaking disability is the loss or limitation of opportunities to take part in the life of the society on an equal level with others.

Medical and social models

Historically, disability has existed in the context of strictly medical, formed by the impairment and the impact on human beings. In the medical model, disability is often seen as individual medical tragedy [9], which were dependent upon medical and technological advances that would assist in normalizing the disabled body. Like a sickness, the individual was blamed for such rejection of bodily standards, leaving her with indignation towards the injustice that accused her of deliberately varying from society’s norms [10]. Until recent years, it was the platform on which the disability has been studied, leaving little hope for the people who live with disabilities. And although the medical model does not completely reject the social access and physical disability limits nature, such “help” came in the form of a suggestion that the normalized only body is a subtle way to confirm the patient's feelings of being outcast [11]. A more recent interpretation of disability is sociological and, above all, indicates a rejection of the medical model as a be-all-end-all [12]. In this social model, disability is seen as an experience rather than a problem, and it becomes a social identity, rather than an objective fact of nature [11]. In turn, many people who have long felt like a victim now recognize the power of the ability of the social model, in order to get rid of the disability from the bigotry of the earlier concepts of the subject [10] The medical model of disability does not fully represent the role of society in disabled people or even their personal experiences. The social model moves the focus of disability away from the individual to the environment of a person and structural factors. In medical model disability is tightly closed and refers only to one person in turn the social model, where disability is the experience of whole society and it situates disability in wider, more general, socio-cultural practices and structures (Tab.1).

New model of disability

Today's discourse on geography of disability is based on medical and social models of disability [13]. Many authors came to the conclusion that one on its own does not fully account for the lack of availability, which is fundamental to disability, instead it is a mix of two models, which builds a framework of spatial

disability patterns [11]. In a sense, a man must still be able to carry through the landscape, provided all social barriers have been eliminated. Gaines [10] believes that geographers should develop more detailed geographic model that includes both models, which are widely accepted as the most accurate representation of disability.

Table 1.

Medical and social models of disability	
Medical Model	Social Model
Disability is a 'personal tragedy'	Disability is the experience of social oppression
Disability is a personal problem	Disability is a social problem
Medicalisation is the 'cure'	Self help groups and systems benefit disabled people enormously
Professional dominance	Individual and collective responsibility
Expertise is held by the (qualified) professionals	Expertise is the experience of disable people
The disabled person must adjust	The disabled person should receive affirmation
'The Disabled' have an individual identity	Disabled people have a collective identity
Disable people need care	Disabled people need rights
Professionals are in control	Disabled people should make their own choices
Disability is a policy issue	Disability is a political issue
Individual adaptations	Social change

A variety of landscapes, in which people with disabilities work means that the absolute model is impossible to implement, but this does not preclude geographers from an elaborate spatial model relative to the person most affected by disability. Gaines [10] proposes a model that uses concentric rings of acceptance that come from the center that individual. The areas around person's environment immediately become fully socially accepting of that person's disability. By this he means the home, the bedroom. As the individual moves further away from the environment, the disability becomes a social problem by creating a gradient from fully medical to fully social. At some point away from this environment, disability of a person is seen only as a social problem in which all the adaptations of the world prevents disabled body from perceived as normal. In this zone, the person is seen as an outcast, his body seen as a impaired mechanism in the absence of the epitome of the glaring.

This Model is strictly rudimentary; however there is some kind of link between the medical models and social and spatial relationships. All zones are relative so their exact size is impossible to determine. Social restrictions are eliminated in an alkaline environment in which a person feels the most comfortable. While the other end of the spectrum, where there is a person with a disability is perceived as "bad", "substandard", and deviant from the norm. Figure 2 presents the third model of disability between medical and social.

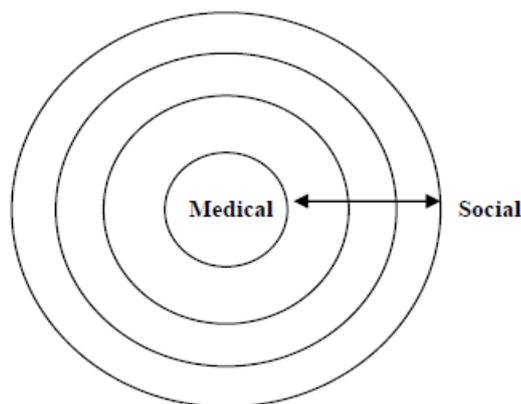


Fig. 2. Third model of disability [10]

Geographic research on disablement

Although superficially it might be argued why conducting research on disablement when disabled persons live in the same environment as their healthy counterparts and that existing theories, concepts or models should equally apply to them. People with disabilities have special needs regarding environment. They live in a transformed space. "While the space in which most people live is certainly not homogenous, being replete with barriers and obstacles, and requiring effort to perform interactions, there is no doubt that this effort is magnified many times when one is disabled" [1: 64].

Before about 1990 there was relatively little involvement in disability issues and geographers [14]. In geography there have been many debates between the Reg Golledge [1] and his opponents, Ruth Bulter [3], Brendan Gleeson [11] or Hester Parr [9]. The dispute was related to conception of disability, understanding of space, ideology and methodology. Basically, Golledge insisted on the development of geography of and for people with disabilities to conceptualize disability in impairment function and leading studies (subjects) and on behalf of disabled persons (beneficiaries). Research in its geographical location was given as an objective, scientific, where space was intended as absolute entity established with Euclidean geometry [2]. His opponents have questioned the basis of such geography and instead they vote for the search for geography with people with disabilities, that could allow to understand disability as a social function. "Within their position geographic research was cast as a situated, political and ethical endeavor and space was conceived of as a social production. In other words, the two proposed approaches to geographical studies of disability were in direct opposition to one another: politically-neutral versus politically-charged; medical model versus social model; space as mere backdrop to life versus space as an active shaper of people's lives" [2: 62].

Generally the research at this time revolves around the following topics:

- "the ecological analysis and mapping of disability, mainly psychiatric geographies, attempts were made at identifying the ecological correlates of mental disorder, in order to shed light on disease-environment relationships,
- the location of mental health facilities and community reactions to such settings and their socio-economic effects,
- a historical geography of mental health asylums,
- the impact of health care reforms and the subsequent availability and quality of the services provided,
- the de-institutionalization of disabled people with mental problems into the community,
- investigations into the spatial learning of people with severe vision impairments in the physical environment: Including route and environmental learning, spatial cognition and research into raised line (tactile) maps" [14].

Geography nowadays

Nowadays the number of disability studies within geography is still growing. New approaches to the issue of disability have emerged expanding the scope, methodology and research focus to include more geographical diversity of life experiences and interactions in both urban and rural environments. It is said that "in developing a geography of and for the disabled there are two primary tasks. One is to examine the nature of the different environments in which the disabled population exists to see if traditional geographic concepts, theories, models, assumptions, and laws hold. A second task is to understand the nature of the human environment interface – the arena in which the disabled must conduct their activities" [1: 81]. Research also includes the geography of tourism, because the transport, mobility needs and various barriers in disabled lives have been explored in general and they were used to explore the spatial analysis of travel patterns.

Conclusion

The most noticeable geographical study of modern disability was the social impact of a model of disability, but on the other hand geography of disability explores also disabled persons experiences of space and place. The issue of disability has a lot of dimensions, hence the geography can take over from the other areas of science and also in directions of conducting researches geography overlaps with many other disciplines. Geography of disability in general deals with the relationship between geographical environment and people with impairments and the challenge nowadays is to continue developing the geography of disability which refers to the landscape experience of handicapped people, from urban to rural and from micro scale to macro scale within the meaning of the accessible environment.

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Аннотация. М. Попель. **География неполноценности как вызов 21-му веку.** Развитие современного мира, а именно его пространственной, культурной и социальной диверсификации, стало причиной появления новых областей науки, или же приспособления традиционных научных методик к вызовам современности. В результате изменился и расширился дискурс изучения и исследования проблемы инвалидности, который, кроме всего прочего, в новых условиях старается охватить и учесть пространственные особенности проблемы, а именно представить разницу городских и сельских аспектов. Целью данной работы является освещение проблемы инвалидности, изучение двух негеографических моделей, которые, однако, послужили причиной развития пространственного подхода и возникновения географических критериев исследования инвалидности.

Ключевые слова: инвалидность, география, пространственные отношения, медицинской и социальной модели.

Анотація. М. Попель **Географія неповноцінності як виклик 21 – м у віку.** Розвиток сучасного світу, а саме його просторової, культурної та соціальної диверсифікації, стало причиною появи нових галузей науки, або ж пристосування традиційних наукових методик до викликів сучасності. У результаті змінився і розширився дискурс вивчення і дослідження проблеми інвалідності, який, крім усього іншого, в нових умовах намагається охопити і врахувати просторові особливості проблеми, а саме представити різницю міських та сільських аспектів. Метою даної роботи є висвітлення проблеми інвалідності, вивчення двох негеографічних моделей, які, однак, стали причиною розвитку просторового підходу і виникнення географічних критеріїв дослідження інвалідності.

Ключові слова: інвалідність, географія, просторові відносини, медичної та соціальної моделі.

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