



POLYTECH[®]
TOURS

Département Aménagement



Improving accessibility for people with disabilities

Supervised by:
Benoît Feildel

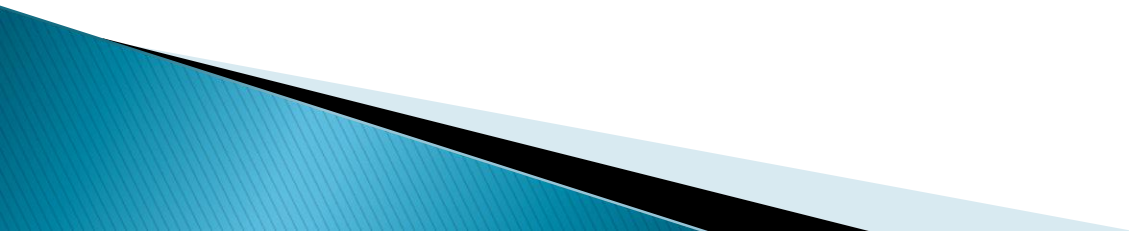
Presented by:
Olga Iuriichuk

Hypothesis:

Place adaptation is the main tool for social integration of disabled people

Aims:

1. To find model of improving accessibility for people with disabilities in Eastern Europe;
2. To identify issue that related to adaption of space in France



Special group of population

The main determinants of health

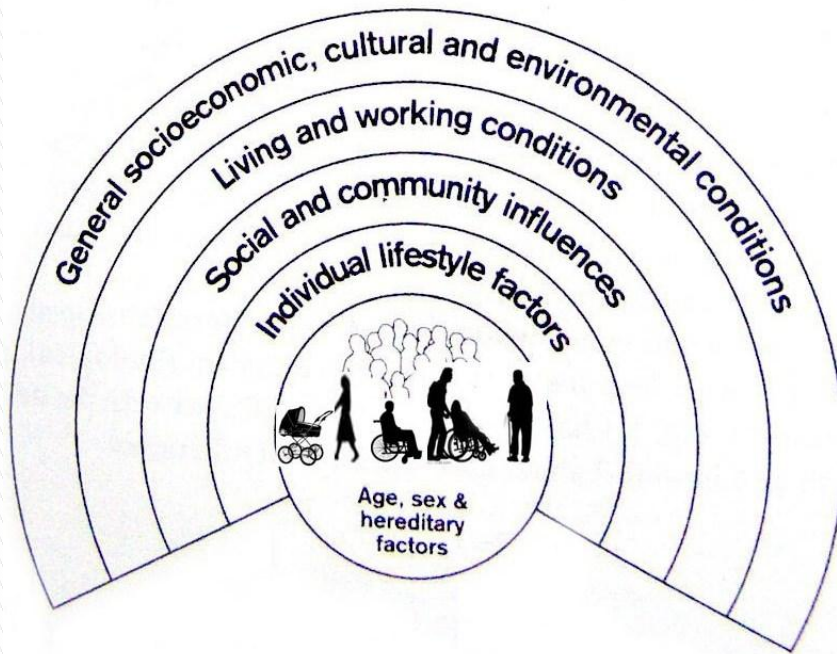


Fig. 1

We selected two types of wheelchair users



Person who has ability to manage his or her wheelchair	Person who has not ability to manage his or her wheelchair and for this he/she needs accompanying.
Differences are that for independent wheelchair is his/her personal problem but for dependent wheelchair user this is problem of accompanying. At this period accompanying becomes participant of less mobile group of population.	

Table 1

Disability: Any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

Handicap: A disadvantage for a given individual, resulting from an impairment or disability, that limits or prevents the fulfillment of a role that is normal, depending on age, sex, social and cultural factors, for that individual.

Low mobile groups of population are people, which feel difficulties at an independent movement, receipt of favor, necessary information or at an orientation in space. To the low mobile groups of population are invalids, people taken with temporal violation of health, expectant mothers, people of senior (sloping) age, people with baby-carriages and others like that.

Similar problems:



Buildings, streets, transport

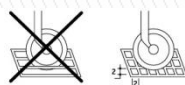
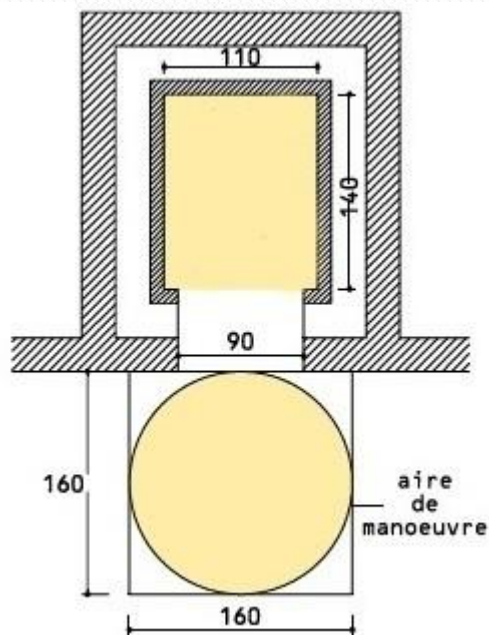


Figure 09 les fentes et trous des grilles



Figure 10 grillage dangereux

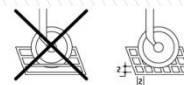
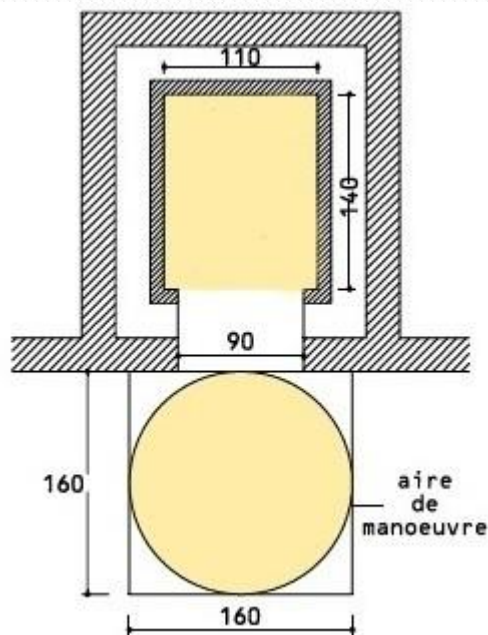
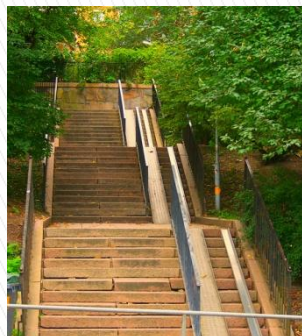
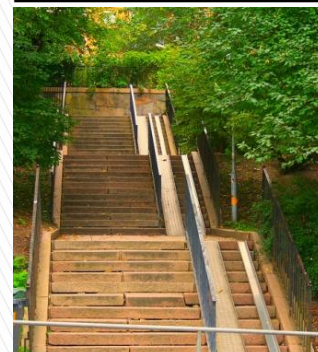


Figure 09 les fentes et trous des grilles



Elementary planes and availability

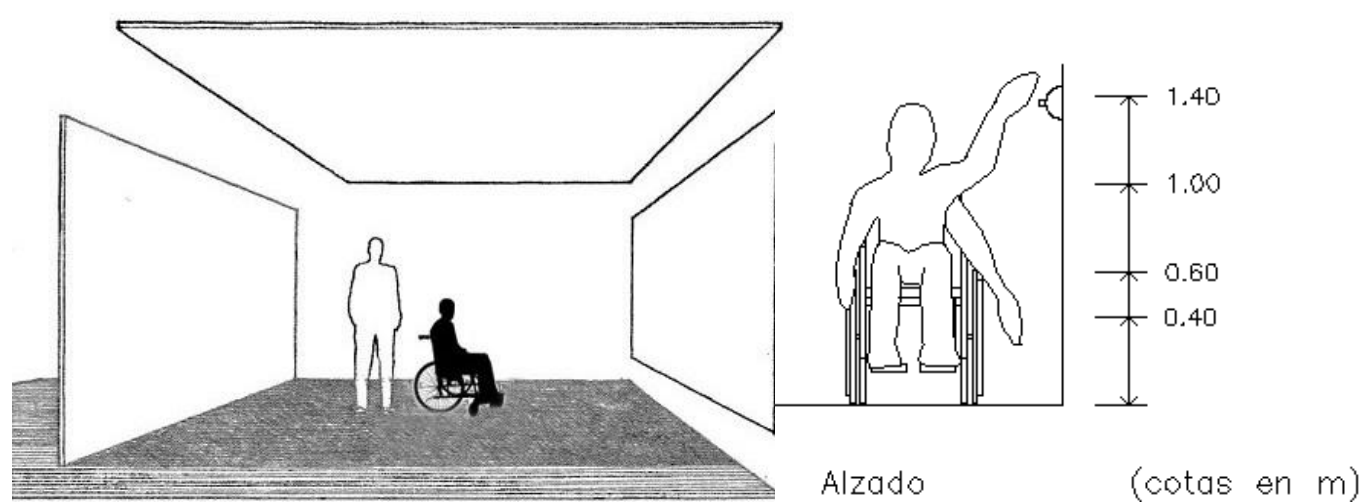
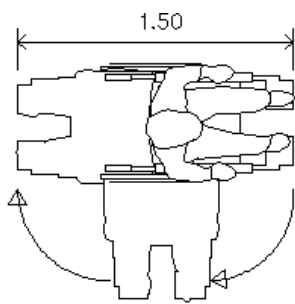
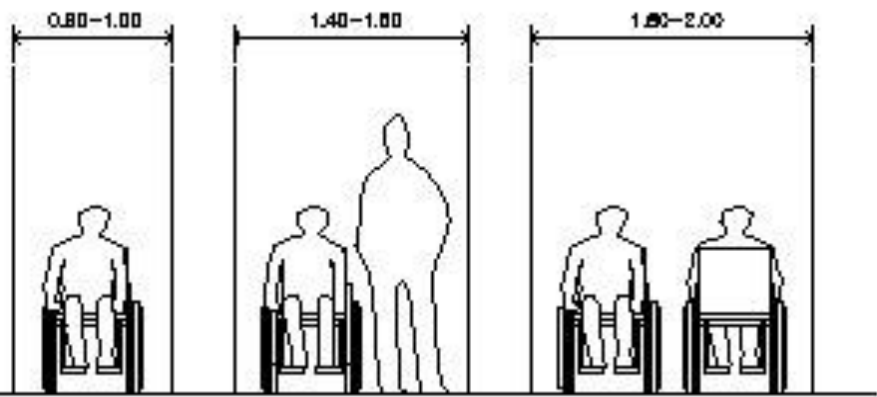
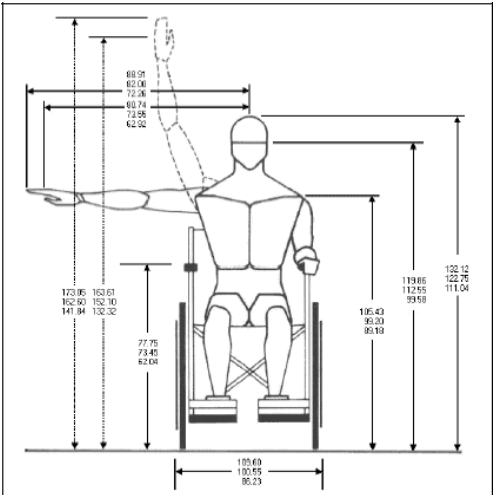
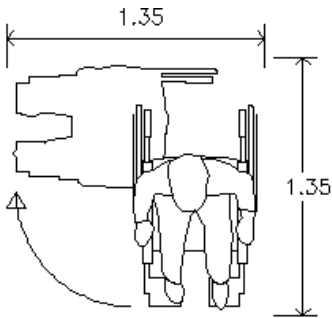


Fig. 2 : Elementary planes

Fig. 3 : Availability on a vertical line



Planta



Planta

Fig. 4 : Availability on a horizontal plane

Social aspects

Eastern Europe

Country	Population
Belarus	9 689 800
Russia	142 905 200
Ukraine	46 314 736

Table 3

Western Europe

Country	Population
Germany	81 799 600
France	65 350 000
United Kingdom	62 262 000

Table 4

Germany:

“G” - serious difficulties at a movement in public places. This category for people, that have diseases of the musculoskeletal system, and also diseases of internalss, causing dizzinesses, hypotaxia motion, fainting fits etc.

«aG» the serious damage of the musculoskeletal system, as a rule, moves in a wheelchair or by other special adaptations.

“B” - necessity of permanent accompaniment.

“H”- is helplessness. This category of disability is got by persons, which cannot manage without a help at dressing, undressing, eating, movement etc.

“Bl”- for blind people.

“RF”- people who have 80% of disability

France has not strict division on groups. There are types of disability:

Blind/visually impaired; Deaf / Hard of Hearing; intellectual disability / mental; wheelchair users.

Disabled pension

Group :	Belarus (BYR)	Russia (RUR)	Ukraine (UAH)
I	700 000 (70 EUR)	5926,13 (151,29 EUR)	1200 (113,2 EUR)
II	267 000 (26,7 EUR)	2963,07 (75,64 EUR)	1090 (102,83 EUR)
III	88 360 (8,8 EUR)	1481,53 (37,82 EUR)	980 (92,45 EUR)

Table 5

Group:	France (EUR)	Germany (EUR)*	United Kingdom *** (£)
- - - -	537	846**	125

Table 6

* There is different system of counting pension. It is depend on part (land) of Germany.

** Germany (EUR)* +20 % to base providing if person has category of disability “G”

***Disability Living Allowance (DLA). If you are under 65, you might be eligible for DLA. There are two components to DLA: care and mobility. You can claim one component or both, depending on your disability. They are paid at different rates depending on the level of difficulty you have. DLA can be worth up to £125 a week.

Hypothesis: Place adaptation is the main tool for social integration of disabled people

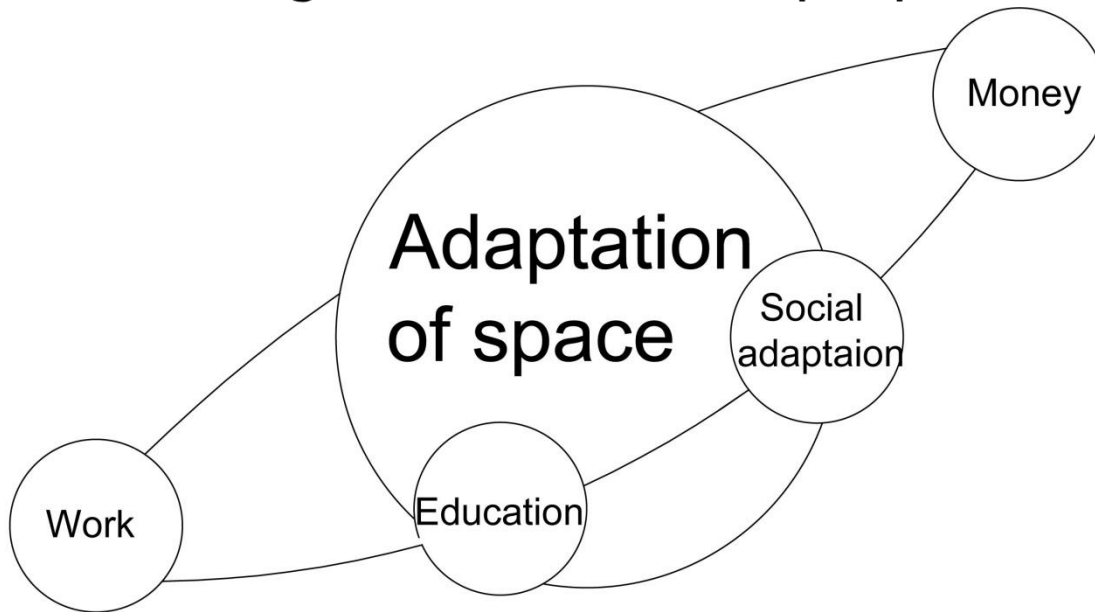


Fig. 5 : "Conceptual Model"

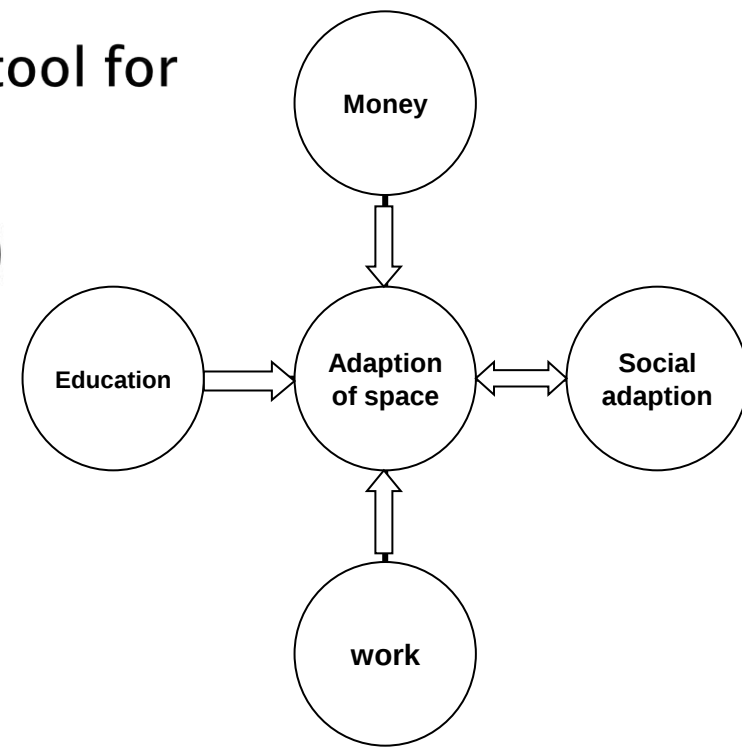


Fig. 6 : "Theoretical Model"

Adaptation of space : flats, streets, transport, public buildings, works places, cities, villages, towns.

Social adaptation: integration disabled people in society.

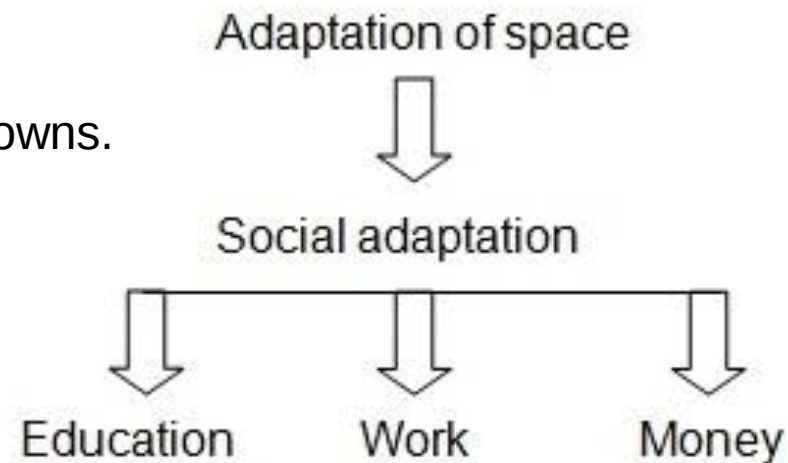


Fig. 7

Methods:

1. Questionnaire for Eastern Europe.

- ▶ Questionnaire for Eastern Europe **Part 1** was created with accent on social aspects of life. The questions related to pension, wage, social policy, social workers, education, work.
- ▶ Questionnaire for Eastern Europe **Part 2** “Sense of place”. Questions related to meaning of places, role of adaptive places in the life of disabled person.

2. Questionnaire for Western Europe.

- ▶ Questionnaire for Western Europe **Part 1** was created on base of Questionnaire for Eastern Europe Part 1. And basically questions were about social aspects.
- ▶ Questionnaire for Western Europe **Part 2**. “Sense of place”. Questions were created on building of priorities transport, adaption of places.

Report about questionnaires

Europe	Quantity of the sent questionnaires	Quantity of completed questionnaires	Quantity of people who were invited to participate in the survey
Eastern	20	18	30
Western	8	7	20
The total number of completed questionnaires 25			

Table 7

Report about interviews

Country	Quantity of interview
Ukraine	2
Russia	1
France	1
United Kingdom	1

Table 8

Eastern Europe. Results

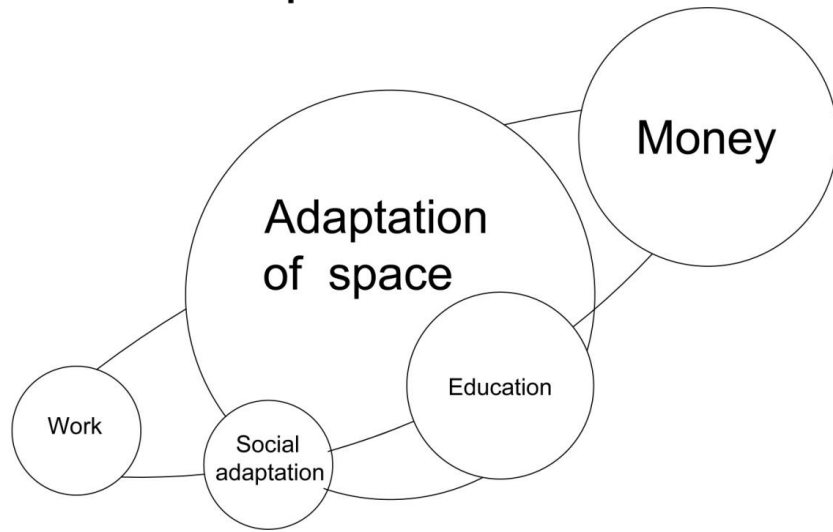


Fig. 8 : "Conceptual Model"

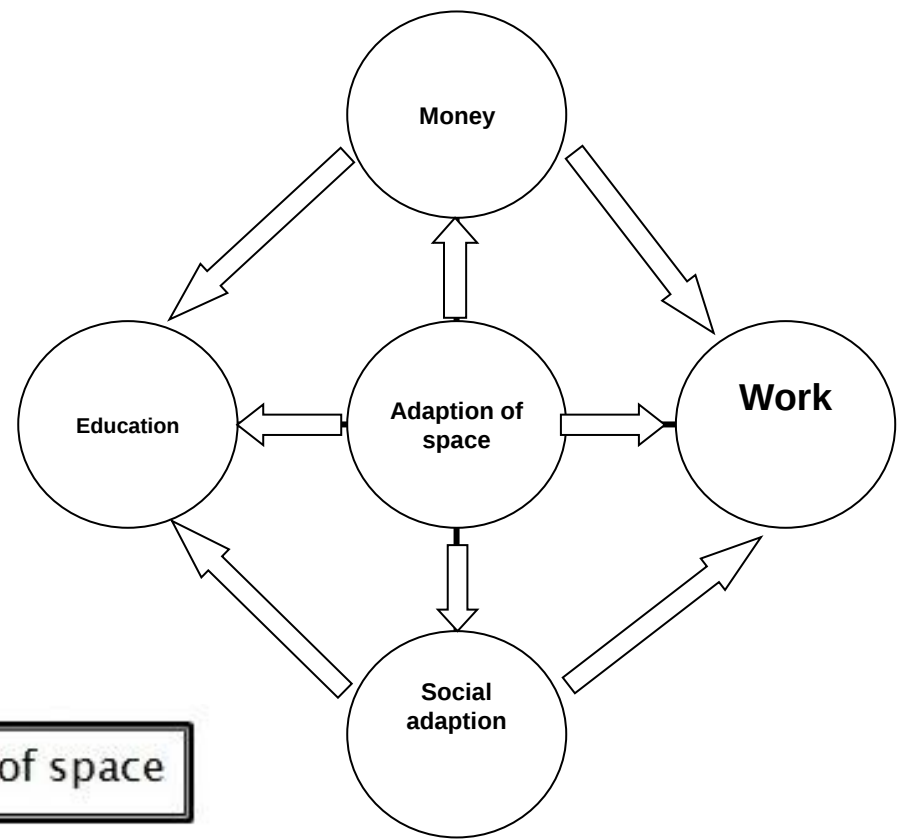


Fig. 9

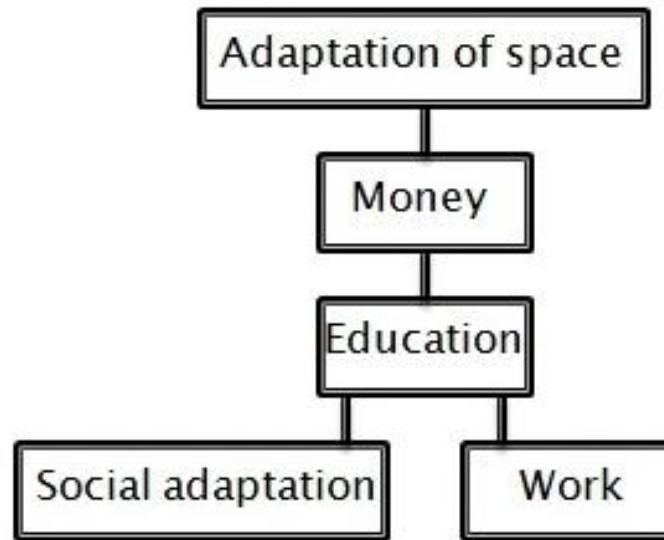


Fig. 10

Western Europe. Results

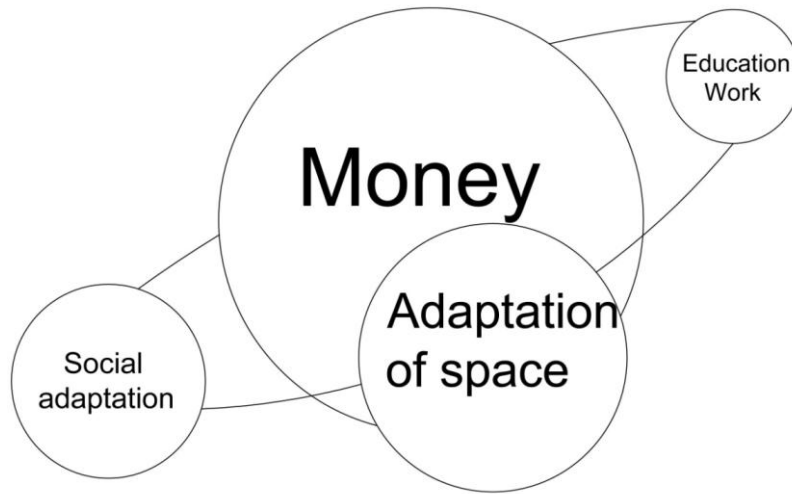


Fig. 11 : "Conceptual Model"

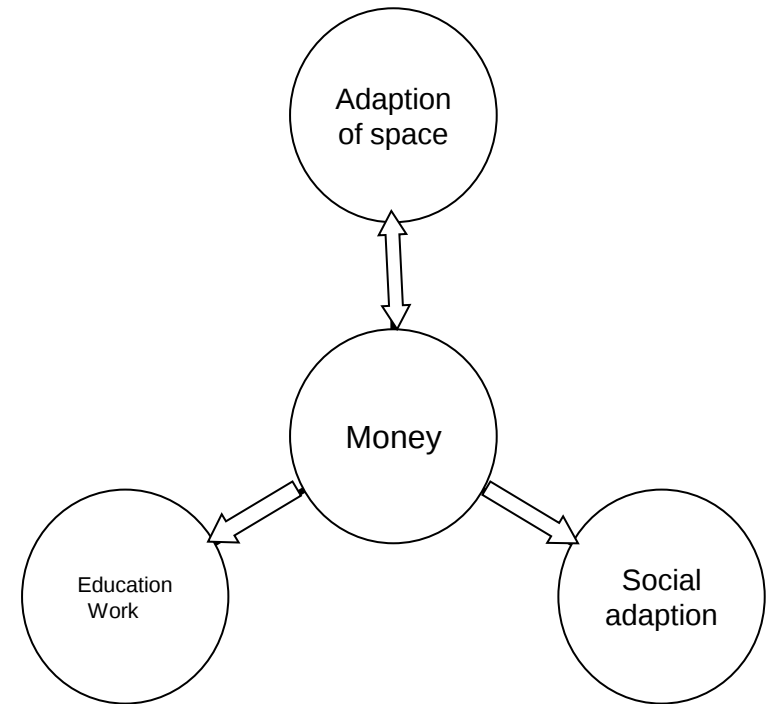


Fig. 12

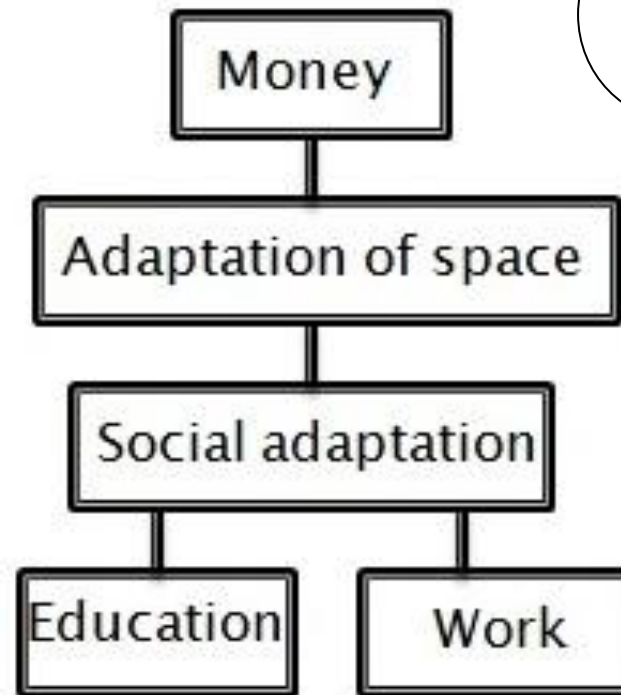
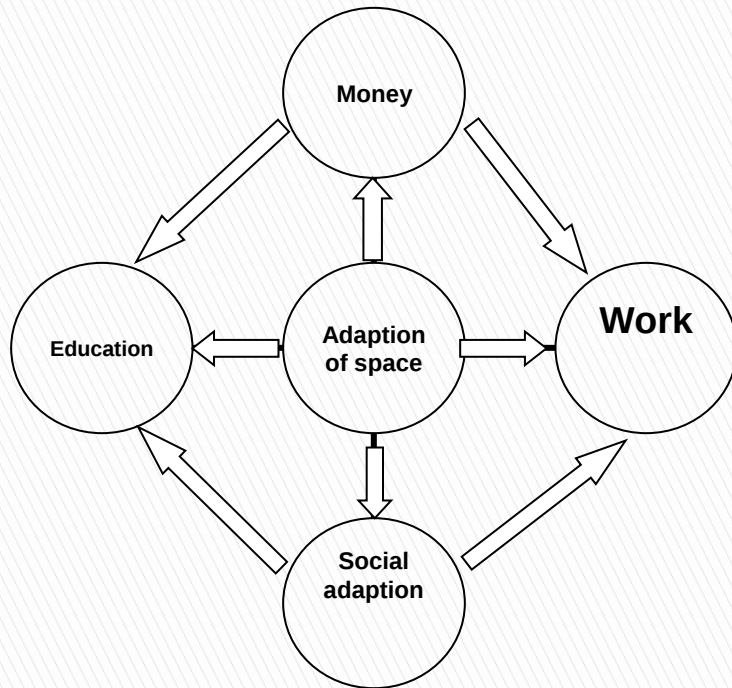
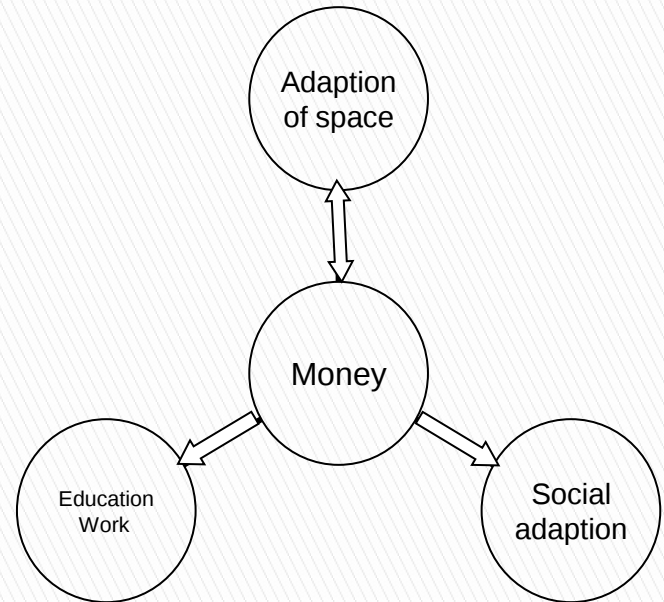


Fig. 13

Eastern Europe



Western Europe



Adaptation of space

Money

Education

Social adaptation

Work

Money

Adaptation of space

Social adaptation

Education

Work

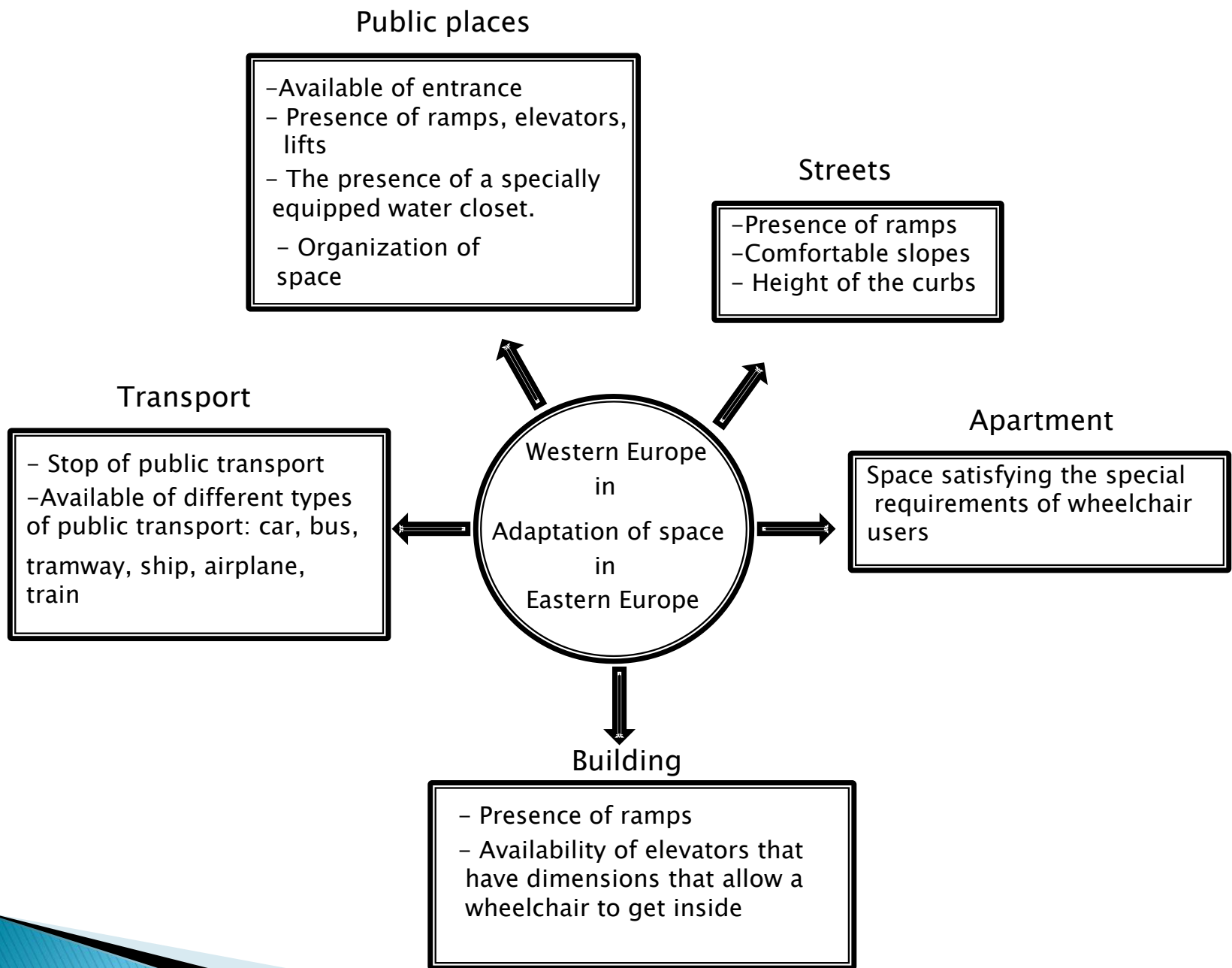


Fig. 14

Rating of comfortable places:
your apartment, small shops, malls, trades, streets, banks, cafes, parks, cinema, pharmacies, bus stop, railway stations, airports, churches, libraries, universities, dinning rooms, museums, art galleries.

1. Apartment	1. Apartment	1. Apartment	1. Apartment	1. Apartment
2. Streets	2. Park	2. Concert venues	2. -----	2. -----
3. Shopping center	3. Cinema	3. Shopping center	3. -----	3. -----
				
	8. Shopping center			

Rating of comfortable transport:
Car, bus, tramway, ship, airplane, train.

1. Car	1. Car	1. Car	1. Car	1. Car
2. Tramway	2. Bus	2. Ship	2. -----	2. -----
3. Bus	3. Train	3. Airplane		
4. Train	4. Plane	4. Train		
5. Ship	5. Tramway	5. Tramway		
6. Airplane	6. -----	6. Bus		

Table 9

Rating of comfortable surfaces:

Rating of comfortable places:

Rank	Seasons
1	Spring, Summer
2	Autumn
3	Winter

Table 10

Rank	Surfaces
1	Asphalt
2	Slabs
3	Marble, parquet, ice
4	Terre
5	Gravel tires, sand tires (wet)
6	Smooth pavement
7	Old pavement, grass, carpet
8	Snow

Table 11

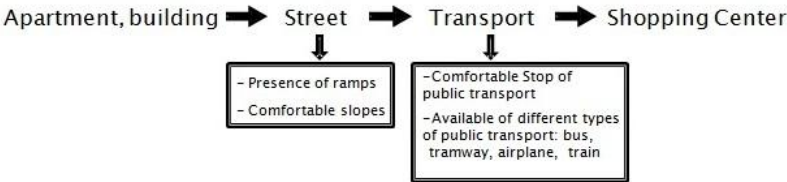
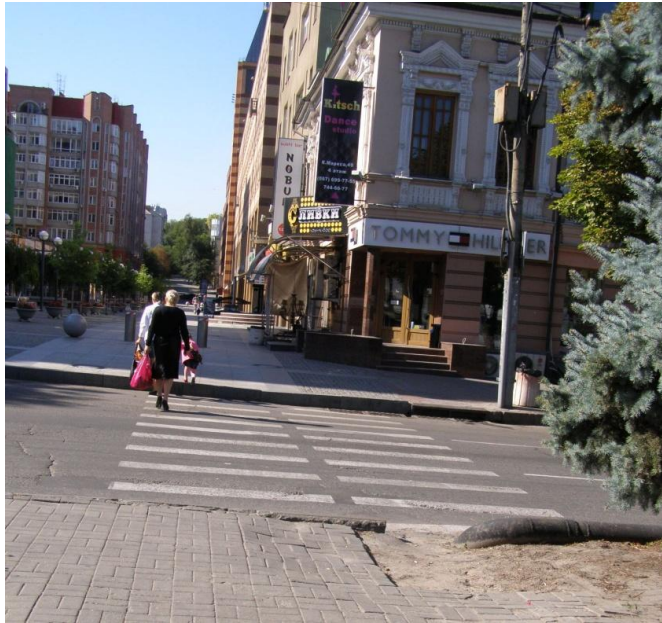


Fig. 15

Eastern Europe: Ukraine, Russia.



Ukraine, Dniepropetrovsk



Ukraine, Dniepropetrovsk



Russia



Russia



Russia



Typical transport for Belarus, Russia, Ukraine



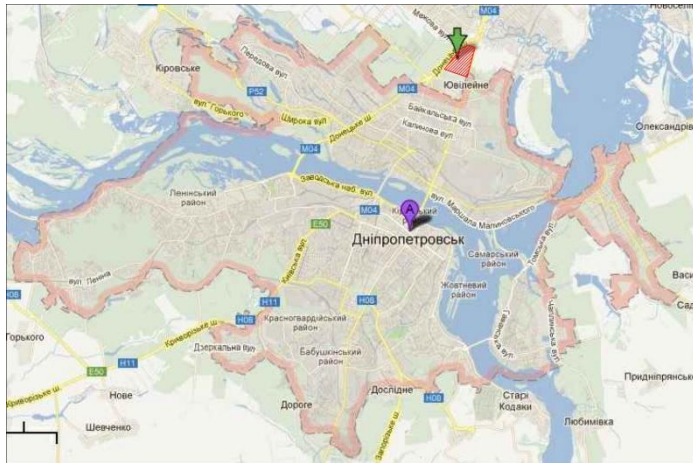
Conclusion: Conceptual Model of integration in Eastern Europe.

Ukraine, Dnieproptrovsk



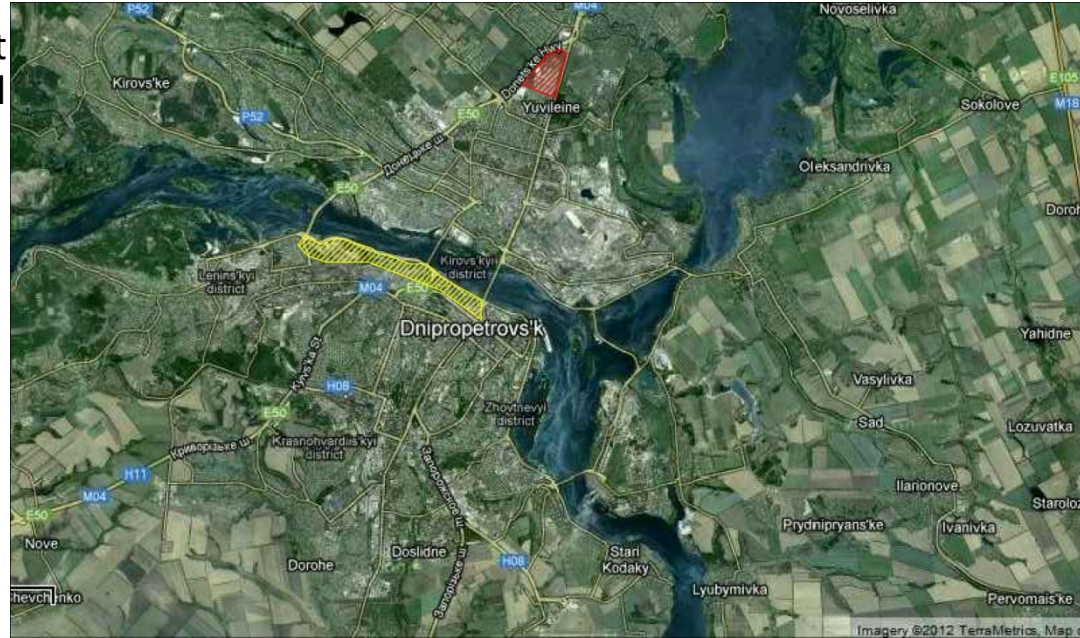
Map 1 Ukraine

Creating separate* district (s) in the city that adapted for low mobile group.



Map 2 Dniepropetrovsk

1. Creating adaptive system of public transport.
2. Creating special paths for wheelchair users (bicycle path)
3. Creating special road signs and maps.



Map 2 Dniepropetrovsk



Alexander, 21 years old, First group (Ukraine) : “ It could be great to have such kind of district. I would like to live there”



Maxim, 29 years old, First group (Ukraine) :” It could be a good solution. I like it but I think that there will be such people who feel themselves like outcast, but if there will live people without disabilities it's ok”.

The ways of adaptation and problems in France

1. Most of old cities are not available for disabled people.

Reasons:

- Historical places
- Natural Relief of place that sometimes mainly complicates accessibility of free movement of wheelchair users.

2. Public places. There is good example with restaurants that have 3 problems: stairs, tables and toilets. Such places is closed for wheelchair user. That such kind of problem stop existing if representative of wheelchair users will participate in creating a projects.

Hotels are very important objects for travelers and for business people. In Western Europe people who use wheelchairs have possibility to move around country. That is why adaption of hotel is very important. In such case there should be a certain amount of room for people who use wheelchair. It is possible to envisage a law which would oblige hotels of all ranks to have a certain number of equipped rooms.

3. Public transport. Disabled person must not stay long time on the bus/tram/ship stop and waiting on accessible bus, tramway, ship. Each type of transport must be adapted for disabled person.

References:

- ▶ 1. Huga Barton, Catherine Tsourou, Healthy Urban Planning, Volume 179, Pages 5–157.
- ▶ 2. Simon Prideaux. Good practice for providing reasonable access to the physical Built Environment for disabled people. Centre for Disability Studies University of Leeds, The school of Sociology and Social Policy, The University of Leeds, Leeds LS2 9JT, 2006. ISBN: 0-9549026-1-0, Volume 70, Pages 10–22; 28–32; 38–39; 43–45.
- ▶ 3. Mary Shaw, Danny Dorling and Richard Mitchell, preface by Peter Haggeti, Health Place and Society, Volume 230, Pages 1–38; 41–83; 86–122; 126–179.
- ▶ 4. Francis D.K. Ching, Architecture. Form, Space and Order, Volume 399, Pages 18–28; 91–98.
- ▶ 5. Marie-Josée Jacobs. Guidedes Normes brochure_FR. Volume 172, Pages 21–172
- ▶ 6. Guide Technique, Volume 71, Page 9–65
- ▶ 7. Valerii Fefelov “There are no invalids in USSR”, <http://lib.rus.ec/b/256725/read>
- ▶ 8. Evgenii Kuznetsov, Copy book of Valaam, chapters 5–7, <http://lib.rus.ec/b/305230/read#t1>
- ▶ 9. Department of Economic and Social Affairs. Population Division. World population to 2300, United Nation, Volume 240, pages 4; 37–40; 62–64 <http://www.un.org/esa/population/publications/longrange2/WorldPop2300final.pdf>
- ▶ 10. United Nations, Department of Economic and Social Affairs, Population Division, Population Estimatea and Projection Section http://esa.un.org/unpd/wpp/Analytical-Figures/htm/fig_2.htm
- ▶ 11. Deborah Kaplan, The Definition of Disability – Perspective of the Disability Community. Executive Director, World Institute on Disability. <http://www.peoplewho.org/debate/kaplan.htm>
- ▶ 12. Access to right for people with disabilities and their full and active participation in society. Doc. 11948, 15 June 2009 <http://assembly.coe.int/Documents/WorkingDocs/Doc09/EDOC11948.pdf>
- ▶ 13. Building Code, “Accessibility of buildings and constructions for low mobile group of population”, B. Gubov, V. Kutsevich, 2007–05–01.
- ▶ 14. Disability discrimination: <http://library.thinkquest.org/07aug/00746/>
- ▶ 15. How to identify group of disability in Ukraine : <http://103-law.org.ua/News.aspx?n=99>
- ▶ 16. European Policy on Disabled People and the Position of Disabled people: <http://uk.qatrain2.eu/european-policy-on-disabled-people-and-the-position-of-disabled-people>
- ▶ 17. The rules of the behavior with disabled person: <http://www.life-real.com/bibl.php?m=2&fn=bl02.txt>
- ▶ 18. Union of invalids in Russia. <http://www.rosinvalid.ru/mission.htm>
- ▶ 19. Document № 10 “ Invalids in USSR Universal declaration of rights of people: <http://museum.udhr1948.org/node/113>
- ▶ 20. Disabled pension in Ukraine: <http://pensiya.com.ua/pensiya-po-invalidnosti>
- ▶ 21. Groups of disabilities: <http://pensiya.com.ua/pensiya-po-invalidnosti>
- ▶ 22. Facilities for I and II groups of disability: <http://pomogayka.blox.ua/2009/08/LGOTY-DLYa-INVALIDOV-2-I-3-GRUPPY-INVALIDNOSTI.html>
- ▶ 23. Disabled people in Russia : <http://www.budgetrf.ru/Publications/Magazines/bea/report/1999/bea031999analysis/bea031999analysis000.htm>
- ▶ 24. Social protection of disabled people in USSR: <http://www.bestpravo.ru/sssrgn-instrukcii/w7k.htm>
- ▶ 25. Disabled people in Belarus : http://naviny.by/rubrics/society/2009/11/30/ic_articles_116_165663/
- ▶ 26. Disabled people in Belarus: <http://zapraudu.info/>
- ▶ 27. Le handicap, enjeu de société: http://www.scienceshumaines.com/le-handicap-enjeu-de-societe_fr_13809.html
- ▶ 28. Categories of disabilities in Germany: <http://recht.germany.ru/sozial.db/items/24.html>
- ▶ 29. Information for disabled people in U.K: <http://www.enabledpeople.co.uk/grants.shtml>
- ▶ 30. Categories of disabilities in Germany: http://www.partner-inform.de/news.php?ids=5251_all_1
- ▶ 31. Pension in Germany : http://samlib.ru/s/suhowa_e_a/10a-131.shtml
- ▶ 32. Disabled people in Germany: <http://www.goethe.de/ges/soz/soz/en3394825.htm>
- ▶ 33. Disabled people in United Kingdom: <http://www.dlf.org.uk/content/key-facts>



Thank you for your attention!