

Methods of geovisualization

MAP LANGUAGE

- = formalized map-symbol system controlled by syntactic and semantic rules, which implement the process of cartographic communication of information
- a specific symbol/character system for recording specific objects and processes on a map



Ján Pravda
(1934-2010)

map language x language of labelling

fundament term = cartographic symbol/charakter

= any graphic means or set of means which is capable of being the bearer of meaning and expressing something in a cartographic product

Specific aspects

Communicability

- ability to transmit and communicate information

Illustrative nature

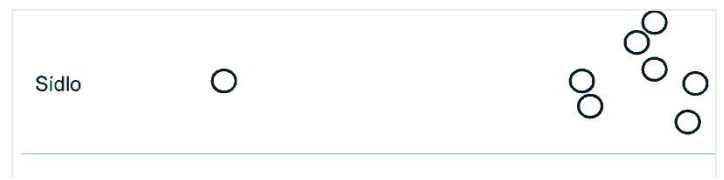
- the ability to quickly and effectively evoke stimuli for thought processes

Interpretability

- the ability to evoke intelligibility in the performer

Compressibility

- the ability to compress information, which increases the density of information reception per unit time

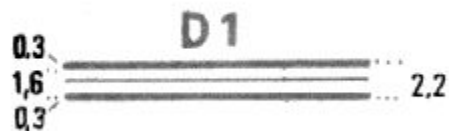
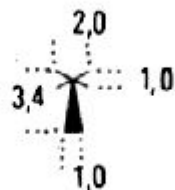
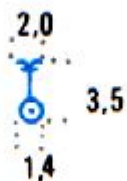
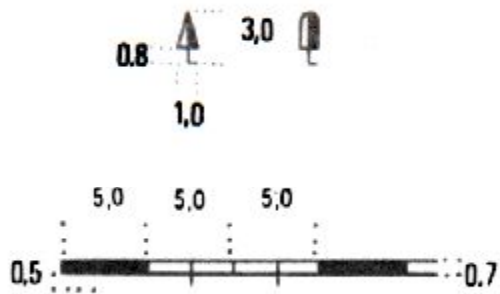
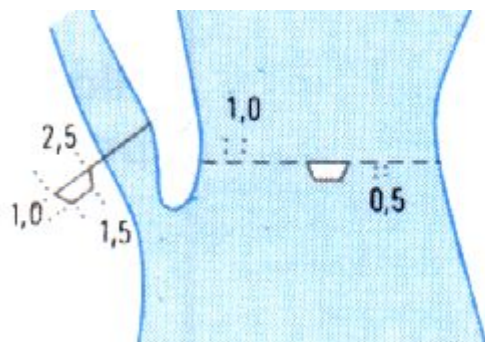


SYMBOLOLOGY

= a set of map symbols prescribed for a particular map with an explanation of their meaning

It has to fulfill:

- enabling a detailed and accurate representation of all the characteristic features of the territory
- ensuring good clarity and readability of the map
- requirements and possibilities of reproduction processing



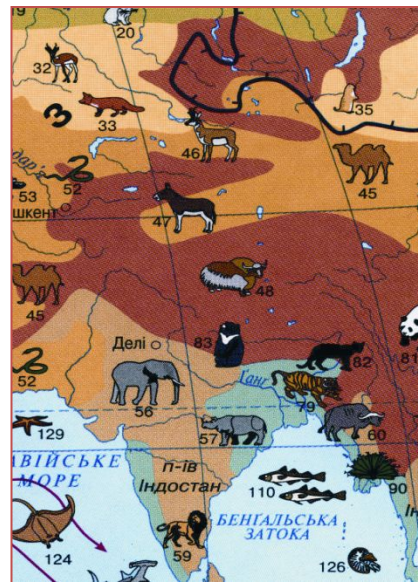
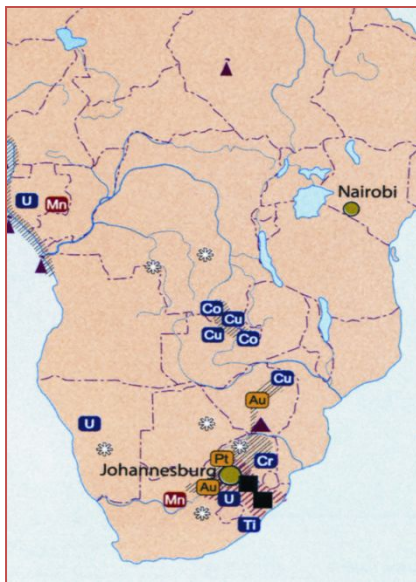
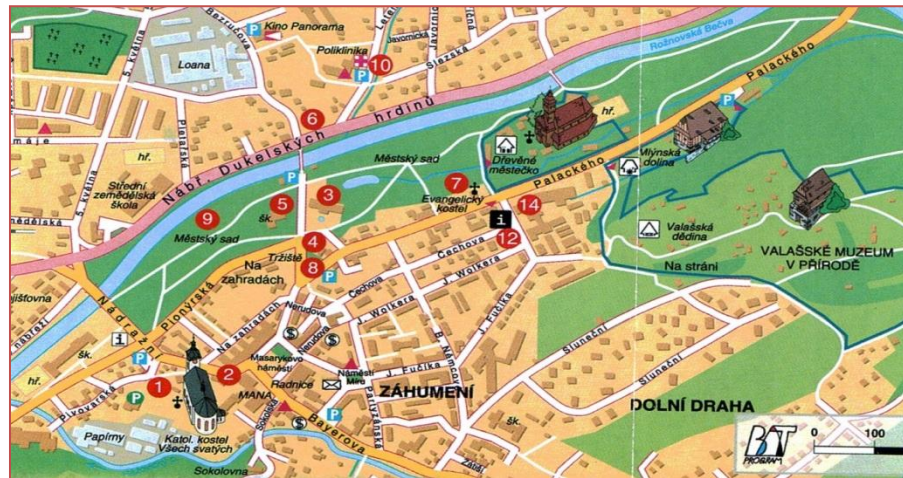
MAP LEGEND

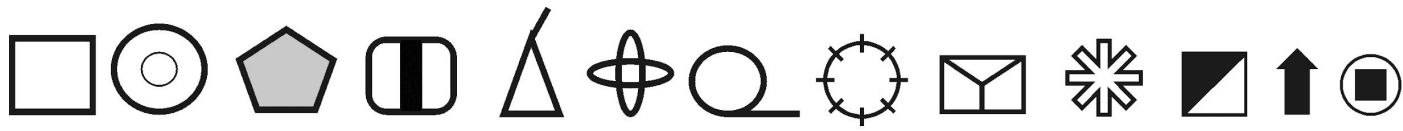
five principles

- 1. complete**
- 2. independent**
- 3. arranged**
- 4. in accordance with the drawings in the map**
- 5. understandable**

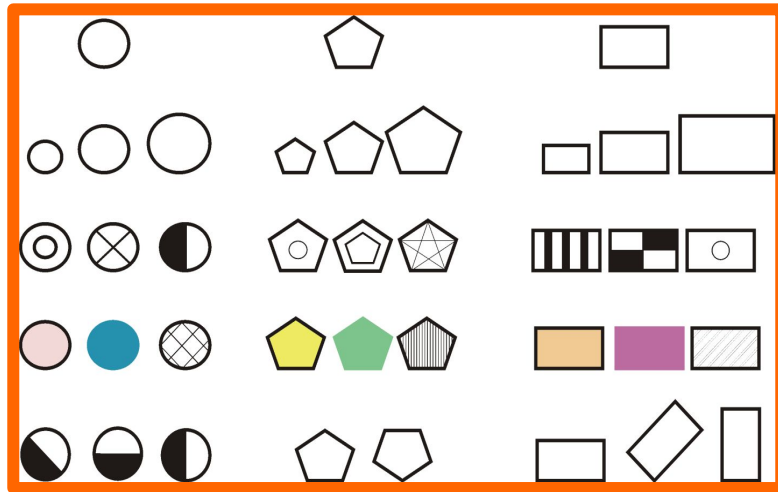
Point symbols

Method of point symbols



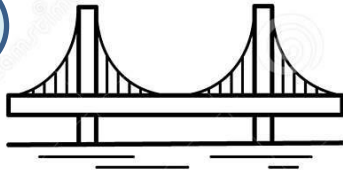


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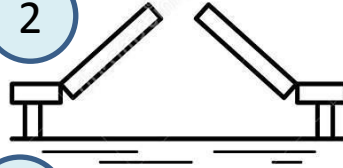


Create new map symbols...

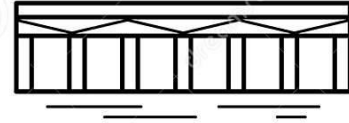
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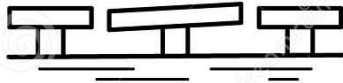
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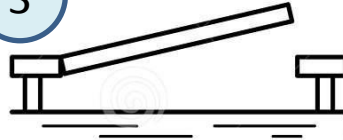
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1



3



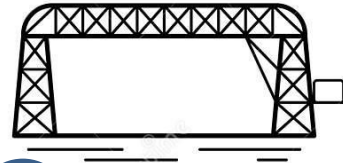
1



4



2



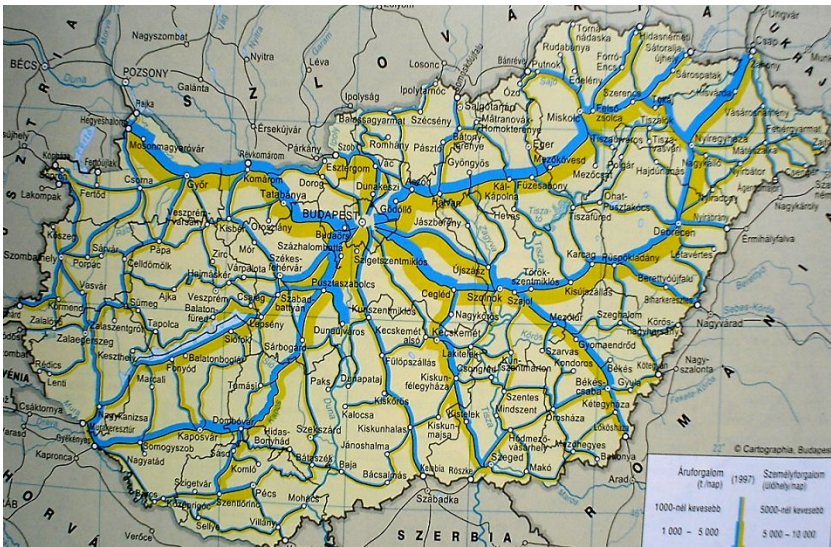
2



... and compile a legend.

Line symbols

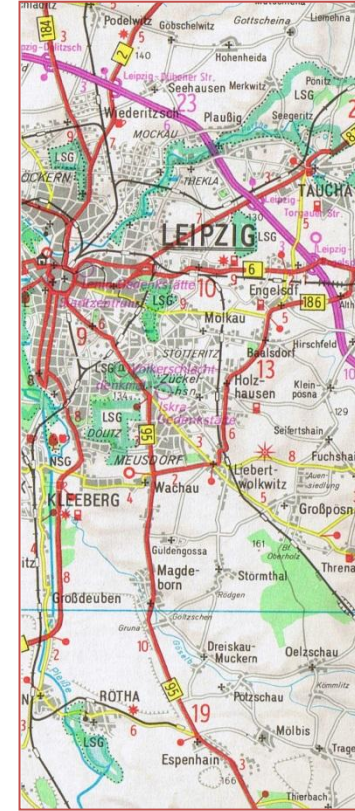
Method of line symbols



Full lines - phenomena clearly identifiable (eg rivers, roads)

Dashed, dashed, dotted lines - phenomena:

- difficult to identify (eg occasional watercourse, unpaved road),
- anticipated (eg geological failure),
- planned (eg movement of troops)
- formed by a wider lane or zone of the transitional territory



Create new map symbols...

Rail Rapid Transit



8

Light Rail



9

Streetcar/Vintage Trolley

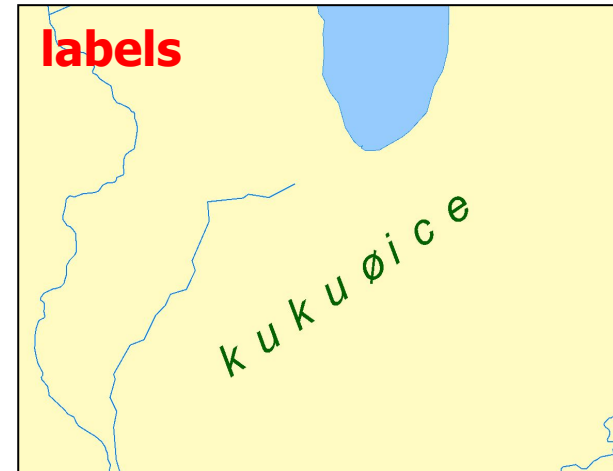
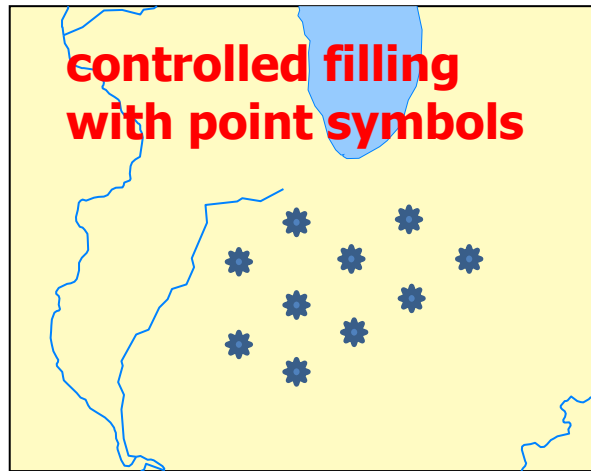
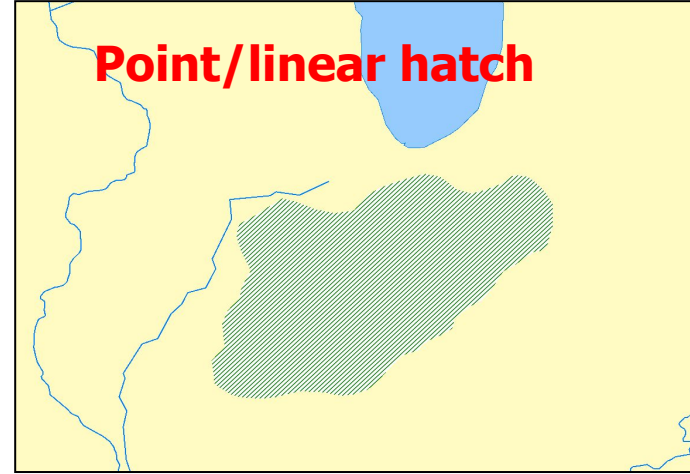
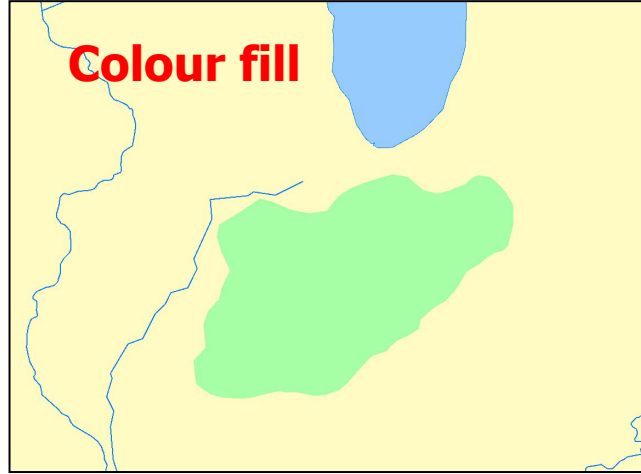


5

... and compile a legend.

Area symbols

Method of area symbols



Create new map symbols...

4



2



3



1



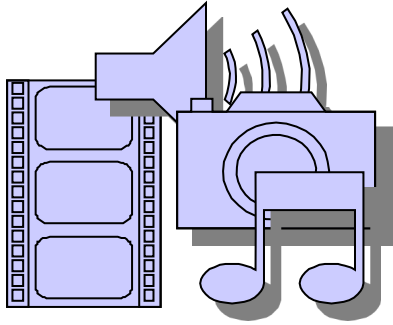
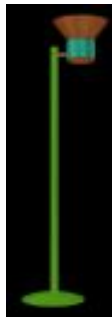
3



1



... and compile a legend.



Dynamic in map language



- sound
- dynamic symbols
 - animations
 - virtual reality

Thank you for your attention.

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