Mapping, synthesis and visualization of Czech dialects

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Czech Republic
Disappearing traditional territorial dialects

Some researchers even believed that dialects would disappear during the 19th century.

Dialectology has long utilized mapping techniques.
Aim

... to present the results from the systematic visualization of the spatial synthesis of the dialects of the Czech language.
Mapping of Czech dialects

1864 A. V. Šembera: The Foundations of the Czechoslovak Dialectology

1894, V. J. Dušek: Dialectical Map of Bohemia

1947 Czech Language Institute – systematic geolinguistic research of Czech dialects

2018 J. Balhar et al. Czech Linguistic Atlas
Geolinguistic methods

• methods of linguistic data collection
  o sound recording of spontaneous speech
  o sending questionnaires to non-dialectological explorers

• cartographic geolinguistic methods (displaying linguistic phenomena on maps)
  o by text inscriptions (traditional method)
  o by special point (geometric) map symbols
  o by areal map symbols using hatches or isoglosses

• interpretive geolinguistic methods
<table>
<thead>
<tr>
<th>Cartography in linguistics</th>
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<td>• linguistic maps and linguistic atlases</td>
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<tr>
<td>o Sprachatlas von Bayerisch-Schwabe</td>
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<td>o dtv-Atlas Deutsche Sprache</td>
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Lee Pederson (2018) – seven steps in the process of a linguistic atlas compilation:

- intention to create a linguistic atlas
- establishing a square network over the study area
- creation of a list of communities or settlements within the network
- managing the questionnaire regarding the research topic
- selection of informants for each community
- fieldwork based on interviewing informants
- recording the answers of informants and further processing.
dtv-Atlas Deutsche Sprache (2019)

Atlas Linguistique de la France (1904)


Czech Linguistic Atlas – 1,600 maps

- six volumes published 1992-2011
- based on the results of field research
- questionnaire with 2,649 items
- 420 rural localities
  - 1964-1972
  - 4,364 informants
- 57 cities
  - 1973-1976
  - 1,032 informants
- the age of the informants ranged from 65 to 75 years
Czech Dialect Atlas

Objectives and purpose

- digitizing maps from Czech Linguistic Atlas
- no changes and updates in map contents
- redesigning of the Atlas layout
- new map symbology

➤ to provide more comprehensible maps to a wider range of users (researcher, teachers, ethnographers, historians, etc.)

- Volume I – Vowel Shortening
Czech Dialect Atlas
new symbology
Czech Dialect Atlas – analytical maps

• HRÁCH
• PLÁČ
• SÁNĚ
• KLÁDA
• SKÁLA
• KRÁVA
• SNÍH
• VÍTR
• KŘÍDA
• LÉTO
• LÉTA
• JMÉNO
• PÉRO
• SÍLA
• HRÓUDA
• NÉST
Czech Dialect Atlas – spatial synthesis
Czech Dialect Atlas – spatial synthesis

REGIONY KRÁČENÍ VOKÁLŮ
Next steps

• IT development in dialectology
  - ProPONAR
  - DiaMA
  - InteGra
  - DiDa
  - ProMAP

Czech Dialect Atlas

- Volume II – Plural Instrument
- Volume III - Genitive Singular Masculine
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THANK YOU FOR YOUR ATTENTION

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