CZECH HISTORICAL ATLAS: CREATION OF THE WEB MAP PORTAL

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CONTENT

- Structure of the web portal
- Map functionality
- Map processing
- Publishing maps
- Conclusion
STRUCTURE OF THE WEB PORTAL I

Academic Atlas of Czech History

Czech Historical Atlas: Chapters on the 20th Century History

2014

2019
STRUCTURE OF THE WEB PORTAL II

BORDERS AND TERRITORIES

In historical cartography and historical geography, the territories and state borders represent one of the fundamental issues. Historical maps and atlases depict borders and their delineations also in relation to the development of regions and regional identities. In the societies, there have always been conflicts between the communities; new borders emerge continuously only to vanish again or change after time. The borders have been accompanying the man since his first steps on the Earth. Historical and present borders cover the entire surface of the Earth in imaginary layers. Whether real or imaginary, they are omnipresent. They can be found in the space, in documents, maps, illustrations, but also in the human minds. They form barriers by which the societies defined and still define themselves, based on various ideas, ideologies and special-interest or controlled landscapes. For centuries, the man has modelled the size and face of his “space”. The fight for survival was replaced with a desire to penetrate into unknown landscapes, take them, settle in them and cultivate them by means of utmost exploitation. If the man succeeded, he delineated the acquired territory with real as well as mental borders. From where to where? This was the common question that the people asked in their homes but also in more distant places that they knew well or were just getting to know. From where to where did the land perceived by the mythical Grandfather Cech extend? From here over to there, his descendants used to answer, decided to penetrate into the new territories, own them and use them. The borders have always been an inseparable part of the life of the society. A glimpse into their mingling and overlapping across the centuries opens philosophical reflections on the permanence of human interests, goals and desires, justification of annexing foreign territories, relativity of the words “permanent” and “stable”, “definite” or “forever” mainly as regards ideologies of totalitarianism. Yet it is clear that the borders have always expressed express a respected and socially significant civilizational, historical and geographical value connected with the awareness of protection and safety of the delineated territory.

References

MAP FUNCTIONALITY

- **basic functionality** → zoom in/out, highlighting the active layer, pop-up
  → all map applications

- **advanced functionality** → time slider, switching layers/maps, filtering by selected attribute, map comparison
  → based on thematic content

- **ArcGIS API for JavaScript** → own templates with predefined functionality
MAP PROCESSING I

- synthesis of two atlases → unification of sign key, font, and map style
- adjustment of colour schemes for web (CMYK → RGB)
- visualizations for zoom levels (LoD and generalization of the original data)
- adjustment of font and symbol sizes for zoom levels → visual continuity
MAP PROCESSING I

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- map comparison → unification of the map scale series and map projections
- more than 160 maps → complex methodology
MAP PROCESSING II

- adjustment/creation of the attribute data for the pop-up
- visualization for advanced functionality → sections of time slider
  → active/inactive features (filtering, time slider)
- change of complex map symbology → replaced by map functionality (pop-up, timeslider)
thematic (active) vs. background (inactive) layers → unique layer ID for use in API
PUBLISHING MAPS II

- desktop GIS
- ArcGIS Server
- ArcGIS Online
- Esri WebMap
- JavaScript API
- templates
- web map portal
  CHA
PUBLISHING MAPS III

- limitations of used web technology → compromise solutions
  - map functionality vs. map graphics
  - additional map editing

masking vs. text halo

annotation layer vs. Feature Outline Mask
CONCLUSION

- digitized printed atlas vs. interactive web maps → increased complexity of the project
- printed vs. web atlas → limitations/advances (web technology, map functionality, ...)
  → unfinished process
  → conversion vs. from scratch
- further development → power optimization
  → mobile devices, tablets, ...