

Developing a Digital Atlas as a concept for multi-perspective peace and conflict mapping

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Keywords: atlas concept, peace and conflict cartography, storytelling

Abstract:

Conflicts always involve different perspectives: be it those of the various parties involved (states, political/military alliances), different actors within conflicts (local population on the ground, regional governments, national/supranational politicians), those reporting on conflicts (e.g. media) or trying to help or resolve them (e.g. international organizations, NGOs). The spatial and temporal dimensions, represented via maps, play a crucial role in the perception, communication and evaluation of current or past conflicts, as well as in the decision-making processes of responsible actors.

The research shows the enormous influence of cartographic media on the perception of conflicts, negotiations of cooperation within conflicts, and peace processes (Crampton 1996, 2006; Campbell 2001, Komsic 2013) as well as on educational work and the establishment of specific narratives regarding the outcome of conflicts (Gavrilova 2024). At the same time, traditional representational concepts persist in cartography (e.g. Asche 2023), due to learned techniques, but also technologies that favor certain representational methods. Multiple perspectives contributing to the mapping process and its design space (Žuljević 2023), and the diverse, less tangible, long-term effects of maps are underexplored in research (Gautreau/Noucher 2022).

By using methods of pragmatically informed critical cartography, we analyze the map production and usage by different actors in peace processes in Eastern Europe (e.g. Campbell 2001; Branch 2017). Building on this and based on case studies in the network “Conflict and Cooperation in Eastern Europe: The Consequences of the Reconfiguration of Political, Economic, and Social Spaces since the End of the Cold War” (KonKoop), we are working with researchers in this network on developing maps and visualizations of peace and conflict in Eastern Europe. In conceptualizing these maps and visualizations, we face the challenge of critically reflecting on our own work from a cartographic as well as a research and interpretative angle. This includes questions on our own positioning in relation to multiple perspectives of a specific region and its conflicts, but also more common cartographic and design dilemmas on the use of colors, labels, or representation of borders.

An important element of the project is the development of a digital atlas. With this format, we want to rethink the atlas as a tool and output conceptually, by seeing it as an infrastructure for collaboration, which allows an iterative development and rethinking of individual (geo)visualisations that it contains. The paper will present the first drafts of a prototype, which is scheduled to appear in spring 2026 (Fig. 1). The “Atlas of Peace and Conflict Cartography” (working title) will neither aim to provide a complete documentation of current or former conflicts nor will it focus on an overview of very specific aspects of these conflicts. Rather, case studies are identified based on research conducted by KonKoop and external partners. These case studies are supported by cartographers and designers in the production of spatial visualizations. Some of the resulting maps (which may vary greatly for a single topic in a single region) – initially produced for use in e.g. papers or presentations – will be integrated into the atlas. In addition to the maps and visualizations themselves, the atlas will contain and foreground critical reflections of the produced work, from a variety of perspectives. This connection is created by visual stories that tie the map(s) into the case study narrative while combining different media. Such stories could include brief explanations of the map topics, reflections on data uncertainty and limitations, and the back-end decision-making in the development of maps.

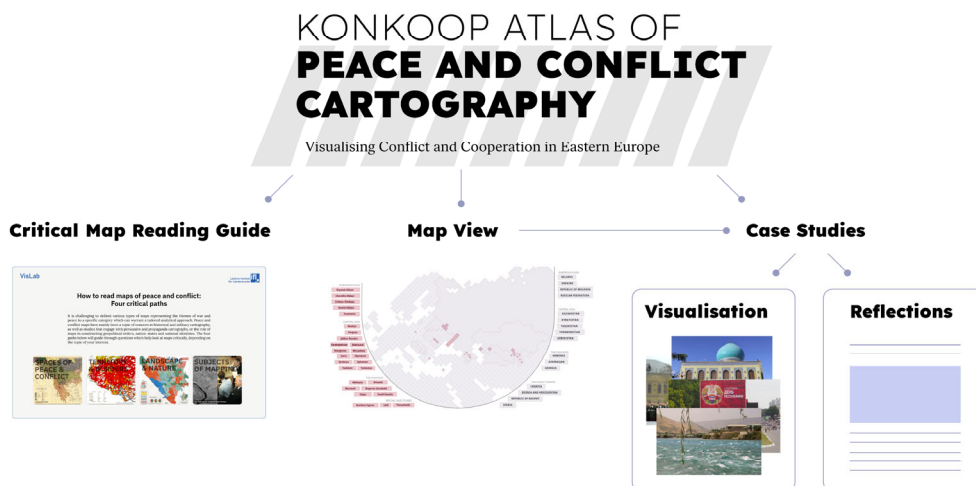


Figure 1. Overview over the atlas concept (credits: M. Žuljević, IfL).

The focus is therefore on the process-related character of the conceptualising and making maps and (geo)visualisationen. Crucially, this aims to make decisions transparent and understandable to potential users, enabling them to contextualize the material themselves (something which is often missing in atlases so far). In addition to a map-based overview of the case studies, this is also supported by a Critical Map Reading Guide as an introductory format, which provides the readers with basic conceptual tools for critically reflecting on the maps in relation to their specific interests. Accordingly, the atlas is initially intended for peace and conflict researchers as well as experts in political decision-making processes. Furthermore, a wider interested public should be addressed. Ultimately, the atlas does not aim to provide a complete set of specific maps, but rather to serve as a tool for reflecting on both the content and the cartographic mechanisms. It thus offers the possibility of continuous further development and future use in education and training, especially in graduate programs.

Acknowledgements

This project is supported by the project „Conflict and Cooperation in Eastern Europe: The Consequences of the Reconfiguration of Political, Economic, and Social Spaces since the End of the Cold War” (KonKoop: <https://konkoop.de/>), funded by the German Federal Ministry of Education and Science 2022–2026.

References

- Asche, H., 2023. Editorial Aspects. In: Sieber, R. and Voženílek, V., The atlas cookbook: Ten ingredients how to edit an atlas. Zurich: ICA Commission on Atlases, 29-39.
- Branch, J., 2017. Territorial Conflict in the Digital Age: Mapping Technologies and Negotiation. *International Studies Quarterly* 61, no. 3: 557–69.
- Crampton, J. W., 1996. Bordering on Bosnia. *GeoJournal*, 39(4), 353-361.
- Crampton, J. W., 2006. The cartographic calculation of space: Race mapping and the Balkans at the Paris Peace Conference of 1919. *Social & Cultural Geography*, 7(5), 731-752. <https://doi.org/10.1080/14649360600974733>.
- Campbell, D., 2001. Apartheid Cartography. The Corner House. <http://www.thecornerhouse.org.uk/resource/apartheid-cartography>.
- Gautreau, P. and Noucher, M., 2022. Farewell to maps. Reformulating critical cartography in the digital age. In: Debarbieux, B. and Hirt, I., The politics of Mapping, ISTE-Wiley, 48-67.
- Gavrilova, S., 2024. How to Normalize the Occupation: Russian Authoritarianism and Maps. In: *UkrainianAnalyticalDigest*, September 2024, 19-22. <https://laender-analysen.de/uad/pdf/UkrainianAnalyticalDigest008.pdf>.
- Komšić, I., 2013. The Survived Country. Zagreb & Sarajevo: Synopsis.
- Žuljević, M., 2023. Design space in cartography: outlining a design perspective in critical analysis of peace and conflict visualisations. In *Abstracts of the International Cartographic Association*, 6 (2023), 9294, 1-2. Cape Town, South Africa. DOI: 10.5194/ica-abs-6-294-202