



Critical Map Reading: Design Space Analysis

[KonKoop Multiperspective VisLab](#)

Leibniz Institute for Regional Geography

The KonKoop VisLab has developed this questionnaire in search of a critical approach to reading and understanding maps and geovisualisations of peace and conflict. It combines the approaches of critical cartography with design studies and visual analysis to account for maps not only as spatial representations but also as material and cultural artefacts. We call this method 'design space analysis' and it has the goal of tracing and articulating the design space of maps - the conceptual and material space formed in the process of mapmaking. Engaging with the design space means analysing maps by looking at the data, construction and visual language used to design them, but also the conditions of its production, actors involved, tools and technologies used in the design process, and so on.

The questions are divided into (1) Maps in themselves and (2) Maps in context. The first part (*Maps in themselves*) requires you to look at the map and analyse its elements, without any particular additional knowledge. The second part (*Maps in context*) requires additional research into the context of how the map was made, by whom and for what purposes. This second step is useful only if you have (or intend to gather) additional information and knowledge about the map (e.g. archival material, interviews with mapmakers, literature review, etc).

Our final note is that the maps can be analysed individually (e.g. if there is only one map you would like to critically analyse), but the method is favourable towards analysing sets of related maps and comparing them. For this reason, we speak of a *map* or *maps*. The questionnaire indicated key concepts or aspects of the map in **bold black**, and specific features to look at in **bold blue** letters. In case you need additional clarifications on this questionnaire, please look into the (forthcoming) KonKoop VisLab's working paper titled *Peace and Conflict Visualisations in Eastern Europe: Proposal for an Analytical Approach* (check

Maps in themselves

Topic, Data Selection and Data Analysis

- What are the **topics, data** and **inputs** used to make this map or maps (look at the **map title, legend**, information in the **map frame**)? What is their relation – why is a **specific set of data** selected to represent the **topic**? How is the topic framed with the **map title**?
- How was the **data analysed** and **classified**? (Pay attention to the **legend, classification techniques, choice of scale**, listed **sources** of data, use of **additional graphics** e.g. diagrams, etc). Is the interpretation of data explained (e.g. with a short text on the map)? Can you identify any **concerns** with how data was collected and analysed (e.g. unreliable sources or classification techniques which might distort the dataset)?
- What **data** and **information relevant to the topic** might be **missing** from the map? Why do you think this was left out? Can you identify some perspectives that might be missing in the map that point to a silencing of specific positions, data or narratives? Are missing data or uncertainties acknowledged in some way (e.g. in the map text)?
- How are different **actors** or **parties** in conflict visualised? What **groups, identities** or **subjects** (e.g. ethnicities, aggressors, victims, allies) does the map represent?
- What is the **time** of the map? What **period** or **moment** in time does it represent? When was it made? Does it represent the future, present or the past in relation to when it was made?

Map Construction and Design Features

- What **base map** and **projection** are used and why? How do they shape the understanding of the map? E.g. is the **base map** a physical, transport or political map? What features does it bring into focus (e.g. terrain, roads or national borders)? Why is that so? Is the **projection** Mercator (see about its colonial view of the world)?
- How does the visual design of the **title, captions, map frame** and other elements surrounding the map represent the theme of peace and/or conflict?
- What are the specific **colours, signs** and **symbols** used to represent the data, and how are they used to visualise peace and conflict? Can you observe **patterns** of using similar elements across different maps? Are these symbols used in some ways to manipulate data or to persuade the viewer? Can you estimate whether such rhetoric or persuasive visualisation is a cartographic choice determined by **technical conditions** (e.g. mandatory choice of colours, digital tools used), or is it **content-related**?
- What **'atmosphere'** does the map convey through **colour palettes, imagery** or **specific visual tones** (dynamic, warning, calm, etc)? What are common visual design choices and styles across maps to depict the themes of peace or conflict?

- How are **different actors**, groups, political positions, identities or subjects represented with **design features** (e.g. use of stereotypical colours for representing a nation)?

Visualising territory

- What is the **core argument** for representing territory in a specific way?
- What space/territory is central to the map (**centring**)? How is it framed (**framing**)?
- What are the forms and instruments of representing **different types of territory**? How are **borders** represented and what are the different features and data used to represent **territorial control**? Are there any **features** or **spatial formats** in the map which hint at **non-territoriality** (e.g. symbols of movement, cross-border landscapes and regions)?
- How are map symbols (e.g. **point**, **line** and **area**) used to depict territorial and non-territorial formats? Are specific **territorial figures** emphasised?
- What is the **language** of the **labels**? Are the languages of different conflict parties used and in what ways?

Multiperspectivity

- Does the map(s) represent **different perspectives** and how? What map elements and features are used in a multiperspective way? Is external or complementary information and media provided to support a multiperspective understanding of the map?
- How are map features used to present **multiple perspectives in one map**? Are there examples of several maps used to achieve multiperspectivity?
- Are some elements, e.g. the **projection** or **centring**, used to enforce a specific perspective on peace and conflict?
- What are the **dominant perspectives** in the maps (by whom, for whose benefit)? Are there **counter** or **alternative perspectives** represented? What do missing data and cartographic absences say about dominant and silenced perspectives? Can we identify specific (dominant or counter) perspectives from within Eastern Europe?
- How is the element of **time** represented - e.g. **points** for conflict events or the **lines** of changes in territorial control over time (movement, events, development, etc)? Does the map represent **multiple temporal perspectives**? Does the map(s) visualise the present, future or the past? How is the map(s) producing an image of a specific temporal regime (see, for example, daily conflict maps of Ukraine)?

Maps in Context

Purposes

- What are the different **purposes** of the map(s) and what **arguments** are they based on? What do the **different actors** and **parties use** the same map(s) for and how do they see the role of cartography in their agendas?

- What do the **title-content relation** and additional **contextual information** reveal about the purpose of the map?
- How are **political agendas** and competing **claims of territory** represented in relation to the specific purpose and context of map use?
- Who is/are the **map's audience(s)**? How do these audiences encounter and engage with the map? How does the map use **rhetorical devices** to address them?

Socio-material relations: Actors, production and technologies

- Who were the **actors** and **participants** in the mapping process? Who made the decisions in mapping, who participated, and who valorised the map? What were the **relations** between the actors?
- What **technology** and **visualisation methods** were used to produce the map, and in what **material settings** and **locations**? How did the technology, locations and settings of production shape the map? How does the **choice of tools** (e.g. open source digital, commercial, experimental, etc) reflect the **position of the map authors**?
- Can you identify **cartographic legacies** - how the map was influenced by other, earlier or contemporary maps? Does the map(s) refer to or represent the **history of the mapping process**, e.g. information on peace negotiations through which it was developed? What do cartographic legacies say about specific **assumptions** and **discourses** of seeing and representing peace and conflict?

Uses and Evaluations

- **Where** was the map(s) used? What was the **material** and **form** of the map? What **format** and **media** were used to present the map(s)? Did the map(s) **change** through the use and interpretation? How (e.g. by adjusting the borders on the map)?
- What are the **archival** and **literature accounts** of how actors gathered around and used the maps? How were maps used to **persuade** the parties in peace and conflict? Did the use of maps shape how actors saw and understood the space of peace and conflict?
- Is the map(s) discussed and perceived as **objective** and **truthful** in the archival documents or other sources? How was the map(s) **evaluated** as objective, more convincing, or truthful than other maps? **By whom**?

Effects and consequences

- Did the map(s) **affect** the **course** or the **outcomes** of the war and peace processes? How? What are the examples of **map(s) effects** e.g. shaping the dialogue between different sides in conflict, affecting public opinion or influencing cartographic discourse?
- Did the maps have specific **material effects** (e.g. new borders or municipalities, landscape management division, etc)?