

## Critical Map Reading Guide

The KonKoop VisLab has developed this questionnaire in searching for 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. The questions are divided in two parts, (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). In general, this is a list of questions that can be useful for critically thinking with the maps, but each of them does not necessarily apply to each map (accordingly, feel free to skip the questions that might not apply to your material). Finally, 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.

Additional information about the method and approach are available in the open access article titled *Design perspective in analysing maps of peace and conflict* (Žuljević, 2025) published in the International Journal of Cartography.

## 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)?

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- 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? Is it documenting what happened, or does it propose a vision of how something should be? How is the map(s) producing an image of a specific temporal regime (see, for example, daily conflict maps of Ukraine)?

## 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 critique 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)?

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- 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 map (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?
- Does the map represent **multiple temporal perspectives**?

## 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?

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## 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)?