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Learning with maps: How school atlases shape spatial perceptions

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Abstract:
Spatial concepts are formed at an early age, often in school. After learning the cultural technique of map reading as a first step - in Germany often by mapping one's own classroom and then gradually one's own school and its surroundings - maps are used to get to know and understand one's own country, one's own continent, and also 'the world' (e.g. Jennings 1961). While the atlas was once the tool of choice, today maps in textbooks or digital offerings are more common. Furthermore, pupils come into contact with mostly digital map material on numerous occasions. It is essential that they learn to critically reflect them as maps as well as digital mediums (Fraedrich 2020). Nevertheless, atlases play and have played an important role in shaping spatial concepts. Geographic school atlases, in particular, are map products strongly influenced by national educational policies. In addition to their introductory pages and the sequence of the mostly continental organization, they implicitly and explicitly convey cultural and social ideas and norms, especially through the layout and naming of the map (pages). This can lead to the formation of biased, incomplete world views (e.g. Fick 1970).

Using an analysis and contextualization of German and British school atlases from the mid-20th century to the present, we especially focus on how Eastern Europe is represented and how the atlases support or hinder the formation of spatial knowledge about this part of Europe. In particular, the role of educational media such as (school) atlases in the formation of knowledge is analyzed against the background of gaps in knowledge about Eastern European regions, such as the Ukraine, since Russia's full-scale invasion. It is important to note that establishing appropriate evaluation categories is challenging and that not everyone will agree with the chosen order. Nevertheless, differences, similarities and developments become apparent when looking at six atlases of the West German/German Diercke series and comparing them with three atlases each of the Oxford and Philips school atlases. Essential for the selection were new editions in atlas series with conceptual and content-related changes. Gaps in the production of knowledge about Eastern Europe and changes over time become apparent (Figure 1). This has to be contextualized with regard to the respective temporal and spatial conditions of atlas production as well as with regard to mapping and research practices, which are characterized by biases as well as categorizations such as the division of regions of Europe (e.g. Sushytska 2010, Marchant 1967), naming or coloring.

It becomes clear that Eastern Europe has been underrepresented in the school atlases of both countries in recent decades. The region's low significance in curricula and geopolitical discourses is reflected in research practices around questions of the Global East in relation to the Global North and South (e.g. Müller 2020). Given this background, it is essential to raise the question of what knowledge licensed atlases of large publishers convey to other regions of the world, such as India or South Africa. Examples of such atlases include those of European publishers from the last 50 years, such as Oxford or Philips. Such analyses are time-consuming and complex, so the presentation does not aim to present the results of a complete study. Instead, it draws attention to the influence of atlases on the production of spatial images and their long-term effects. It will demonstrate that the production of knowledge today is not limited to current atlases and maps. It will show that knowledge is a cycle in which values learned 30 or more years ago are still relevant when authors of educational media, national curriculum makers and teachers convey previously learned concepts. The paper demands a joint discussion on current ways of teaching spatial knowledge in different regions of the world. It is imperative that we examine how digital media influences spatial knowledge production and how we can use it to shape context-sensitive and critically reflected spatial knowledge.

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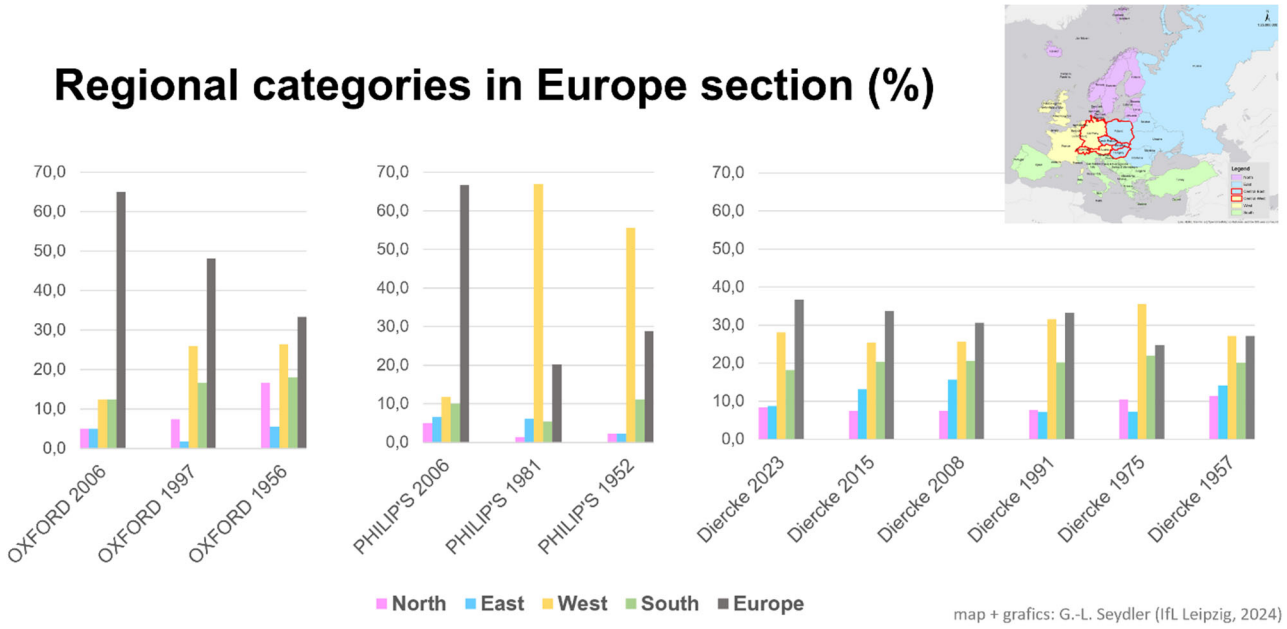

Figure 1. Amount of maps dedicated to categorized regions in Europe, compared for the British Oxford and Philips school atlases and the German Diercke atlases. Apart from the fact that the focus on the own region (here Western Europe) is visible in the number of maps, spatial knowledge about Eastern Europe is underrepresented in all atlases. Even more astonishing is the fact that the Diercke atlases, for example, have increasingly reduced their focus within Europe in recent editions (own graphic, G.-L. Seydler, IfL).

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References

Fick, K. E., 1970. Schulatlanten im 18. und 19. Jahrhundert. Elemente ihrer kartographischen Entwicklung, geographische Inhalte und didaktisch-methodische Grundlagen. In: Der Erdkundeunterricht (11), pp. 55–91.

Fraedrich, W. 2020. Kartographische Medien im Geographieunterricht. Von der "klassichen Karte" zur kompetenzorientierten digitalen Kartographie. In: Geographie heute 41 (350), pp. 2–9.

Jennings, H. J., 1961. The Regional Content of Secondary School Geography. In: Geography (Journal of the Geographical Association) 46 (213), pp. 338–342.

Marchant, E. C., 1967. Geography teaching and the revision of geography textbooks and atlases. Summary report of four Council of Europe conferences. (Rat für Kulturelle Zusammenarbeit).

Müller, M. 2020. In Search of the Global East. Thinking between North and South. In: Geopolitics 25 (3), pp. 734–755.

Sushytska, J., 2010. What Is Eastern Europe? In: Angelaki: Journal of the Theoretical Humanities 15 (3), pp. 53–65.