

Development of the international schools of cartographic thought



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There are numerous paradigms and theories of cartography that are reflected in schools of thought at academic centers and by independent researchers. They occurred and evolved in different (language) areas of the world and were influenced by the social context. The schools of cartographic thought have only been studied from the historical perspective, and not as integrated theoretical and educational practice at a particular university or area. The research describes the development of the schools indicating which factors influence them and how schools interact with each other.

METHODOLOGY AND EXECUTION

Based on the criteria, the characteristics of the Russian, American, German, and French schools, and their interactions were described using surveys and interviews, which were processed with the qualitative approach related to the critical philosophy of research (Fig. 3). The schools' developments over time were analyzed according to the positivist approach by studying the university curricula (Fig. 2). 17 answers to the survey were received. 16 persons participated in the interview. 26 curricula were analyzed.

DEFINITION AND CRITERIA

A school of cartographic thought is a group of scholars who share the same ideas about the core of cartographic knowledge. It is defined based on three criteria: theoretical concepts, people (prominent scholars), and cartographic education (Fig. 1).

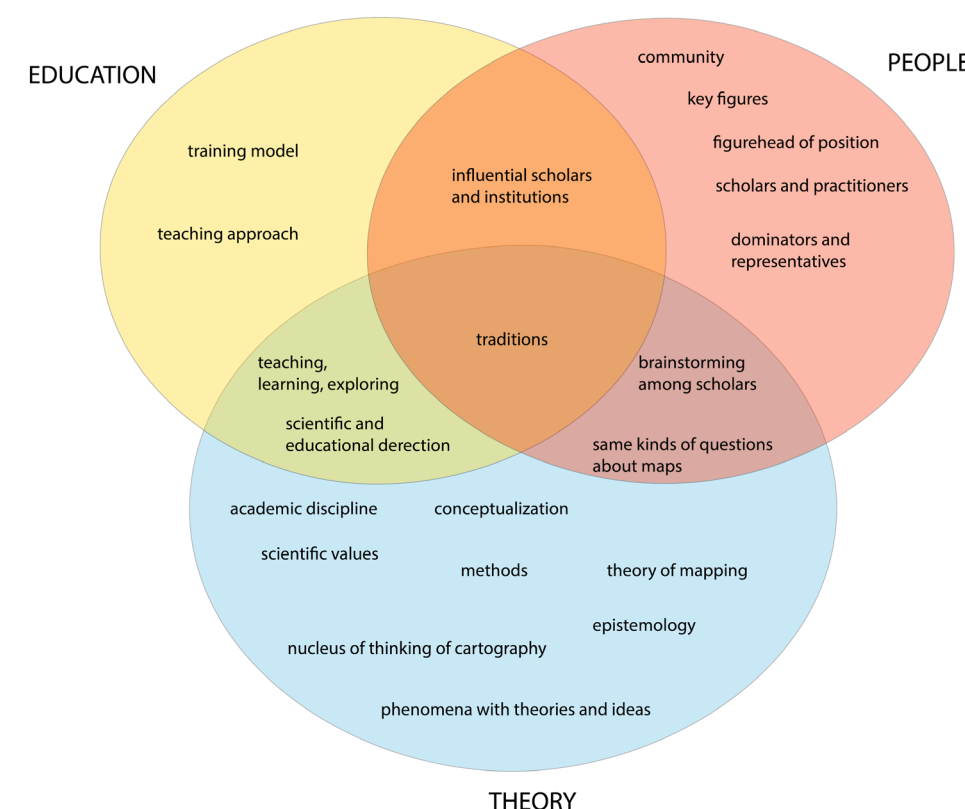


Fig. 1. Three elements of a school of cartographic thought

DEVELOPMENT

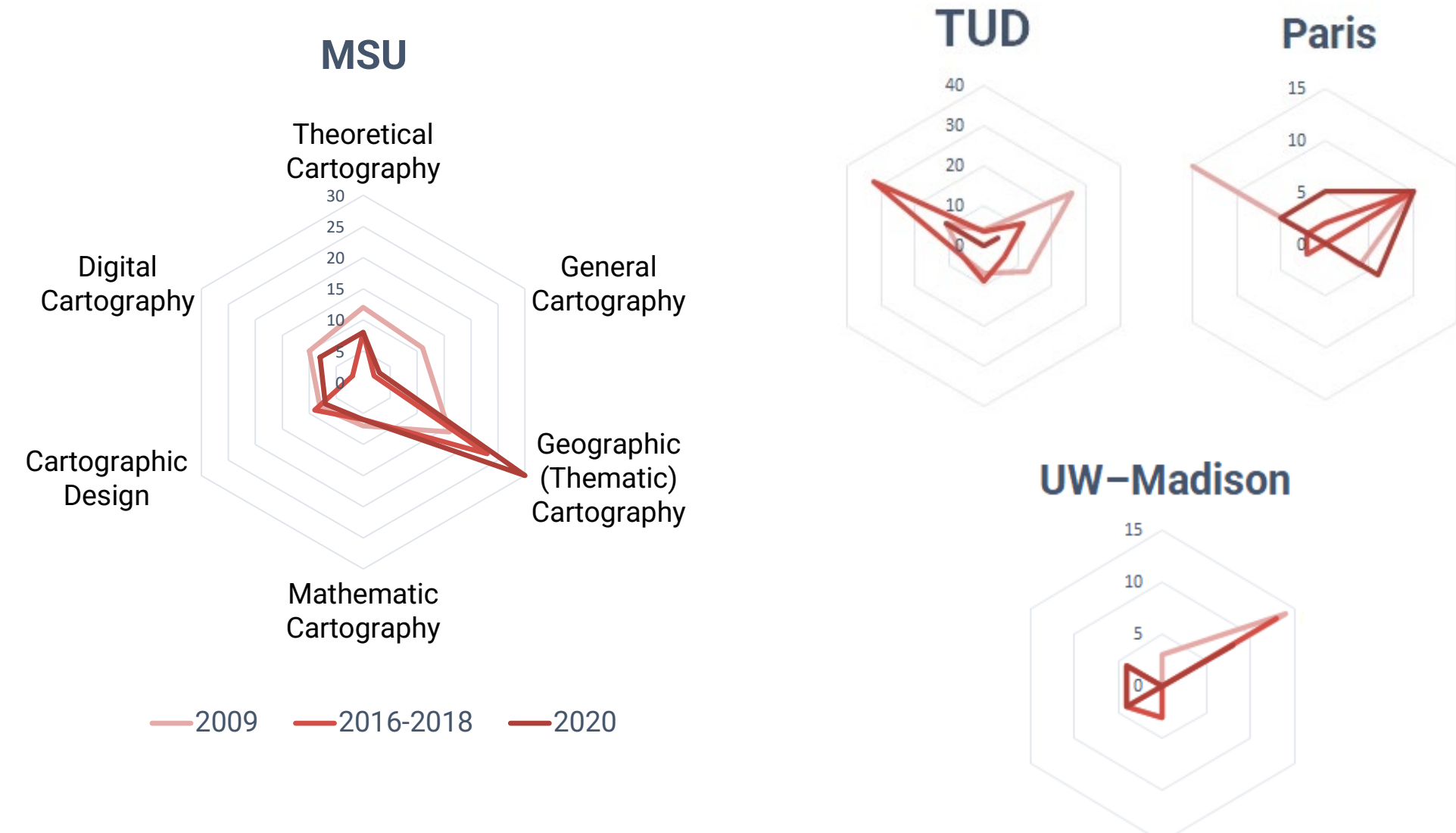


Fig. 2. Cartographic subjects grouped by categories throughout 2000-2020 at different universities

CONCLUSION

American, German and French schools are sharing the same cognitive-semiotic concepts, while Russian school remains conservative (Fig. 4). Nowadays, schools of cartographic thought interact easier because the internet and language barrier are less an issue than before. The schools' development reflects the technological advances in the domain.

INTERACTIONS

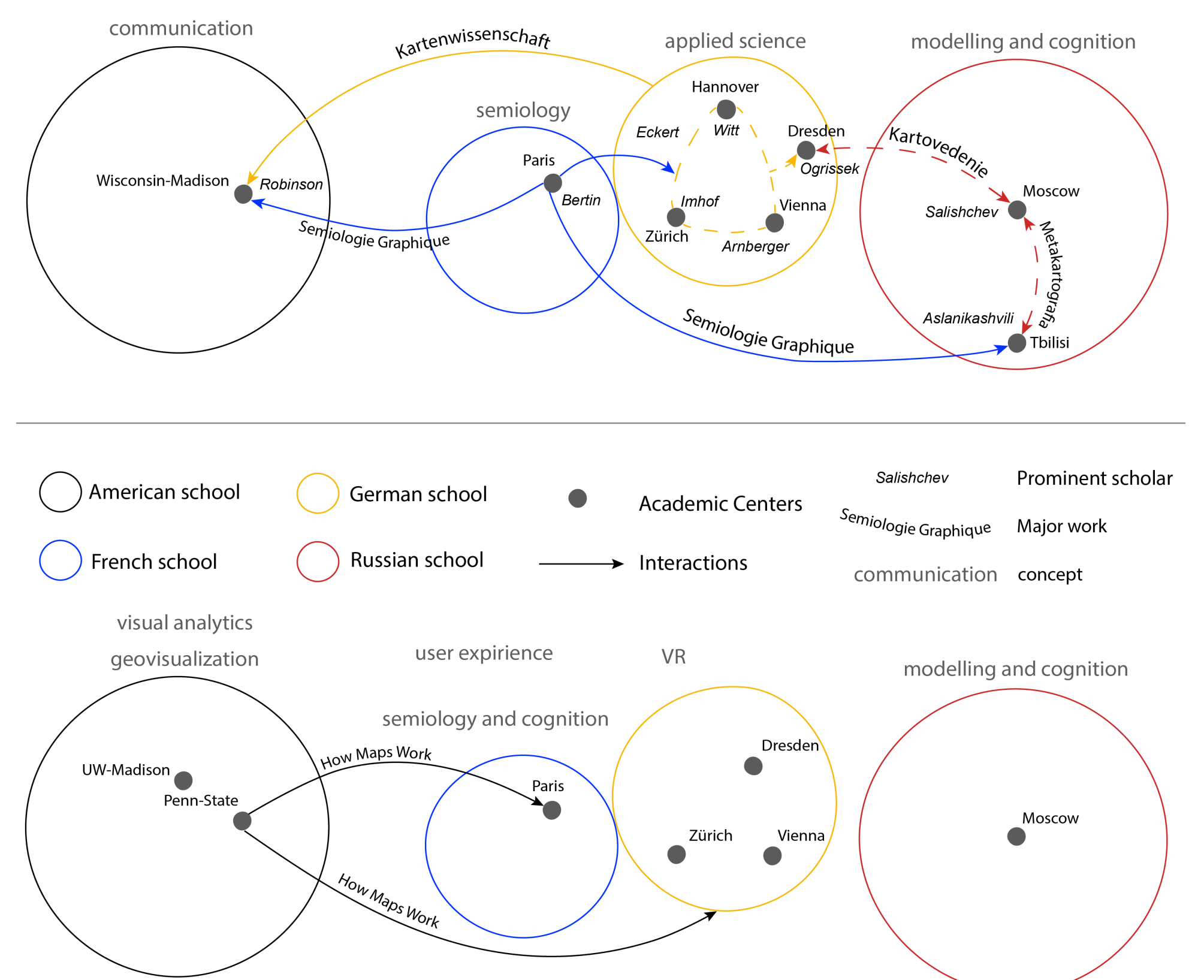


Fig. 3. The interactions between schools of cartographic thought in 1960-1990 (upper figure), and in contemporary time (lower figure)

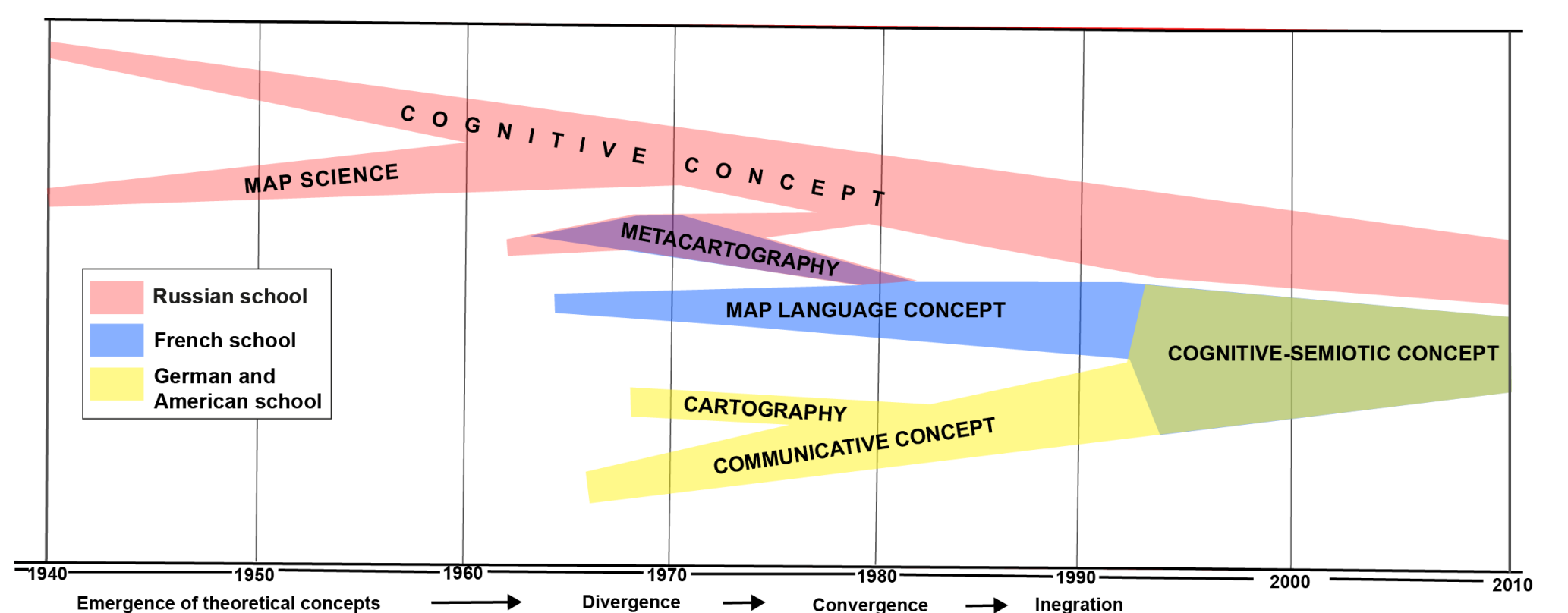



Fig. 4. The course of theoretical thought in cartography over 70 years. Adapted from [2]

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KEYWORDS

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