

Abstract

COSINSCHI-MEUNIER Micheline, 2003, *Entre transparence et miroitement, la transfiguration cartographique. Pour une épistémologie ternaire de la cartographie*, Geography Institute, University of Lausanne, Switzerland.

Key Words :

Epistemology. Ternary logic. Contrary opposition. Contradictory opposition. Oblique path. Third-included. Medium-term. In-between. Order/hierarchy/organization. Map. Cartography. Origin, centre, middle, periphery, margin. Scale/legend/map. Information/signification/communication.

Abstract :

This thesis deals with the epistemological status of the geographic map. Our approach calls explicitly for elementary structures of signification. A so-called ternary logic allows us to build a reflexive discourse about the cartographical object. The aristotelian term *Mesos* refers to the middle or mean between extremes. For Nicholas Entrikin (1991), « betweenness » is a key concept in contemporary geography, and so is the concept of « médiance » for Augustin Berque (1990). We see, along with Michel Piclin (1980), that we find ternary structures everywhere, as well as for Jean-François Six (2000), that the concept of « médiation », described as « radicalement ternaire », is widely used. We have instrumented all these emerging concepts in cartography.

Instead of applying this ternary logic to the usual *propositions* recognized in classical logic, we have developed a new approach using a topological model based on *concepts*. The thesis shows the way to move from binary to ternary logic, and identifies main concepts as those of *order/hierarchy/organisation* or *information/signification/communication* to deal afterward with the epistemological status of the map. We consider, as seen in the title of the thesis, that the cartographic image is a *transfiguration*, halfway between the *mirror image* (eye and intellect reflection logic towards the territory), and the *transparency* (refraction logic of the territory). These two opposite concepts have, within the topological ternary model, a **common limiting point** related to the *mat texture* for the *mirror image logic*, and the *opacity* for the *transparency logic*. From this common limiting point, the two concepts differ by a **distinctive feature** expressed by their orthogonal divergence. The pure concepts of *mirror image* and *transparency* constitute the extreme limits of a third diagonal concept. The middle point on this diagonal is an optimal point of equilibrium. The *transfiguration* is thus a logical and complex medium-term, an in-between expressing the epistemological status of the cartographic image. This *diaphanous-translucent* point is called by Lupasco (1947, 1989) the Third-included. *Representamen*, the map thus acts as intermediary to communicate some meaning which cannot be communicate otherwise.

This ternary logic of mediation allows to further examine the cartographic image through the processes of *mapping* and *mapmaking*. *Mapping*, on the one hand, calls for exploration of specific topological features and mental structuring of the *Imago Mundi*, such as the analysis of cartographical expressions of *origin*, *centre*, *periphery*, or the fundamental relationship between strait and isthmus, or the archetypal function of the island, or the notion of marginality. *Mapmaking*, on the other hand, tackles the process of making maps in terms of structure and functionality. In view of the historical developments in cartography, i.e. the *mapping* process, and in view of the *mapmaking* process through structure (*scale/legend/map*) and functionality (*inform/signify/communicate*), we have identified the medium-term by focusing on the opposition between specific contrary concepts in order to build a coherent epistemological model of the geographic map. We show that this epistemological ternary model can be further applied to other fields than cartography, thus opening up new perspectives in our ways of looking at and understanding the world.