

Introduction: The Nexus of Knowledge and Space – *Peter Meusbürger (Geography), University of Heidelberg (Germany)*

Some social scientists assume that knowledge is a public commodity, which is available to everybody and spreads relatively quickly in space. Those who expect a quick diffusion of knowledge and a trend towards the spatial ubiquity of knowledge generally make at least one of the following mistakes:

- they overlook the importance of spatiality for the generation of knowledge
- they underestimate the relation between power and knowledge and the role of asymmetrical power relations between centre and periphery
- they do not differentiate between knowledge and information and different kinds of knowledge and
- apply a naive model of communication.

Asymmetric social relations such as power, dominance and control manifest themselves in spatial disparities. There are both functional and symbolic reasons why knowledge and power depend on each other and why jobs of important decision-makers and highly skilled specialists show a strong tendency towards spatial concentration, whereas low-skilled routine activities in production and administration show a trend towards dispersion and decentralization.

In terms of the sender of a message, the line between information and knowledge might become blurred. In regard to the receiver or decoder of a message, the difference between knowledge and information becomes quite distinct. Many categories of information can only be understood and evaluated by people with prior knowledge and experience. In the communication process between a sender and potential receiver, prior knowledge acts as a double filter. The first filter consists of the understanding of codes (e.g. a foreign language or scientific terminology), of analytical abilities, professional skills, experience and expertise. The second filter, which falls into the category of symbolic knowledge, consists of religious and ideological convictions, national myths, political legends, collective memories, cultural traditions, stereotypes and prejudice. This filter decides whether new information is accepted as 'truth' or is emotionally rejected. Both filters can distort perception, weaken analytical

judgement, and thus prevent a certain piece of knowledge from being transferred from A to B. The filter function of prior knowledge is an important reason why the diffusion of certain categories and contents of knowledge is limited to certain places, or why they only circulate within certain areas with similar cultural preconditions and bypass others. The speed at which new knowledge and information diffuses through space depends on the type of knowledge, its usefulness to power and economic competition, the interest of the producer (inventor) in sharing his or her knowledge, the prior knowledge necessary to understand the contents of new information, the availability of technology necessary for the production and application of knowledge, and the inclination to accept the knowledge.

Geography of Knowledge is also interested in the significance of the spatial context for the production and application of knowledge and in the settings in which experiments and studies were carried out and knowledge was generated and legitimized. It studies spatial disparities of educational attainment, of research input and output, it is interested in the spatial diffusion and mobility of knowledge (e.g. brain drain). Science is situated in time and space. It is created in particular places and contexts and through interaction within space. “Scientific knowledge bears the imprints of its location” (Livingstone 2003, 13).