

# **Epistemic Encounters Intra- and Interdisciplinary Analyses of Human Action, Planning Practices and Technological Change**

Ph.D. dissertation, English text, by Henrik Bruun, Göteborg University, Department of Interdisciplinary Studies of the Human Condition, Human Ecology Section, Box 700, 405 30 Göteborg, Sweden.

## **Abstract**

The interest in interdisciplinary research seems to be greater than ever. Science parks, research networks, centres of excellence, research programs, conferences, journals, and books bear witness to the central role of interdisciplinarity in present-day knowledge generation. Some analysts are even arguing that scientific progress is increasingly being relocated from disciplinary to interdisciplinary (or transdisciplinary) arenas. At the same time, many of those who pursue interdisciplinary research complain about the rigid structures of academia – structures that in different ways discourage interdisciplinarity. It is also complained that there is little discussion on the methodology of interdisciplinarity, and that the term “interdisciplinarity” itself is used in a superficial way. These are the problems that this work addresses.

The thesis is based on four articles on three topics: theory of agency and action, scenario practices in our society, and theory of technological change. Common for all articles is that they approach their issues from the perspective of boundary crossing science. Thus, besides treating their particular topics, the articles also function as analyses of the knowledge processes involved in encounters between different theoretical frameworks and approaches (or *epistemic encounters*). A set of concepts for studying the epistemic dynamics of intra- and interdisciplinary boundary crossing is developed on the basis of the four studies. It is argued that such a terminology is needed for a better understanding of the methodological challenges involved in epistemic encounters, as well as of the epistemic competences that are needed for successful participation in such encounters.

Many human-ecologists consider interdisciplinarity to be the methodological core of human ecology. There is an ongoing debate about the implications of such a position for human-ecological research and education. The thesis contributes to that debate by providing a terminology for methodological self-reflection. The focus is on research, but large parts of the analysis should be illuminating within the context of education too.

Key indexing words: epistemic encounter, interdisciplinarity, intradisciplinarity, transdisciplinarity, multidisciplinarity, epistemic framework, epistemic approach, epistemic closure, epistemic coalitions, the interdisciplinary academic, methodology of interdisciplinarity, theory of action, agency, scenarios, technological change.