MODERN LOGIC 199

ABDUCTION AND THE TOPOLOGY OF HUMAN COGNITION

Review of Ansgar Richter, Der Begriff der Abduktion bei Charles S. Peirce, Europäische Hochschulschriften 20, Vol. 453, Frankfurt a. M./ Berlin/New York/Bern/ Paris/Wien, Verlag Peter Lang, 1995. 209pp.

HELMUT PAPE

Philosophisches Seminar Universität Hannover Welfengarten 1 D-30167 Hannover, Germany

I. Abduction: Logic, Methodology and the Dimensionality of Human Cognition.

What is the problem that the conception of a non-deductive and even non-inductive variety of hypothetical inference suggested by Charles S. Peirce (1839 – 1914) was to solve or at least to address? This, as Ansgar Richter's recent book *Der Begriff der Abduktion bei Charles S. Peirce* shows, is far from obvious, although the notion of abduction has found its heyday and rather wide-spread application in artificial intelligence and proliferation in recent approaches in literature theory and hermeneutics. At the very least, the problem of abduction can be given a historical or a systematical reading and both readings depend on what we identify as Peirce's conception of abduction. For mathematics, logic, and epistemology the systematic problem raised by abduction is the question whether, besides the formal standards for deductive and inductive logic, there is an irreducible type of abductive logic with its own, autonomous standards of formal validity. But what exactly is this logic of abduction dealing with? It seems that there are at least three options. Abduction can be seen as:

1.) a logic of discovery: The logic of generating (discovering, creating) a new hypotheses,