

## Undoing one's learning

Magda Osman

University College London

### Abstract

Post-task questionnaires presented at the end of complex problem solving tasks have revealed dissociations between participants' performance and their declarative knowledge of the task and their behavior during the tasks (e.g., Berry, 1991; Berry & Broadbent, 1984). This kind of dissociation has been taken as evidence for functionally separable inductive reasoning processes (i.e. implicit reasoning vs. explicit reasoning). Contrasting this position, studies of goal specificity effect (i.e. Non-goal orientated instead goal-orientated learning leads to global processing of task information and successful transfer of knowledge) show that individuals have access to, and can accurately report on their hypothesis testing behavior during complex problem solving tasks (e.g., Burns & Vollmeyer, 2002). To reconcile these competing positions Buchner, Funke and Berry (1995) proposed that, rather than evidence of dissociations between implicit and explicit inductive reasoning, this kind of evidence suggests differences in the diversity of learning experiences that are generated during the tasks. The aim of the present study was to investigate Buchner et al's (1995) claims. In order to achieve this, a novel procedure was employed in which participants solved two control tasks under Non-goal orientated learning conditions. For half, the learning phase from the first task was recorded and replayed in the second task (i.e. restricted learning experiences). For the remaining half a different learning phase from their first was presented in the second task (i.e. diverse

learning experiences). The findings showed decrements in control performance under conditions in which the diversity of the learning experiences was restricted; these findings are discussed in light of dual system frameworks.

Department of Psychology  
University College London  
Gower Street  
London WC1E 6BT  
England  
Phone: +4420 7679 7572  
Fax: +4420 7436 4276  
Email: [m.osman@ucl.ac.uk](mailto:m.osman@ucl.ac.uk)