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# The Symposium on the Synergy between Implicit and Explicit Learning Processes

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## The Implicit/ Explicit Dichotomy

Implicit processes are thought to be relatively fast, inaccessible, holistic, and imprecise, while explicit processes are slow, accessible and precise (e.g., Reber, 1989, Sun 2002). This dichotomy is closely related to some other well-known dichotomies including symbolic versus subsymbolic processing (Rumelhart et al., 1986), conceptual versus subconceptual processing (Smolensky, 1988), and conscious versus unconscious processing (Jacoby et al., 1994). This dichotomy has been justified by extensive studies of implicit and explicit learning, implicit and explicit memory, and implicit versus explicit metacognition (Reder, 1996).

It seems obvious that implicit and explicit processes must coordinate in some way. Otherwise we would have a difficult time behaving in an organized way and it would be difficult to understand our own behavior. Yet, it is apparent that we do not always have conscious access to all our knowledge (e.g., Ericsson & Simon, 1984). Also many discrepancies have been observed between what people say they do when performing a task and what they really do (e.g., Nisbett & Wilson, 1977). In addition, attempts at deliberate self-directed behavior change (e.g., deciding to quit smoking) often fail. So while implicit and explicit processes must be coordinated to some degree, this coordination is less than perfect: They may conflict or interfere with each other. At other times the two types of processes work together enhancing performance beyond what one could do with either type of processing alone (see Sun 2002).

## The Focus of This Symposium

This symposium is focused on interactions between implicit and explicit cognitive processes. Questions addressed include: What are the conditions that lead to reliance on one type of process versus the other? How does knowledge acquired through these two modes of learning communicate or coordinate with each other? Which one is really the “boss” in controlling most behaviors? Is conscious control of behavior largely an illusion as some have suggested (e.g.,

Wegner, 2002)? Can implicit and explicit processes really work together to enhance performance? How are conflicts resolved?

This symposium will address the above issues by presenting 4 talks on data, models, and/or theories concerning the implicit/explicit interaction as well as a panel discussion that answers specifically each of the above questions. The Speakers are: Lynne Reder, Axel Cleeremans, Zoltan Dienes, and Robert Mathews.

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