Nous: A powerful machine

Zoe Bablekou

doi: 10.12681/psy_hps.36232

Copyright © 2023, Ζωή Μπαμπλέκου

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0.

To cite this article:

Nous: A powerful machine

Under the broad title “Nous: a powerful machine” this thematic issue aims at bringing together different avenues of research in cognition and its relations to human development. Both review and research papers are presented, addressing a variety of areas. Ziori’s theoretical paper covers the subject of unconscious cognitive processing and especially implicit learning. She reviews how the cognitive unconscious manifests itself in implicit learning and how it affects learning in general. The aim of the paper is to show the importance of implicit processing in understanding psychological phenomena from fields such as neuroscience, social, and cognitive psychology. Sidiropoulou and Metallidou take us to a trip into how metacognitive processes occur during human–Internet interactions, a field of great contemporary interest. They review evidence with reference to the theory of transactive memory systems and the theory of cognitive offloading. Their discussion focuses on the ways in which our cognitive systems adapt their responses when using the internet, by examining its effects on the metacognitive evaluations of the feelings of confidence and findability and on how our metamemory judgments are affected. Roussos presents how the human mind differs when someone is online compared to when being offline and attempts to describe the impact of digital technologies on human cognitive functions, such as attention, memory, decision-making and problem solving. Phenomena, such as multitasking, task switching, development of heuristic-based strategies used to search information, and deciding about the credibility of information, are discussed in relation to their impact on the human mind and cognitive functions. Roussos presents certain ideas relating to three internet use directions: digital literacy, ethical boundaries and future research. Chrysochoou’s synthetic-critical discussion focuses on theory of mind (ToM), specifically on the theoretical accounts proposed to explain its development, and reviews the factors suggested to explain such development by these accounts. She examines evidence in the light of different theoretical interpretations: processing accounts, modularity theories, theory theory accounts, and simulation theories. The paper suggests we may begin to discuss the possibility of approaching ToM from a different perspective, that of a bio-cultural approach.

The remaining two presentations are research papers. Bablekou, Chrysochoou, and Kazi present empirical evidence on children’s metacognitive and metalinguistic operations. Children appear to gradually progress from inaccurate (overestimates or underestimates) to more accurate judgements regarding performance with increasing age. The authors investigate children’s executive processes, oral comprehension capacity, and corresponding metacognitive-metalinguistic awareness. They find developmentally distinct profiles in preschoolers’ and second graders’ performance in the variables examined (inhibition, shifting, working memory, oral comprehension). Finally, Spanoudis and Tourva examine how inspection time tasks relate to intelligence, by investigating the relationship between inspection time task performance and individual differences in attention, as well as the role age plays in this relationship. The authors conclude that inspection time improves through ages 7 to 18, is related to intelligence during all these years, and makes unique contributions to individual differences in intelligence. The authors also express the view that data reflects top-down sensory processes, but also attentional control mechanisms underlying the inspection time-IQ relationship.

Zoe Bablekou,
Prof. of Cognitive Psychology,
Guest Editor