Toward an Ecological Approach to Perceptual Learning and Development: Commentary on Michaels and Beek

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The following commentary addresses an oversight in Michaels and Beek's keynote presentation at the Third European Workshop on Ecological Psychology. Michaels and Beek criticized the ecological approach for lack of progress toward understanding processes of change, yet these authors failed to cite any of the recent work on perceptual–motor learning and development. The primary purpose of our commentary is to offer readers a list of review papers which summarize current theoretical and empirical advances in the area of perceptual learning and development.

We write to redress an oversight in a 1995 issue of Ecological Psychology. In their keynote presentation at the Third European Workshop on Ecological Psychology, Michaels and Beek (Ecological Psychology, 7, pp. 259–278) lamented lack of progress toward understanding processes of change. Unfortunately, Michaels and Beek did not cite any of the recent, plentiful work on perceptual–motor learning and development.

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development by ecological psychologists, and in his commentary, Smitsman (same issue, pp. 279–283) also failed to reference any of the relevant work. Readers are left wondering whether the authors intended a critique of this work or were simply unaware of its existence.

This oversight is surprising because the International Society for Ecological Psychology has always placed strong emphasis on learning and development. Most striking, Eleanor Gibson delivered the keynote lecture, “Learning to Perceive and Perceiving to Learn,” for the inception of the Center for the Ecological Study of Perception and Action at the University of Connecticut in 1989, and she was the first visiting scholar at the center. Furthermore, the first article published in Ecological Psychology addressed the development of mobility (Gibson & Schmuckler, 1989, Ecological Psychology, 1, pp. 3–25). In 1993, the society presented Gibson with a lifetime achievement award “for her pioneering and fundamental contributions to the scientific understanding of learning, perception, reading, perceptual learning, and perceptual development; for her leadership in the creation of ecological psychology as a field concerned with perceiving and acting in a meaningful world.” Catherine Best, Gibson, and others organized a symposium on perceptual learning in infancy at the 1993 International Conference on Event Perception and Action in Vancouver, British Columbia. Gibson also presented the keynote address, “An Ecological Psychologist’s Prolegomena for Perceptual Learning and Development,” to the Ecological Society at their Fall, 1994 meeting in Storrs, Connecticut.

Moreover, this work on learning and development is recognized by the larger scientific community. Gibson received the Century Psychology Series Award for her 1969 book, Principles of Perceptual Learning and Development. Gibson and Spelke (1983) co-authored a chapter on “The Development of Perception” in the prestigious Mussen Handbook of Child Psychology. Gibson’s keynote address to the American Psychological Society in Chicago, “Has Psychology a Future?,” presented an ecological approach to perceptual learning and development (Psychological Science, 5, 1994, pp. 69–76), and she was recognized in the American Psychological Association Centennial Series published in Development Psychology in 1992 (Pick, 28, pp. 787–794). In 1992, Eleanor Gibson received a National Medal of Science from President Bush “for her conceptual insights in developing a theory of perceptual learning; and for achieving a deeper understanding of perceptual development in children and basic processes in reading.”

Interested readers of Ecological Psychology are referred to the following review papers (organized chronologically) for summaries of current theoretical and empirical advances by ecological psychologists (and other developmental psychologists) on perceptual learning and development:


