



SPATIAL COGNITION IN HUMANS JANELLE HUTTENLOCHER

Janelle Huttenlocher was born in 1932 in Buffalo, New York. She received her B.A. at the University of Buffalo, and her M.A. and Ph.D. at Harvard University. She has been teaching at the University of Chicago since 1974. Current position: William S. Gray Professor of Psychology and Chairperson, Committee on Developmental Psychology, University of Chicago. Her research concerns various aspects of cognitive development: quantitative development, the development of spatial understanding, and the development of language. She is particularly interested in the role of the child's environment in the development of cognitive skills. In addition, her work includes research on conceptual representation and memory. Recommended Reading: Huttenlocher, J., L. V. Hedges, and J. L. Vevea. „Why Do Categories Affect Stimulus Judgment?” *Journal of Experimental Psychology: General* 129 (2000). Huttenlocher, J., S. Duffy, and S. Levine. “Infants and Toddlers Discriminate Amount: Are They Measuring?” *Psychological Science* 13 (2002). Huttenlocher, J., M. Vasilyeva, E. Cymerman, and S. Levine. “Language Input and Child Syntax.” *Cognitive Psychology* 45, 3 (2002). – Address: Department of Psychology, University of Chicago, 5848 South University Avenue, Chicago, IL 60637, USA.

I worked on several projects as part of the spatial cognition group. I have been invited to contribute a chapter on the development of spatial cognition to the next revision of the main reference text in developmental psychology, *Handbook of Child Psychology*, which is very widely used in the field. The chapter includes various topics not covered in my book and reorganizes the material. I recently obtained important new findings, with broad implications for spatial development, that people code specific locations (e. g. compass points)

and also categorical information (e. g. geographic region). Our model posits that, by combining inexact information on two levels in forming estimates, the accuracy of these estimates can be increased. My collaborator is my Co-Fellow Nora Newcombe, Professor of Psychology at Temple University, Philadelphia.

Another project was to complete writing up a series of studies of the hierarchical organization of spatial information and how it affects people's judgments of location. This work was done in collaboration with Larry Hedges, Professor of Sociology, University of Chicago. By presenting our overall rational model, we hope we have enhanced each particular application and thus made the strongest case for this form of coding in the domain of spatial representation.

Finally Ken Cheng, John Rieser, Sarah Shettelworth, and I had regular meetings concerning the Focus Group *Development of Spatial Cognition* about similarities and differences in spatial functioning across species. That work is on hold at the moment because of Ken Cheng's baby and my husband, among other things. We intend to get back to it.