

Dear colleague,

A number of faculty and grad students have recently expressed interest in discussing the book, "Rethinking Innateness." To this end, we are organizing an informal reading group that will read and discuss this book next semester. What follows is a brief description of the book, and then the logistical details of the meetings.

"Rethinking Innateness" addresses the issue of what it means for cognitive abilities, such as language and object perception, to be innate. Contrary to widespread views in developmental psychology and linguistics, Elman et al. argue that the genetic bases of these abilities don't specify their form in any detail. Instead, the plasticity of the nervous system, in conjunction with environmental input, shapes these abilities considerably. Although these abilities may have weak genetic beginnings, their final forms reflect how the nervous system adapts to environmental structure over the course of development. In making these arguments, Elman et al. provide many concrete illustrations of how neural nets accomplish important developmental feats. Indeed, much of the book can be viewed as a tutorial on neural nets and their remarkable abilities. The essence of these demonstrations is that classic points in development can be achieved through adaptive learning--complete genetic prespecification is not necessary. If sufficient environmental structure is present, it drives highly-plastic systems into the proper course of development, assuming that weak genetic constraints get things off to a good start. The book's other major emphasis is on empirical research from neuroscience that addresses the plasticity of brain development and its provocative implications for developmental psychology. This book is receiving much attention and provoking extensive discussion across a variety of academic communities.

The reading group will meet on the following Wednesdays at noon in Psychology 201:

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| January 21 | Chapter 1. New perspectives on development |
| February 4 | Chapter 2. Why connectionism? |
| February 18 | Chapter 3. Ontogenetic development |
| March 4 | Chapter 4. The shape of change |
| March 18 | Chapter 5. Brain development |
| April 1 | Chapter 6. Interactions all the way down |
| April 15 | Chapter 7. Rethinking innateness |

There will not be a summary of each chapter to begin the respective session. Instead, we will simply begin discussion immediately, so please come with issues to discuss.

Students may register for 1 credit in Psychology 770N, pass-fail, if they wish, although registering is not necessary. The only requirement for passing is regular participation. Copies of the book will be available in the Emory bookstore by early next semester. It's full reference is:

Elman, J.L., Bates, E.A., Johnson, M.H., Karmiloff-Smith, A., Parisi, D., & Plunkett, K. (1996). *Rethinking innateness: A connectionist perspective on development*. Cambridge, MA: MIT (Bradford).

Please let us know if you have any questions.

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