

University of London  
MA Seminar in Philosophy of Psychology  
2000-1  
Cognition, Language and Computation  
Sarah Patterson and Barry C. Smith  
Birkbeck College

**Schedule of Topics and Readings**

Introductory Reading: Steven Pinker, *The Language Instinct* (Penguin, 1995/2000)

**Term 1 Weeks 6 – 10**

**Week 6 Introduction to cognitive science**

Reading: J. Fodor, 'Four accounts of mental structure,' ch. 1 of *The Modularity of Mind*, MIT Press, 1983

N. Block, 'The computer model of the mind' in *Thinking*, ed. D. Osherson and E. Smith (MIT Press, 1990)

**Week 7 Explaining language**

Reading: N. Chomsky, 'Language and problems of knowledge' in *Philosophy of Language*, ed. A. Martinich (OUP, 1996)

N. Chomsky, 'Reply,' *Mind & Language* (1987) 2: 178-197

**Week 8 Classical computation**

Reading: J. Haugeland, 'Semantic engines: An introduction to mind design' in *Mind Design* (first edition), ed. J. Haugeland (MIT Press, 1985); reprinted in *Minds, Brains and Computers*, ed. D. Cummins and R. Cummins (Blackwell, 2000)

R. Cummins, 'Interpretational semantics,' ch. 8 of *Meaning and Mental Representation* (MIT Press, 1989)

**Week 9 Connectionism and language**

Reading: P. Churchland, 'Cognitive activity in artificial neural networks' in *Thinking*, ed. D. Osherson and E. Smith (MIT Press, 1990); reprinted in *Minds, Brains and Computers*, ed. D. Cummins and R. Cummins (Blackwell, 2000)

D. Rumelhart and J. McClelland, 'On learning the past tenses of English verbs' in *Parallel Distributed Processing*, ed. J. McClelland and D. Rumelhart (MIT Press, 1986); reprinted in *Minds, Brains and Computers*, ed. D. Cummins and R. Cummins (Blackwell, 2000)

## Week 10 Rules in language

Reading: S. Pinker and A. Prince, 'On language and connectionism: Analysis of a parallel distributed processing model of language acquisition,' *Cognition* (1988) 28: 73-193; reprinted in *Connections and Symbols*, ed. S. Pinker and J. Mehler (MIT Press, 1988)

K. Plunkett and V. Marchman, 'Learning from a connectionist model of the acquisition of the English past tense,' *Cognition* (1996) 61: 299-308

## Term 2 Weeks 1 – 5

### Week 1 Cognitive architecture and levels of explanation

Reading: D. Marr, 'The philosophy and the approach,' ch. 1 of *Vision* (Freeman, 1982); reprinted in *Minds, Brains and Computers*, ed. D. Cummins and R. Cummins (Blackwell, 2000)

A. Clark, 'Connectionism, competence and explanation' in *The Philosophy of Artificial Intelligence*, ed. M. Boden (OUP, 1990)

### Week 2 Connectionism and cognitive architecture

Reading: J. Fodor and Z. Pylyshyn, 'Connectionism and cognitive architecture,' *Cognition* (1988) 28: 3-71; reprinted in *Connections and Symbols*, ed. S. Pinker and J. Mehler (MIT Press, 1988) and in *Mind Design II*, ed. J. Haugeland (MIT Press, 1997)

W. Ramsey, S. Stich and J. Garon, 'Connectionism, eliminativism and the future of folk psychology' in *Philosophy and Connectionist Theory*, ed. W. Ramsey, S. Stich and D. Rumelhart (Lawrence Erlbaum, 1991) and in *Mind Design II*, ed. J.

Haugeland (MIT Press, 1997)

### Week 3 Content and computational explanation

Reading: R. Cummins, 'Interpretation and the reality of content,' ch. 11 of *Meaning and Mental Representation* (MIT Press, 1989)

F. Egan, 'Computation and content,' *Phil. Review* (1995) 104: 181-203.

### Week 4 Chomskyan internalism

Reading: N. Chomsky, 'Language and nature,' *Mind* (1995) 104:1-61, concentrating on part 2, 'Language from an internalist perspective'

J. Higginbotham, 'Remarks on the metaphysics of linguistics,' *Linguistics and Philosophy* (1991) 14: 555-566

### Week 5 Cognitive architecture and folk psychology

Reading: A. Gopnik and H. Wellman, 'Why the child's theory of mind really is a theory' in *Folk Psychology*, ed. M. Davies and T. Stone (Blackwell, 1995)

G. Segal, 'The modularity of theory of mind' in *Theories of Theories of Mind*, ed. P. Carruthers and P. Smith (CUP, 1996)