

# Reading Lists for PhD Qualifying Exam of Cognitive Science, METU

## Track-Independent Reading

- Clark, Andy (2001). *Mindware. An Introduction to the Philosophy of Cognitive Science*. Oxford University Press.

## Language & Computing

- Lyons, J. (1981). *Language and linguistics: An introduction*. Nineteenth Printing, 2009. Cambridge University Press.
  - All chapters (370 pages)
- Jurafsky, D. & Martin, J. H. (2009). *Speech and language processing: An introduction to natural language processing, computational linguistics, and speech recognition* (2nd Ed). Pearson International Edition.
  - Part 1:
    - Ch. 1 Introduction, 1-16.
    - Ch. 2 Regular Expressions and automata, 21-51.
    - Ch. 3 Morphology and finite state transducers, 57-89.
    - Ch. 4 Computational phonology and text-to-speech, 91-136.
  - Part 2
    - Ch. 12 Lexicalized and probabilistic parsing, 443-471.
    - Ch. 13 Language & complexity, 473-494.
  - Part 3:
    - Ch. 14 Representing meaning, 497-539.
    - Ch. 16 Lexical semantics, 587-623.

## Computing & Psychology

- Marr, D. (1982/2010). *Vision: A computational investigation into the human representation and processing of visual information*. MIT Press (2nd Ed).
  - Ch. 1 The philosophy and the approach, 8-40.
  - Ch. 7 In defense of the approach, 335-361.
  - Afterword by Tomaso Poggio, 362-367.
- Russell, S. & Norvig, P. (2010). *Artificial intelligence: A modern approach* (3rd Ed) Prentice Hall
  - Ch. 1 Introduction, 1-33.
  - Ch. 2 Intelligent agents, 34-63.
  - Ch. 3 Solving problems by searching, 64-119.
  - Ch. 4 Beyond classical search, 120-160.
  - Ch. 5 Adversarial search, 161-201.
  - Ch. 7 Logical agents, 234-284.
  - Ch. 8 First-order logic, 285-321.
  - Ch. 10 Classical planning, 366-400.
  - Ch. 11 Planning and acting in the real world, 401-436.
  - Ch. 12 Knowledge representation, 437-479.
- Sun, R. (Ed.) (2009). *Cambridge Handbook of computational psychology*. CUP.
  - Ch. 1 Introduction to computational cognitive modeling. R. Sun, 3-20.
  - Ch. 2 Connectionist models of cognition. M. S. C. Thomas and J. L. McClelland, 23-58.
  - Ch. 3 Bayesian models of cognition. T. L. Griffiths, C. Kemp, and J. B. Tenenbaum, 59-100.
  - Ch. 4 Dynamical systems approaches to cognition. G. Schröner, 101-126.
  - Ch. 5 Declarative/logic-based cognitive modeling. S. Bringsjord, 127-169.
  - Ch. 6 Constraints in cognitive architectures. N. A. Taatgen and J. R. Anderson, 170-185.
- Peterson, M.A. & Rhodes, G. (Eds.) (2003). *Perception of faces, objects, and scenes: Analytic and holistic processes*. OUP.
  - Ch. 7 Visual object recognition: Can a single mechanism suffice? M. J. Tarr, 177-211.

- Ch. 8 The Complementary properties of holistic and analytic representations of shape, J. E. Hummel, 212-234.
- Ch. 10 Overlapping partial configurations in object memory: An alternative solution to classic problems in perception and recognition. M. A. Peterson, 269-294.

## Psychology & Linguistics

- Gaskell, M. G. (2007). *The Oxford handbook of psycholinguistics*. Oxford University Press.
  - Section II The mental lexicon
    - Ch. 11 Morphological processes in language comprehension. W. D. Marslen-Wilson, 175-194.
    - Ch. 12 Semantic representation. G. Vigliocco & D. P. Vinson, 195-216.
    - Ch. 13 Conceptual structure. H. E. Moss, L. K. Tyler & K. I. Taylor, 217-234.
    - Ch. 14 Connectionist models of reading. M. S. Seidenberg, 235-250.
  - Section III Comprehension and discourse
    - Ch. 17 Syntactic parsing. R. P. G. van Gompel & M. J. Pickering, 287-308.
    - Ch. 18 Spoken language comprehension: insights from eye movements M. K. Tanenhaus, 309-326.
    - Ch. 19 Eye movements and on-line comprehension processes. A. Staub and K. Rayner, 327-342.
    - Ch. 20 Inference processing in discourse comprehension. M. Singer, 343-360.
  - Section V Language development
    - Ch. 35 The perceptual foundations of phonological development. S. Curtin & J. F. Werker, 577-600.
    - Ch. 36 Statistical learning in infant language development. R. Gómez, 601-616.
    - Ch. 37 Word learning. M. A. Koenig and A. Woodward, 617-626.
    - Ch. 38 Concept formation and language development: count nouns and object kinds. F. Xu, 627-634
    - Ch. 39 Learning to parse and its implications for language acquisition. J. C. Trueswell & L. R. Gleitman, 635-656
    - Ch. 40 Learning to read. R. Treiman & B. Kessler, 657-666
- Spivey, M, McRae, K., & Joanisse, M. (2012). *The Cambridge handbook of psycholinguistics*. Cambridge University Press.
  - Part II. Spoken Word Recognition
    - Ch. 4 Current directions in research in spoken word recognition. A. G. Samuel & M. Sumner, 61-75

- Ch. 6 Finding the words: how young children develop skill in interpreting spoken language. A. Fernald & M. Frank, 104-126
  - Part III. Written Word Recognition
    - Ch. 8 Visual word recognition in skilled adult readers. M. J. Cortese & D. A. Balota, 159-185.
    - Ch. 10 Decoding, orthographic learning and the development of visual word recognition. K. Nation, 204-217.
  - Part IV. Semantic Memory
    - Ch. 12 The human conceptual system. L. W. Barsalou, 239-258.
  - Part VII. Sentence Production
    - Ch. 20 Research in language production. Z. M. Griffin & C. M. Crew, 409-425.
  - Part IX. Discourse and Conversation
    - Ch. 27 Spoken discourse and its emergence. H. H. Clark, 541-557.
- Stemmer, B & Whitaker, H. A. (2008). Handbook of the neuroscience of language, Amsterdam: Academic Press, Elsevier.
  - Ch. 22 Neurolinguistic computational models. B. MacWhinney & P. Li, 229-236.
  - Ch. 23 Mirror neurons and language. M. A. Arbib, 237-246.
- Baddeley, A. (2007): Working memory, thought, and action. Oxford: OUP
  - Ch. 2 Why do we need a phonological loop? 15-34.
  - Ch. 3 The phonological loop: challenges and growing points, 35-62.
- Stainton, R. J. (2006): Contemporary debates in Cognitive Science. Malden, MA: Blackwell
  - Ch. 4 Irrational nativist exuberance. B. C. Scholz & G. K. Pullum, 59-80.
  - Ch. 5 The case for linguistic nativism. R. J. Matthews, 81-96.
  - Ch. 6 On the innateness of language. J. McGilvray, 97-112.
- Selections from the special issue of the Journal of Neurolinguistics (2012), 25, 5, 295-514: "Is a neural theory of language possible? Issues from an interdisciplinary perspective"
  - Grimaldi, Mirko: Toward a neural theory of language: Old issues and new perspectives, 304-327.
  - Schwartz, Jean-Luc, Basirat, Anahita, Ménard, Lucie, and Marc Sato: The Perception-for-Action-Control Theory (PACT): A perceptuo-motor theory of speech perception, 336-354.

- Pulvermüller, Friedemann: Meaning and the brain: The neurosemantics of referential, interactive, and combinatorial knowledge, 423-459.
- Rizzi, Luigi: Core linguistic computations: How are they expressed in the mind/brain?, 489-499.
- Guerra-Filho, Gutemberg and Aloimonos, Yiannis: The syntax of human actions and interactions, 500-514.