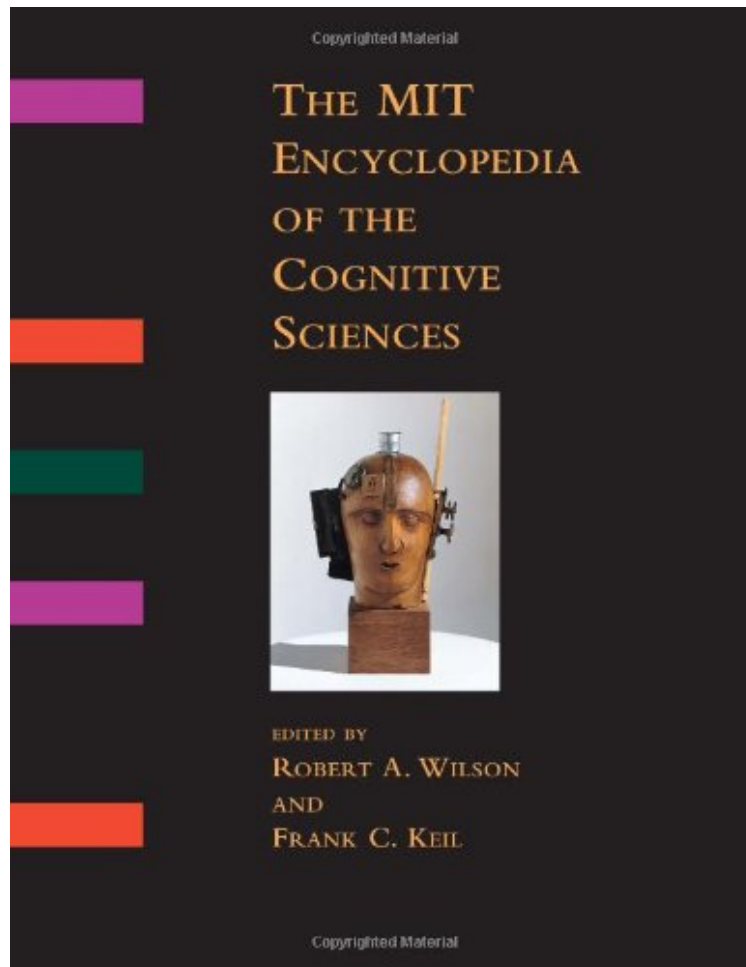


(Library ebook) The MIT Encyclopedia of the Cognitive Sciences (MITECS)

The MIT Encyclopedia of the Cognitive Sciences (MITECS)

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#526624 in Books MIT Press 1999-05-07Ingredients: Example IngredientsOriginal language:EnglishPDF #1 2.03 x 8.85 x 11.36l, 6.11 #File Name: 02622320061096 pages | File size: 42.Mb

From Brand: MIT Press : The MIT Encyclopedia of the Cognitive Sciences (MITECS) before purchasing it in order to gage whether or not it would be worth my time, and all praised The MIT Encyclopedia of the Cognitive Sciences (MITECS):

75 of 80 people found the following review helpful. Required reading for cognitive scientistsBy Eliezer YudkowskyThe MIT Encyclopedia of the Cognitive Sciences - "MITECS" - is a truly excellent book. MITECS is the book I spent four years wishing for back when I started studying cognitive science. MITECS is also a very *large* book; I've set out to read all 471 articles, and I'm currently on "Computational Neuroscience" (p. 166 of 900), although I've also read a lot of other articles as circumstances required. From that sample size, my comments:The good news: There are some truly excellent articles in this book. Microcolumns and macrocolumns, cerebellar chips, the pathways of the visual system - you can read this book and find out a hundred amazingly cool things that you never even realized you desperately needed to know. Oddly enough, MITECS is also a pretty good as an encyclopedia - if you

suddenly need to know more about vision, you'll find what you need to know in "Visual Anatomy and Physiology". (Or "Visual Processing Streams". Or "High-Level Vision". Or "Computational Vision". Or "Mental Rotation". You do need to do a certain amount of hunting, if it's a sufficiently broad subject. More than half the cerebral cortex is devoted to vision - see "Mid-Level Vision" - and MITECS reflects this fact.) MITECS *excels* as an authoritative reference; you'll almost never need to quote anything else. If you're familiar with cognitive science, you'll often laugh when you get to the end of an article and see the author's byline: "Columns and Modules" by William Calvin, "Chinese Room Argument" by John Searle, "Evolutionary Computation" by Melanie Mitchell, "Evolutionary Psychology" by Leda Cosmides and John Tooby. The bad news: If you try to read MITECS linearly, you will find that many of the articles, perhaps even a majority, are eminently skippable. (For the record, I read them anyway.) As all of the articles were written by independent individuals - none of whom could read the book first, since it didn't exist yet - there is understandably a great deal of duplication of information. Every third author feels the need to inform you that the mind is a computational information-processing system. (If I had one request to make of the hundreds of authors who write the next edition, it would be: "Skip all the introductory material and the philosophy and try to pack in as much useful detail as you can.") There are also some understandable problems with depth of coverage, made worse by the aforesaid tendency to write introductions; whenever I read an article about a topic that I had earlier studied in more detail, it really brought home the realization that each of these 471 articles tries to cover a topic about which *multiple* entire books have been written. There are several things I'd like to see in future editions of this book. First and foremost is *less philosophy* and more focus on concrete details, particularly *surprising* details, or details that have something substantial to say about how the mind works. I don't want to know what David Hume thought about causality; I want to know if anything interesting happens when research subjects are asked to reason about causality. (I must also confess myself uninterested in most of the biographical articles that form much of MITECS - but then, that's probably because I'm not using it to study history.) Finally, I would like to see a neuroanatomical index as well as a table of contents. It's already a big book, but they can afford another six pages to show a detailed neuroanatomical map, with names for the areas, and references to the appropriate sections of the book. Such a map would be an enormous help to those of us trying to build up a concrete visualization of the brain. Conclusion: This is a *really good* book. It's not so much "a good book with a few drawbacks" as "an excellent book with tremendous potential for *even more* improvement", and I mean this in all seriousness. If you're a cognitive scientist, you have basically no choice but to buy this book. If you're a student of the mind or a cognitive hobbyist, then this may not be the *first* book you buy, but you will buy it sooner or later. It's just such a great book.

Winner in the category of Psychology in the 1999 Professional/Scholarly Publishing Annual Awards Competition presented by the Association of American Publishers, Inc. and Choice Outstanding Academic Title, 2000. Since the 1970s the cognitive sciences have offered multidisciplinary ways of understanding the mind and cognition. The MIT Encyclopedia of the Cognitive Sciences (MITECS) is a landmark, comprehensive reference work that represents the methodological and theoretical diversity of this changing field. At the core of the encyclopedia are 471 concise entries, from Acquisition and Adaptationism to Wundt and X-bar Theory. Each article, written by a leading researcher in the field, provides an accessible introduction to an important concept in the cognitive sciences, as well as references or further readings. Six extended essays, which collectively serve as a roadmap to the articles, provide overviews of each of six major areas of cognitive science: Philosophy; Psychology; Neurosciences; Computational Intelligence; Linguistics and Language; and Culture, Cognition, and Evolution. For both students and researchers, MITECS will be an indispensable guide to the current state of the cognitive sciences.

.com The state-of-the-art knowledge about knowledge is contained within the MIT Encyclopedia of the Cognitive Sciences. Its 471 comprehensive entries cover topics as diverse as "Hemispheric Specialization," "Epiphenomenalism," and "Algorithms" in 1,000 to 1,500 words each, thoroughly cross-indexed and extensively referenced to launch further research. A few biographical entries are also included, highlighting such giants as Alan Turing and Santiago Ramn y Cajal. The editors selected their contributors well, assigning "Neurobiology of Consciousness" to Christof Koch and Francis Crick, for example. Even better, six longer essays introduce the Encyclopedia, each providing an overview of one of the six disciplines that overlap to form cognitive science: computational intelligence; culture, cognition, and evolution; linguistics and language; neurosciences; philosophy; and psychology. These are enormously helpful to the researcher, as they are general enough to allow easy entry but still meaty enough to be useful themselves and as pointers to specific entries. The MIT Encyclopedia of the Cognitive Sciences, while not a casual entry into the field, is an essential addition to the reference shelf for anyone seriously interested in AI, consciousness, or other aspects of natural and artificial brains. --Rob Lightner
From Library Journal
Content is king in this electronic title (known as MITECS), which is essentially an Acrobat version of the printed MIT Encyclopedia of the Cognitive Sciences. Encyclopedia content is itself beyond reproach. Six broad, extended essays set the stage, while 471 signed, crisply written topical entries include useful lists of references and further readings. MITECS's cross-disciplinary approach covers topics ranging from "ethnopsychology" to "game

theory" to "taste." But the publishers haven't exploited the opportunities afforded by electronic access on the disc. Once Acrobat Reader and Searcher software (included on the CD) are installed, you can pull up the text of the Encyclopedia and use a small navigation bar to jump from "Title," to "CIP," to "Dedication," to "Preface." When I tried to print the Preface, my command started a printout of the entire volume. (One must use the volume's page numbers to print a desired section.) Entries are indexed A-Z, and clicking on a letter brings you to the first entry for that letter. "Name" and "Subject" index buttons bring you to facsimiles of those printed index pages. The Acrobat Searcher software allows full-text keyword searching but is awkward to use. As a CD-ROM, MITECS would be enhanced by the ability to print entries easily, a better keyword searching mechanism, and by dynamic links among related entries. These features are realized in MITECS Online, a web-based product available full text to those who purchase the printed book or CD. An abstracts-only version is provided, after free registration, to the general public (mitpress.mit.edu/MITECS/). The free version is valuable in itself, as most entries include references and further reading lists. MITECS Online has a number of enhanced features over both the print and CD-ROM: it adds graphic interest with unobtrusive color and design elements and is powered by the Excite search engine. MITECS Online also features the e-mail addresses of authors (although these are not hot links) and a collection of links to other cognitive science resources on the web. The Bottom Line: Skip the CD-ROM MITECS until more functionality is added. Academic and special libraries whose collections include any of the six disciplines that overlap to form cognitive science will want the similarly priced print title and corresponding online access. Site licenses have recently become available for the online product and may be cost-effective for heavy users. Check the MIT Press web site above for details.

Beth Ann Zambella, Lamont Lib., Harvard Univ. Copyright 1999 Reed Business Information, Inc. "At last, a thorough, authoritative source for work in the cognitive sciences. Take the most important topics in the study of cognition, ask the world's top authorities to summarize the state of the art, and you have it: The MIT Encyclopedia. I have already used it to learn, to browse, to inform, to teach, and to update my own understanding. It doesn't matter which end you seek: the book will frequently be in use." Donald A. Norman, The Nielsen Norman Group; Professor Emeritus, Department of Cognitive Science, UC, San Diego; and author of *The Invisible Computer* "The Cognitive Sciences emerged in recognition of the fact that scholars and scientists in many different fields shared common problems and needed to collaborate. Now at last The MIT Encyclopedia of the Cognitive Sciences has provided a forum large enough for that interaction to occur a forum that will not only facilitate cooperation but will educate a new generation of cognitive scientists." George Miller, Professor of Psychology Emeritus, Princeton University