

Briefly Noted

The Turing Test: The Elusive Standard of Artificial Intelligence

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Dordrecht: Kluwer Academic Publishers
(Studies in cognitive systems, edited by
James H. Fetzer, volume 30), 2003,
ix+273 pp; hardbound, ISBN 1-4020-1204-7,
\$99.00, £66.00, €103.00

Alan Turing begins his 1950 *Mind* article, "Computing Machinery and Intelligence," with the following straightforward pronouncement: "I propose to consider the question 'Can machines think?'" He quickly (too quickly?) argues for "replacing" the original question with another "which is closely related to it and is expressed in relatively unambiguous words." (Please note the vagueness of the claim; what is not vague is that it is not a claim of identity.) Turing goes on to describe the new form of the "problem" in terms of an "imitation game," played with three people, a man *A*, a woman *B*, and an interrogator *C*, who may be of either sex. They are placed in separate rooms, with the only form of communication between them being teleprinter (or, to be au courant, instant-messenger clients on their desktops). *C* is to ask them questions or otherwise engage them in conversation, with the object of the game being for *C*, who knows them only by the labels *X* and *Y*, to determine which of them is a man and which a woman. Turing then proceeds to offer his replacement(s) for the original question:

We now ask the question 'What will happen when a machine takes the part of *A* in this game?' Will the interrogator decide wrongly as often when the game is played like this as he does when the game is played between a man and a woman? These questions replace our original 'Can machines think?'

And the rest is history—highly contentious history. Alas, not much to useful effect is made of (or added to) this history in the volume under review, which is a collection of articles selected from recent issues of two Kluwer journals, *Minds and Machines* and *Journal of Logic, Language and Information*. A truly unwarranted amount of space (that is, much much more than a page) is devoted

to worrying about the relation between the game as described above and a brief reprise later in the article. In the interim, Turing has given the reader a short course in computer science, that is, an introduction to Turing machines and, in particular, the idea of a universal digital machine. He goes on to give what he clearly intends to be a more precise rendering of his original replacement question:

Let us fix our attention on one particular digital computer *C*. Is it true that by modifying this computer to have an adequate storage, suitably increasing its speed of action, and providing it with an appropriate program, *C* can be made to play satisfactorily the part of *A* in the imitation game, the part of *C* being taken by a man?

This is sloppy. Aside from the singularly unfortunate choice of constant (wasn't *C* the interrogator?), we seem to have lost a player and now the part of *B*, the woman in the drama in the first description, is being played by a man. What ever happened to her?

Sloppy, yes, but the sloppiness need not be taken to raise issues about sexual identity and the central role of deceit in our mental lives. One of the five sections of the book is largely given over to much ado about this particular variety of nothing. (Take my word for it: It's enough to make one grind one's teeth.)

There are a few worthwhile pieces in the collection, in particular, characteristically sober and thoughtful overviews by Jack Copeland and by the editor. And there is absolutely nothing of interest in the collection about dialogue or conversation: the medium, after all, of the imitation game.—David Israel, *SRI International*

The contents of the volume are as follows:

1. History
 - B. Jack Copeland, "The Turing Test"
 - Ayşe Pinar Saygin, İlyas Cicekli, and Varol Akman, "Turing Test: 50 Years Later"
2. Interpretation
 - Susan G. Sterrett, "Turing's Two Tests for Intelligence"
 - Saul Traiger, "Making the Right Identification in the Turing Test"
 - Gualtiero Piccinini, "Turing's Rules for the Imitation Game"

3. Criticism

Sean Zdenek, "Passing Loebner's Turing Test: A Case of Conflicting Discourse Functions"

Bruce Edmonds, "The Constructibility of Artificial Intelligence (as Defined by the Turing Test)"

Edmund M. A. Roland, "Intelligence is Not Enough: On the Socialization of Talking Machines"

4. Defense

William J. Rapaport, "How to Pass a Turing Test"

Larry Hauser, "Look Who's Moving the Goal Posts Now"

James H. Moor, "The Status and Future of the Turing Test"

5. Alternatives

Selmer Bringsjord, Paul Bello, and David Ferrucci, "Creativity, the Turing Test, and the Better (Lovelace) Test"

Gerald J. Erion, "The Cartesian Test for Automatism"

S. Harnad, "Minds, Machines and Turing"

Form and Meaning in Language. Volume I: Papers on Semantic Roles

Charles J. Fillmore

(University of California, Berkeley)

Stanford, CA: CSLI Publications (CSLI lecture notes, number 121) (distributed by the University of Chicago Press), 2003, viii+311 pp; hardbound, ISBN 1-57586-285-9, \$70.00, £49.00; paperbound, ISBN 1-57586-286-7, \$25.00, £17.50

The linguistic theories of Charles Fillmore, developed in the 1960s in reaction to Chom-

skian generative grammar, have had a profound influence on computational linguistics that is felt to this day. His so-called case grammars were a precursor of frame-based semantic representations and of contemporary approaches to semantic roles. This volume republishes seven of Fillmore's important papers from 1968 to 1978, including the seminal "Case for Case" (1968) and "The Case for Case Reopened" (1977).—G.H.

Modes of Discourse: The Local Structure of Texts

Carlota S. Smith

(University of Texas)

Cambridge: Cambridge University Press (Cambridge studies in linguistics, volume 103), 2003, xiv+320 pp; hardbound, ISBN 0-521-78169-8, \$70.00

"This book is a partial answer to the question: what can close linguistic analysis bring to the understanding of discourse? Discourse studies have focused on pragmatic factors such as genre expectations, discourse coherence relations, and inference. In part, this has been a natural reaction to earlier, rather unsuccessful attempts to apply the techniques of linguistic analysis beyond the sentence. . . . I attempt to find the right balance here, at least in part. I propose a local level of discourse, the Discourse Mode, which has linguistic properties and discourse meaning. I posit five modes: Narrative, Report, Descriptive, Information, and Argument."—*From the author's introduction*