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do so. But I can imagine some of the intended audience ending up somewhat disoriented — "Didn't we already do that? Or did we? Is there any real difference between those theorems, or is this just tinkering?" The danger in a spiral construction for a book is that some readers may feel that it just goes around in circles.

Another possible source of disorientation is the nonuniform labeling of results. For example, pages 57–64 feature, in order: Theorem G, Theorem A, Theorem B, Theorem 1, Lemma 1, Corollary, Theorem 1 $^{\circ}$ , Lemma  $^{\circ}$ , Theorem 2, Theorem 3 $^{\circ}$ , Theorem A', Lemma 2, and Theorem A\*. And there is no index of theorem names to help the reader keep track of this motley collection.

The book also contains several glitches that should have been caught at the copyediting/proofreading stages. These range from the merely annoying (e.g., the occasional scrambled sentence) to the potentially more serious (e.g., the disjunctions in the statement of Theorem 3 on page 94 should be conjunctions.)

Theorems is well worth reading — and even obtaining for one's own (unlike many other of the publisher's monographs, this one is not unduly expensive.) Although it contains many exercises, the book seems to be written more for self-study than for use as a classroom text, and it serves that purpose well. In addition, besides providing an excellent introduction to incompleteness and giving old hands at logic some food for thought, Smullyan has another aim. Quoting from the Preface one last time, "this volume...was also intended as a preparation for our sequel, Recursion Theory for Metamathematics, in which we explore in depth the fascinating interrelations between incompleteness and recursive unsolvability." I am eagerly awaiting the sequel's appearance.

Katalin G. Havas, *Thought, Language and Reality in Logic*, Budapest, Akadémiai Kiadó, 1992. Translation by J. Kovács & M. Gulyás, revised by B. Dajka, of *Gondolkodas, nyelv, valóság a logikában*, Budapest, Akadémiai Kiadó, 1983.

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