

## Additional Errata for AIMA, Second Edition

See the AIMA website, [aima.cs.berkeley.edu](http://aima.cs.berkeley.edu), for a list of errors already found by other people. I will use **(BUG)** for those below that matter, as that web site does.

### Clarifications

- p 61 Figure 3.1 caption. I think that the caption suggests a looping structure within the algorithm but the algorithm in fact needs to be called repeatedly, the loop being outside the listed algorithm. I would clarify the caption.
- p 301 line 11. I think that “substitutions [of constants] for variables” is intended, although the line says “substitution ... with variables,” which in my dialect of English is backwards.
- p 509 versus 979: We pronounce #P as “sharp P” because that’s its syntax, but when we are thinking of its meaning, we pronounce it “number P.” So both are correct.
- (BUG)** p 569 Figure 15.17 caption. /p/ is an English phoneme containing two phones, [p] and [ph], as the text under this figure says clearly. Similarly for the other English phonemes. So I would have written the table with slashes and called them the phonemes of English. But who’s to disagree with DARPA? DARPA elects to pick one phone out of each English phoneme as a representative phone and calls those the phones of the English language.
- (BUG)** p 854 line 13. P(FIE) → P(EIF)  
in the phrase “first we use the translation model P(EIF) to find...”
- p 778. The delta rule here is called Hebbian learning on p. 16. Widrow and Hoff built on Donald Hebb’s work in Psychology. It’s the same rule.
- (BUG)** p 791 What is here called a “declarative” speech act is called “performative” by linguists. The word “declarative” is reserved to contrast with “interrogative” and “imperative” so as to distinguish statements, questions, and commands.
- p 846 n. 3. I disagree with the reason that an “inverted index” is called “inverted.” In the early days of the programming language Fortran, subscripts and loop control variables were stored in registers called “index registers” because “index” was a synonym for “subscript” among mathematicians. Thus if we have a[1]=“boy”, a[2]=“girl”, and so on, the 1 and 2 are indices (unlike the things at the end of books, which pluralize as indexes). The map (or array) named ‘a’ that maps from index to string is direct. The map in the other direction from string to subscript is inverted in the sense that the words form the entry into the table, and of course “boy” may have several indices listed in the inverted index.
- (BUG)** p 950 line 4, gravity → mechanics  
Quantum gravity has nothing specifically to contribute.

### Typography

- The “fi” ligature has an un-called for white space after it twice on p. 219 in the words “fi xed” and “specifi c,” and in the word “quantifi ers” in footnotes #6 on p. 251 and #7 on p. 252. Then line 12 of p. 849 has “gol f” instead of “golf”.
- p 450 Figure 12.23. Syntax: Either PRECOND and EFFECT are separated by commas or they are not. I’d add a comma after the PRECOND in the Hit action right before EFFECT, or remove the comma in the Go action.  
Syntax: I’d move the parenthesis that balances the one in “INIT(“ from “Baseline)])” to after “Partner(B,A)”.
- p 702 Figure 19.12 caption. Change NEW-LITERAL to NEW-LITERALS.
- p 741 Figure 20.20. The shading really got out of hand, escaping not only the right hand side of the separating line, but even escaping the whole Figure into the page heading!
- p 811 In Figure 22.15, there are two lines that don’t connect that should connect.
- p 828 The Russian linguist Igor Melčuk’s name is anglicized as “Melčuk” not as “Melćuk.” (Similarly in the Bibliography.)
- p 832 A keyboard icon belongs in front of Exercises 22.10 and 22.11.
- p 933 line -11, some its → some of its
- p 1007 Barbara Grosz’s first initial should be upper case: b → B
- p 1015 The two references by Janet Kolodner are out of order, since the Bibliography is sorted within author alphabetically by title.
- p 1039 If Van is capitalized, then the last name is properly emboldened; but in 9 cases, van and von begin names that are not properly emboldened.

### Omissions

- p 979 3-SAT: although satisfiability is defined on p. 211, the notion of k-satisfiability is nowhere defined, so 3-SAT is a mystery. See en.Wikipedia.org for a definition of k-SAT.
- p 1038 Turing (1948). The source of this paper is cited as (Ince, 1992), but no entry for Ince 1992 is found in the Bibliography.