

Errata

Errata in W. Hodges, *Logic*, 2nd ed. (NB, the sections we are going to read are: 1, 2, 3, 4, 5, 6, 7, 8, **9**, **10**, **11**, **16**, **17**, 18, 19, **20**, **21**, 22, 23, **26**, 30, **34**, **35**, 37, **39**, **40**. Those printed in bold type (and underlined) are core sections.)

1. p. 26 '... it was first invented in the 1930s by the German mathematician Gerhard Gentzen.' Indeed, the roots of the tableau method lie in Gentzen's sequent systems, but these systems do not themselves give us a tableau method (cf. the other remark on Gentzen, p.176). Actually, the method of 'Semantic Tableaux' was introduced by the Dutch logician Evert Beth ('Semantic Entailment and Formal Derivability', 1955) and about the same time a similar method was introduced by Jaakko Hintikka ('Form and Content in Quantification Theory', 1955). Another format was given to these tableaux by Raymond Smullyan and used in textbooks by Richard Jeffrey (*Formal Logic: Its Scope and Limits*, 1967) and by himself (*First-Order Logic*, 1968). It is the format used in the present book.
2. p. 155 In figure 33.1 there are two double arrows missing. These should be drawn along the diagonals of the square in the bottom-right compartment of the circled area. (This correction pertains to a section that was not selected for this course.)
3. p. 179 In the paraphrase of 37.14 the sign for conjunction (\wedge) should be replaced by one for material implication (\rightarrow). Notice that in 37.13 no such replacement should be made.
4. p. 241 (Exercise 20B. 1) At the bottom of the tree, there are two underlined statements: 'Mr Zak is a C.I.A. spy' and 'Mr Zak is a Russian spy'. Both should be preceded by a sign for negation (\neg).
5. p. 242 (Exercise 20B. 3) The rightmost branch of the tree should be closed: put a line under 'book last Tuesday.' at the right.
6. p. 243 (Exercise 20D. 1) The rightmost branch of the tree should be closed: put a line under 'are in danger.' at the right.
7. p. 249 (Exercise 21C. 2) Before $\neg\neg P$, there should be no tick (\checkmark).
8. p. 250 (Exercise 21C. 3) There are two occurrences of $\neg\neg R$ and both should be preceded by a tick (\checkmark). The same holds for the rightmost (the not underlined) occurrence of $\neg\neg S$.
9. p. 268 (Exercise 39A. 6) The paraphrase should be:

$$[Eb\wedge\exists x[[Ex\wedge\neg x=b]\wedge\neg Sbx]]$$
 (Exercise 39B. 6) Replace the sign for conjunction (\wedge) by one for disjunction (\vee).
10. p. 270 (Exercise 40B.) On line 5, replace $\forall x$ by $\forall y$.
11. p. 272 (Exercise 40D. 3) On line 12 (on the right), replace $[c=b\leftrightarrow Pd]$ by $[c=b\leftrightarrow Pc]$.