This page contains corrections to *Introduction to Non-Classical logic: From If to Is*. Note that the corrections marked † were made in the second printing of the book, and those marked †† were made in the fourth printing of the book. If you think that you have found something else that should be listed, please contact Graham Priest at g.priest@unimelb.edu.au. Corrections are listed under section numbers.

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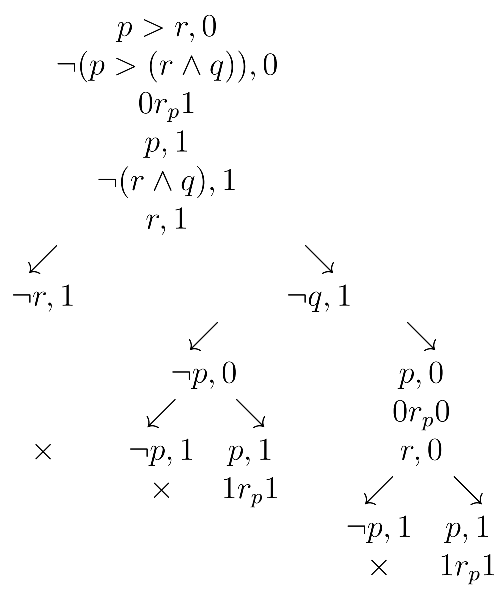
††3.2.6, fn 1. ‘Consider any world, w,’ should be ‘Consider any world, w.’

††4.10.3 In l. 3 of the proof, the first occurrence of ‘i’ should be ‘w_i’.

†5.5.5 The tableau of this section is incomplete. The second rule of 5.5.3, for $i = 1$, has not been applied to the second branch from the left. The correct tableau is as follows:



††The last line of the section should read ‘Only three of the five branches close.’

††5.12 In Ex. 8, there are two parts (d). The second should be (e).

††6.10 In Ex. 5 all occurrences of ‘$\neg$’ should be ‘$\not\rightarrow$’.

††7.12, p. 140, l. 2. ‘many valued’ should be ‘finitely many-valued’.

††7.14, l. 2. The sentence should start ‘Call a many-valued logic in the language of ...’ . (This was changed in error in the second printing.)

††8.4a.3, l.1: ‘LP’ should be ‘RM_3’.

†8.5.4 In the third displayed rule, ‘$\wedge$’ should be ‘$\vee$’.

†9.7.9 Footnote 7, first sentence, should read: ‘For the first, what we show is that for every formula made up from the propositional parameters and conditionals occurring in A—and so, in particular, A—the result holds.’

††9.7.14 In fn 9, the penultimate line should be hard against the left margin, not indented.

††9.11, Ex. 5 should read: ‘Repeat problems 2-4 with K_* and N_*—except that 3(e) *is* valid in K_*. (Show this instead.)’

††9.11 In Ex. 10, l. 1, delete the word ‘inferences’.

††10.3.1 Replace the second and third sentences after the displayed tableau rules with: ‘In the second rule, j and k are numbers new to the branch, and are distinct unless x is 0, in which they are the same—as required by one half of the normality condition.

††10.3.2 Delete the brackets around the first conditional in l. 1, and the conditional in the first, fifth, and sixth lines of the tableau.

Immediately after 10.3.4, insert:

> 10.3.4a Note that if an inference does not involve negation, one can forget all about the #-worlds in a tableau. In reading off a counter-model, simply set each w_i^* to w_i.

††10.5.6 (p. 206). The matrix entries at locations $\langle 1', b\rangle$ and $\langle 1', n\rangle$ should be in italics.

††10.11 In Ex. 5 replace the last sentence with ‘Then in the resulting conditional, use permutation on the antecendent.’

††10.11 Delete part (e) of question 9. (The inference always preserves the designated value in the logic. The inference is invalid in R, however. It is not difficult to show this with the logic of 10.5.6.)

††11.5.1 Replace the two final axioms with:

$((A \to B) \to B) \to (A \vee B)$
$(A \vee B) \to ((A \to B) \to B)$
$(A \wedge B) \to \neg(\neg A \vee \neg B)$
$\neg(\neg A \vee \neg B) \to (A \wedge B)$

†11.5.7 The sentence in brackets on l. 2 should read: ‘Hence, R is not a sub-logic of Ł$_\aleph$.’

††11.5.9 Replace the last five sentences with:

The first three axioms and the last two are easy. If we can prove the fifth and sixth, the fourth follows from $(A \vee B) \to (B \vee A)$, which is easy to prove. Axiom five is obvious, and axiom six is left as an exercise.

††11.7a.1, fn 10: ‘(2000)’ should be ‘(1998)’.

11.10, Question 9: The hints, as stated in the text, are not as helpful as they might be (and in some printings, Σ is incorrect).. Replace with:

Let $A * B$ be $\neg A \to B$. Show that (α) given any interpretation of $\L_\aleph$, $v(A * B) = Min(1, v(A) + v(B))$. Let A^1 be A, and A^{n+1} be $A^n * A$. Show that (β) $\nu(A^n) = Min(1, n.v(A))$. Let $\Sigma = \{\neg p \to q, p^n \to q : n \geq 1\}$. Show that ($\gamma$) in $\L_\aleph, \Sigma \models q$. (Hint: If $v(p) > 0$, then we can make $n.v(p) > 1$ by taking n to be large enough.) Show that (δ) if Σ' is any finite subset of Σ, $\Sigma' \not\models q$. (Hint: there must be a largest n such that $p^n \to q$ is in Σ'. Choose a v such that $v(p) < 1/n$.) Infer, from the last question that (ϵ) $\L_\aleph$ has no axiom system that is sound and complete (with respect to arbitrary sets of premises).

††11.10 Question 10, l. 1: ‘11.7a7’ should be ‘11.7a.7’.

††11.10, Question 10: replace the content of the first parentheses with 'soundness only'. (Completeness is too hard for one hit, and deferred to questions 12 and 13 below.)

††11.10 Add the following questions:

11. *Show that the Łukasiewicz, product, and Goedel t-norms *are* t-norms; that is, that they satisfy the conditions of 11.7a.2.

12. *Show that in Łukasiewicz logic $f_\circ(x, y)$ may be defined as $f_{\neg(}f_\rightarrow(x, f_\neg(y)))$.

13. *Show that the axiom system for BL plus $\neg\neg A \rightarrow A$ proves everything that the axiom system for Ł of 11.5.1 can prove. (Hint: Use the previous question to formulate BL without $\circ$. You will need to prove the substitutivity of equivalents for BL. This is relatively simple, since the only connective is then $\rightarrow$.) Since that system is theoremwise complete, it follows that this axiom system is theorewise complete too. (Soundness was already proved in Question 10, 11.7a.10.)

13.3 Simpler tableau rules have been found by Marylinn Johnson. The simplifications carry over to the tableaux of chs. 15 and 20. See Johnson. M. (2015), 'Tree Trimming: Four Non-Branching Rules for Priest's Introduction to Non-Classical Logic', *Australasian Journal of Logic* 12, https://ojs.victoria.ac.nz/ajl/article/view

††15.10, l. 4: 'Barcan (1962)' should be 'Barcan (1961)'.

15.12, ex. 3: In parts (a) to (d) replace every occurrence of A with 'Px'.

††23.4.4 The eight occurrences of the 'i's in the tableau rules should be 'α's.

††23.4.7 In the displayed counter-model '$\forall x Px \rightarrow \forall x Qx$' should be '$\exists x \neg Qx \rightarrow \exists x \neg Px$'.

†p. 590, Dummett (1975a) should be: 'The Philosophical Basis of Intuitionist Logic*'*.

††p. 598, Restall and Roy has now appeared: *Journal of Philosophical Logic* 38 (2009), 333-341.

††p. 600, Skolem (1920): 'kombinatorische' for 'kombinatorishe', 'mathematischer' for 'mathematisher'; and 'dichte' for 'dechte'.

††p. 600, Skolem (1957): ‘Komprehensionaxiom’ for ‘Komprenhensionaxiom’.

††p. 605: Interchange the page references for the two ‘Smullyan’s.