

ERRATUM

to: *How Far Can Hume's Is-Ought Thesis be Generalized*, JPL 20, 1991, 37–95 by: Gerhard Schurz.

(1.) In the proof of Theorem 2, direction \Leftarrow , p. 74, I introduce the is-ought separated frame-double $F^* = \langle W^*, R^*, S^* \rangle$ with $W^* = W \cup W'$, and the model M based on F^* such that $\pi^0 A$ is false at α in M . I forgot to mention that I presuppose that the world $\alpha \in W^*$ belongs to the subset W (cf. the 6th line from bottom). To guarantee this, one has to ensure – contrary to what is said in the 8th line from the beginning of the third paragraph – that M is an is-ought separated double. This can be done in two steps: (i) one takes any model M' based on a frame for L which makes $\pi^0 A$ false at some α in M' , and (ii) one lets M be the is-ought separated double of M' : $\pi^0 A$ will then be false at α in M by Lemma 10, M will be based on a frame for L by the assumption that L is characterized by $\text{Sep}(F_L)$, and $\alpha \in W$ will hold (by the construction of M out of M' , see def. 10).

On p. 75, last paragraph, I claim that the proof of Theorem 2, direction \Leftarrow , presupposes only the weaker condition that the frame F^* is any is-ought separated frame (not necessarily a 'double'). This claim is wrong, because of what was said above. Therefore, also my claim that "if L is characterized by a class of is-ought separated frames, then GH holds in L " is wrong; it is correct only if the class consists of is-ought separated frame-doubles.

(2.) The proof of Proposition 2 has to be modified as follows. In step (B), instead of the formula P_{SAT} one has to take the infinite formula set $P_{\text{SAT}} := \{A \in \mathcal{L}^{\alpha 1} \mid \mathfrak{R}(A) \subseteq \mathfrak{R}(P_N), \varepsilon A \in \mathbf{aX}d\emptyset 1\}$, where ε is the substitution function from step (1.). Assume that P_{SAT} is satisfied in a given a.1-model M at some world α . Then:

(*) For every $\beta \in W^M$ which is R -reachable from α there exists an a.d.1-model M' (based on an $\mathbf{aX}d\emptyset 1$ -frame) and a world β' in M' such that for each substitution instance $At_i[y/x](x, y \in \mathcal{V})$ of any of the atomic sentences At_1, \dots, At_n the following holds: $(M, \beta) \models At_i[y/x]$ iff $(M', \beta') \models \varepsilon At_i[y/x] := \text{OA}_i[y/x]$.

For otherwise, there exists a finite conjunction Π of substitution instances of At_i -formulas which is true at β in M , although $\varepsilon \Pi$ is $\mathbf{aX}d\emptyset 1$ -unsatisfiable

and hence (by completeness) $\mathbf{aXd\emptyset 1}$ -inconsistent. This contradicts the assumption that $\mathbf{P_{SAT}}$ is satisfied at α in \mathbf{M} and hence (because $\mathbf{P_{SAT}}$ is closed under necessitation) satisfied at every β in \mathbf{M} which is \mathbf{R} -reachable from α .

The claim (*) is stronger than that in step (B) on p. 80; it covers not only all \mathbf{At}_i -formulas but also all of their substitution instances. This is needed for getting the induction step on quantifiers (1.3) on page 82 through – in the original version, without the stronger claim (*), it would not hold.

The two cases of step (C) are spelled out with $\mathbf{P_{SAT}}$ similar as before: (C1): $\mathbf{P_{SAT}} \vdash_{\mathbf{aX1}} (\mathbf{D} \rightarrow \mathbf{P_N})$ or (C2): $\mathbf{P_{SAT}} \not\vdash_{\mathbf{aX1}} (\mathbf{D} \rightarrow \mathbf{P_N})$. If case 1 were true, then $\vdash_{\mathbf{aX1}} \mathbf{P_{SAT}} \rightarrow (\mathbf{D} \rightarrow \mathbf{P_N})$ would hold for a conjunction $\mathbf{P_{SAT}}$ of finitely many elements of $\mathbf{P_{SAT}}$. We argue as in the last paragraph of p. 80 that this is impossible. Hence by frame-completeness of $\mathbf{aX1}$ there exists a frame-based model and a world in it verifying $\mathbf{P_{SAT}}$ and \mathbf{D} and falsifying $\mathbf{P_N}$ – and we continue as in case (C2) on p. 81.

(3.) On p. 84, line 5 from bottom, the semantic condition for the logic $\mathbf{aT(B \vee 4)0}$ is slightly mistaken. The right condition is this: for all α, β, γ and $\delta \in \mathbf{W}$: either $(\mathbf{R}\alpha\beta \rightarrow \mathbf{R}\beta\alpha)$ or $(\mathbf{R}\alpha\gamma \wedge \mathbf{R}\gamma\delta \rightarrow \mathbf{R}\alpha\delta)$.