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CORRIGENDUM TO "FIXED POINT ALGEBRAS"

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I would like to make a few corrections in, and additions to, my exposition [Bull. Amer. Math. Soc. (N.S.) **6** (1982), 317–356].

Typos. Originally all my corners ($\ulcorner$, $\urcorner$) were typeset as little T's. The in-house proofreader caught all but a few of these and I caught some more; but it seems these were corrected while I did my proofreading and the typesetter didn't notice the new ones I had marked in proof. Thus

p. 318, line 17: "$^{\mathrm{T}}\varphi^{\mathrm{T}}$" should be "$\ulcorner\varphi\urcorner$".

p. 323, line 2: Ditto.

p. 353, line −14: "$^{\mathrm{T}}0 = 1^{\mathrm{T}}$" should be "$\ulcorner 0 = 1\urcorner$".

There are also:

p. 337, line 8: "$\tau(s+t)$" should be "$\tau s + \tau t$".

p. 355, Bibliography, entry 1: "Informackk" should be "Informacii".

p. 356, Bibliography, entry 38: "model" should be "modal".

While the latter is an obvious oversight, the former was extreme stupidity on my part: I had simply copied the title from another source without thinking.

Grammatical howlers. These are most embarrassing.

p. 328, first paragraph following Theorem 3.6: Replace "Happily" by "Fortunately".

p. 337, first sentence of §4: "Doubtlessly" is no doubt not a word. This is obviously not the paper to make the invidious J. Martin Hyland, who called me the worst enemy the English language has, eat his words.

Mathematical. Fortunately, I can happily report that I have only slight expansions rather than corrections to make:

Lemma 4.21, described just prior to Lemma 4.19 as properly belonging in the next section, is more relevant to §4 than I had realised. Using it, the classification of FPA's over the 4 element boolean algebra can be established by a shorter argument than that given via Lemma 4.18. (Also, particularly in conjunction with the algorithm underlying the representation theorem of the next section, it can be exploited in analysing the structure of other small FPA's.)

I have been asked for the example cited on p. 353 of a theory T for which $(A_T; \tau)$ shares the equational, but not the full universal, theory of $(A_{\mathrm{PA}}; \tau)$. It is fairly easy to describe: $T = \mathrm{PA} + \mathrm{Pr}_{\mathrm{PA}}(\ulcorner\neg 1-\mathrm{CON(PA)}\urcorner)$, where $1-\mathrm{CON(PA)}$ is the single sentence expressing the 1-consistency of PA. Visser's observation shows $(A_T; \tau)$ to be equationally generic; Löb's Theorem shows this algebra not to satisfy $\forall x(\tau x = 1 \supset x = 1)$.

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