

**ERRATUM FOR  
UNIFORM PROOFS AS A FOUNDATION FOR  
LOGIC PROGRAMMING**

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A. Felty has pointed out an error in the proof of Lemma 11 in the paper “Uniform Proofs as a Foundation for Logic Programming” (*Annals of Pure and Applied Logic*, 1991 (51), 125–157). The proof is based on a claim of the following sort: If  $\Delta$  is an arbitrary set of  $D$ -formulas and  $G'$  is a  $G$ -formula such that  $\Delta \longrightarrow G'$  has an  $\mathbf{M}'$ -proof of height  $h$ , then (i) if  $G' = G_1 \wedge G_2$ , the sequents  $\Delta \longrightarrow G_1$  and  $\Delta \longrightarrow G_2$  have  $\mathbf{M}'$ -proofs of height less than  $h$ , (ii) etc. This claim is not correct, the sequent

$$Pa \supset Q, \forall x.Px, R \longrightarrow Q \wedge R$$

providing a counterexample. This sequent has an  $\mathbf{M}'$ -proof of height 3 (the last inference rule in this proof being  $\supset$ -L), but  $Pa \supset Q, \forall x.Px, R \longrightarrow Q$  does not have an  $\mathbf{M}'$ -proof of height less than 3.

However, Lemma 11 is still true. In constructing its proof the measure in the claim mentioned above needs to be changed. In particular, the measure of the height of a proof must be replaced by the size of a proof, the latter measure being a count of the number of occurrences of sequents in the proof. The outlined proofs of the claim are correct if this measure is used instead.