

# Corrigendum to 'Effect-Driven QuickChecking of Compilers'

March 28, 2018

1. In Theorem 3.6 (PRESERVATION AND PROGRESS) the preservation part needs to be generalized from the empty type environment  $\cdot$  to any type environment  $\Gamma$  in order to be applicable in Theorem 3.8 and Lemma 3.14. (The soundness assumption about primitives is updated accordingly)
2. The text of Lemma 3.11 (MULTI-STEP DIAMOND PROPERTY UP TO EFFECTS) should read

If  $e \xrightarrow{\eta_1} e_1 \xrightarrow{\eta_2} \dots \xrightarrow{\eta_n} e_n$  and  $e \xrightarrow{\eta'_1} e'_1 \xrightarrow{\eta'_2} \dots \xrightarrow{\eta'_{n'}} e'_{n'}$ , then there exists traces  $e_n \xrightarrow{\eta_{n+1}} \dots \xrightarrow{\eta_m} e_m$  and  $e'_{n'} \xrightarrow{\eta'_{n'+1}} \dots \xrightarrow{\eta'_m} e'_m$  such that  $e_m = e'_m$  for some  $m \leq n + n'$

In addition we have fixed a case in the full version's proof of Lemma 3.12 (DETERMINISM OF RUN-TIME EFFECTS). The change does not affect the validity of the original lemma.

In the authors' full version available at

<http://janmidtgaard.dk/papers/Midtgaard-a1%3aICFP17-full.pdf>

the article's main text and the accompanying proofs have been corrected.

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