

Errata

p259, Exercise 8.2.5: The root condition for rooted weak bisimilarity is stated wrongly. It should read as follows:

Two transition systems s and t in S are *rooted weak bisimulation equivalent* or *rooted weakly bisimilar* if and only if there is a weak bisimulation relation R on S with $(s, t) \in R$ such that

- (a) for all states $s' \in S$, whenever $s \xrightarrow{\tau} s'$, then there are states t_1 and t' such that $t \rightarrow t_1$, $t_1 \xrightarrow{\tau} t'$, and $(s', t') \in R$;
- (b) vice versa, for all states $t' \in S$, whenever $t \xrightarrow{\tau} t'$, then there are states s_1 and s' such that $s \rightarrow s_1$, $s_1 \xrightarrow{\tau} s'$, and $(s', t') \in R$;

These two conditions replace the four conditions mentioned in Exercise 8.2.5. They strengthen the requirements for a weak bisimulation relation by requiring that initial τ -steps of one process are matched by *at least one* τ -step of the other process.

(Thanks to Roberto Gorrieri for observing this mistake.)

p289, Fig. 8.11: The upper-right transition in Fig. 8.11 has two τ -labels, where it should have only one.