

# Some more errata to lecture notes and excercises

## Theory of Concurrency

\* = not too important

\*\* = more important

### Remarks about the lecture notes

- \* at the bottom of page 43 and at the top of page 44:  
there exists a reachable configuration  
instead of  
there exists a configuration
- \* in the second line of the proof of Lemma 48 (on page 49), the condition  
such that  $C \cap S \in \mathbb{C}_{M'}$   
seems to be useless
- \* in the second line of the proof of Lemma 78 (on page 66), I would say  
with  $t_1, t_2 \in U$  and  $p_1 \neq p_2$   
instead of just  
with  $t_1, t_2 \in U$   
although I admit that it follows from the hypothesis  $p_1 F^+ p_2$ .
- \* in the proof of the new Lemma 82 (in the errata), from right to left, the introduction of the element  $z$  should be after the assumption  $x_i \in P$  is made. Moreover, in this case, it is worth mentioning that by Definition 73(1),  $z \neq x_{i+1}$ .
- \*\* in the new proof of Theorem 83(1) (in the errata),  
Theorem 4.9(3)(i)  
should be  
Theorem 49(3)(i)  
and similarly for  
Theorem 4.9(3)(ii)
- \* in the new proof of Theorem 83(1) (in the errata), I would say  
Since  $M$  contains exactly one element ...  
instead of  
Since  $M$  contains at most one element ...
- \*\* in the new proof of Theorem 83(1) (in the errata), the last line should end with  
 $y \in L$   
instead of  
 $y \in X_M$ .
- \* in the first line of the proof of Theorem 114 (on page 90), I would skip the  $\exists$  symbol
- \*\* on page 117,  
necessary condition  
should be  
sufficient condition  
(two times).

- \* in the 4th line of page 136,  
 $S$  is a subsystem  
should be  
 $S$  determines a subsystem
- \* in the last but one line of page 136, I would say  
each token at a certain place  
instead of just  
each token
- \*\* Definition 202 (on page 139) should probably start with  
Let  $M = \dots$  be a marked graph.  
instead of  
Let  $M = \dots$  be a P/T system  
because in a marked graph, it is more natural to compare  $p_i^\bullet$  and  ${}^\bullet p_{i+1}$ .
- \*\* on page 144,  
 $S$  can never get to another configuration  
should be  
 $M$  can never get to another configuration

## Remarks about the exercises and their solutions

- \* in the solution of exercise 5.6(b), in the 6th line of page 10, the implication  
This means that  $C'[t]_M D'$ ,  
is a bit too fast for me. I would say  
This means that there exists  $C'' \in [C']$  and  $D'' \in [D']$  with  $C''[t]_M D''$ ,  
and then proceed with  $C''$  instead of  $C'$ . This way you stay closer to the definition  
of  $F'$ .
- \*\* solution to exercise 6.6(d) should be  
 $\{c\}$   
instead of  
 $\{c, d\}$
- \* statement of exercise 7.5 should end with  
whether or not  $M$  and  $M_i$  are lpo-equivalent.  
instead of  
that  $M$  and  $M_i$  are lpo-equivalent.

Rudy van Vliet, 2007.