Example exercise 5

Tuesday, 28 April 2020 18.16

Find a distinguishing formula for the CCS expressions:

$A = a.a.Nil + a.b.Nil$

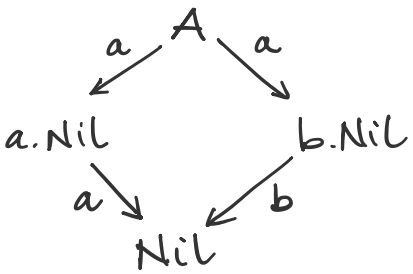
$B = a.(a.Nil + b.Nil)$

Solution: A possible distinguishing formula (not the only one) for the processes A and B is

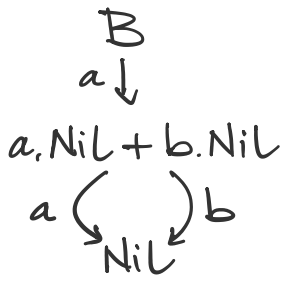
$$\langle a \rangle [b] ff$$

Intuitively meaning "there exists an a-transition leading to a state with no b-transitions".

Indeed, we have that



$A \models \langle a \rangle [b] ff$



$B \not\models \langle a \rangle [b] ff$