

a ranked alphabet

arity 2



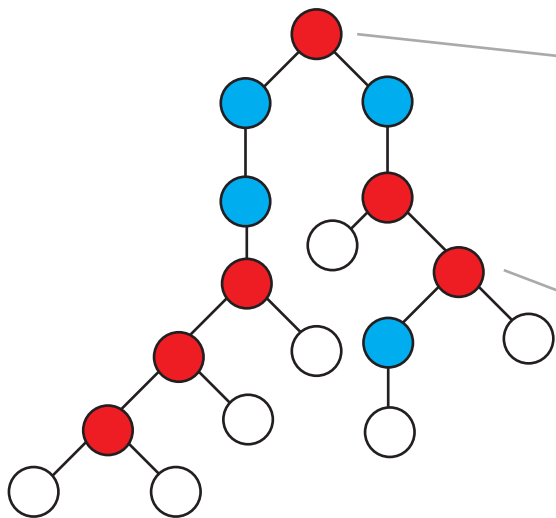
arity 1



arity 0



a tree



this node has a label of arity 2,  
and therefore it has 2 children

this node is child 2  
(children are ordered)



A tree  $t$  over  $\Sigma^{[2]}$



$\text{unfold}_1(t)$



$\text{unfold}_2(t)$





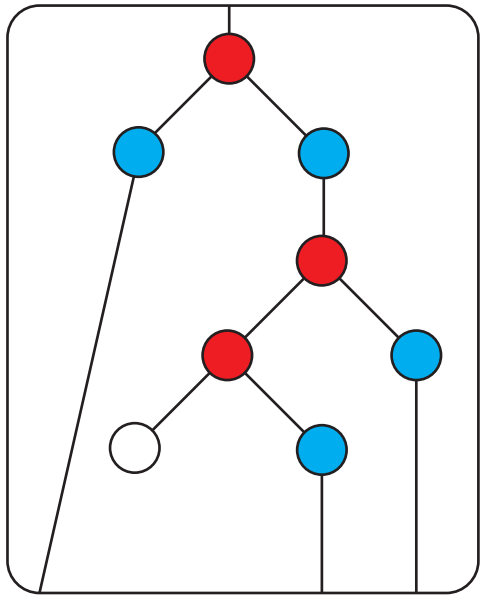
$t$



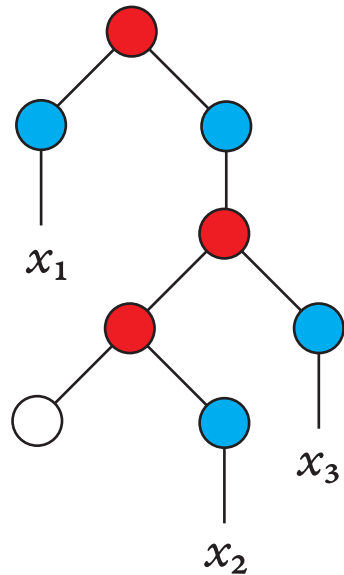
substitute( $t$ )

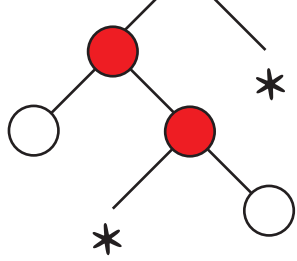




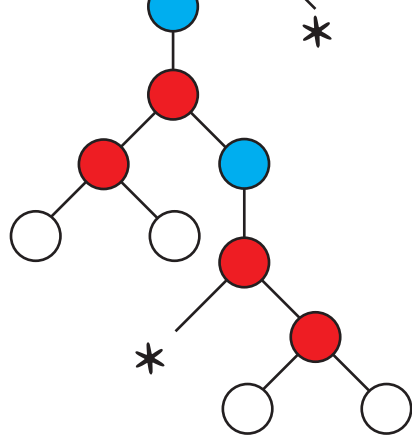


is the same as this term

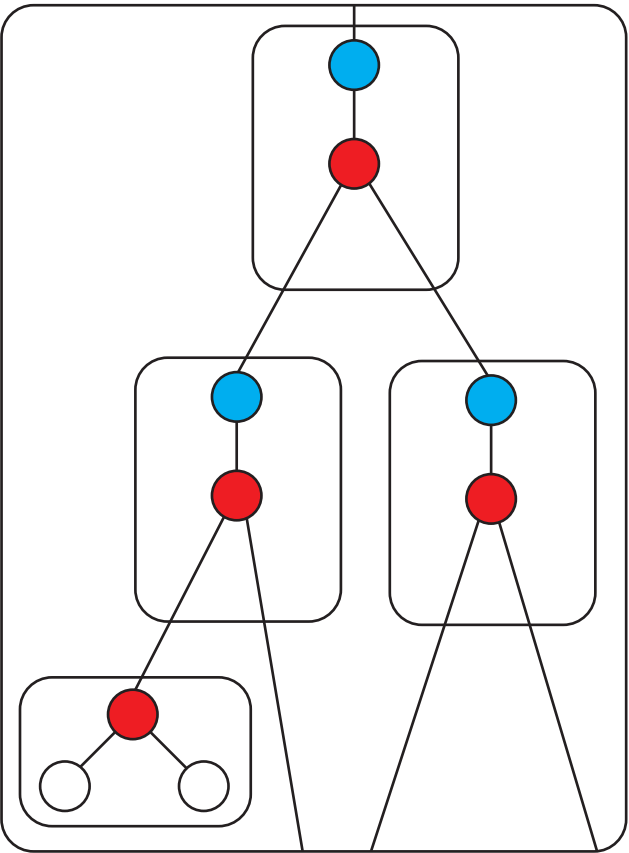




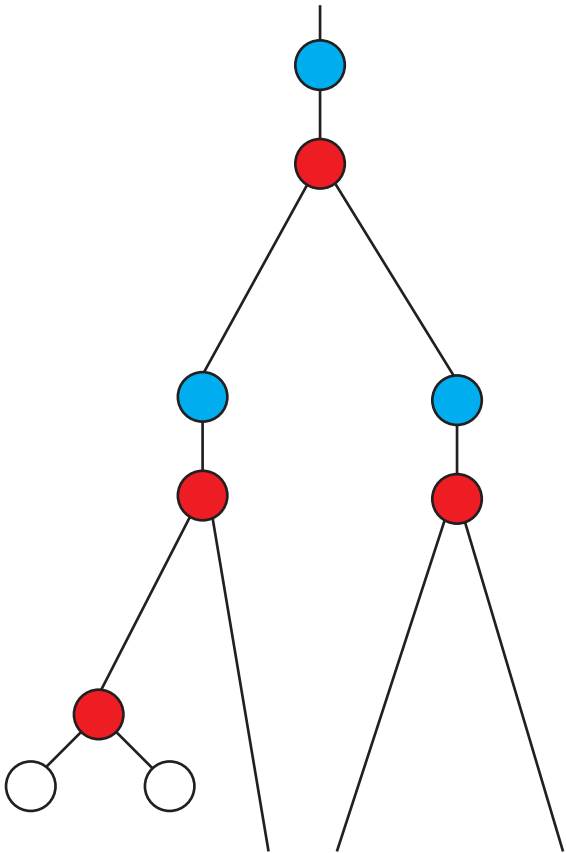
$\mathsf{T}f$   
 $\mapsto$







$\mapsto$





a term



ancestor equivalence



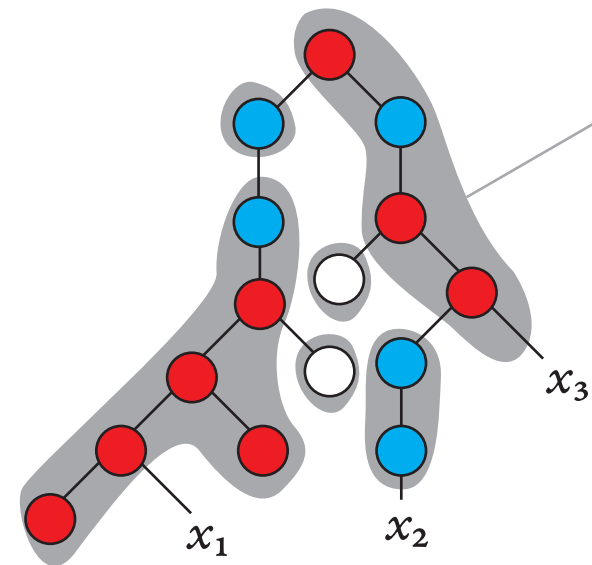
descendant equivalence



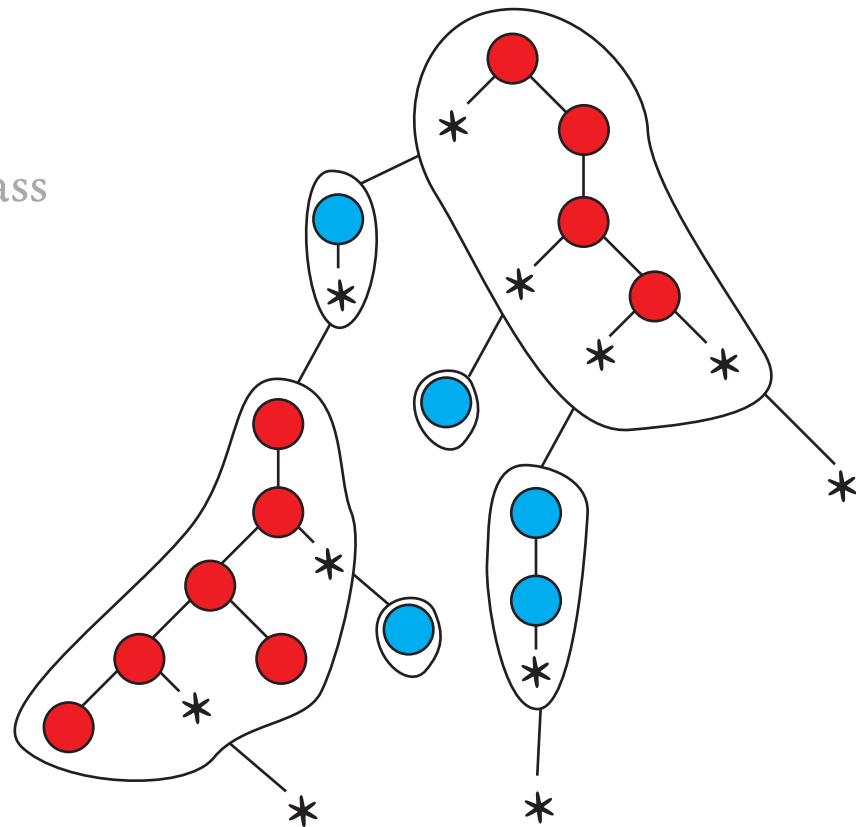




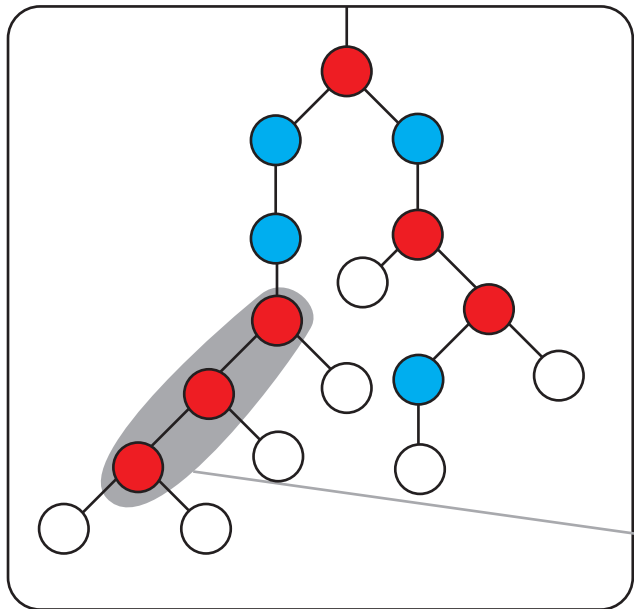
a factorisation equivalence



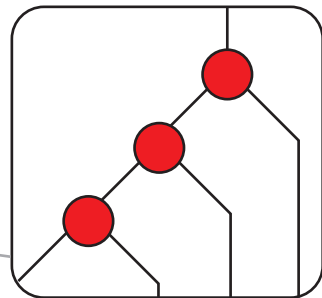
an equivalence class



a tree



a factor of the  
tree, viewed  
as a term







input alphabet

arity 2



arity 1



arity 0



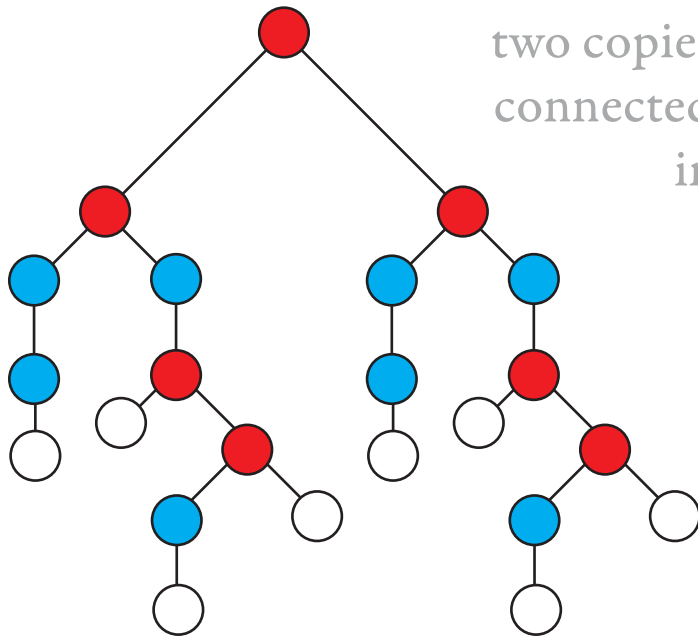
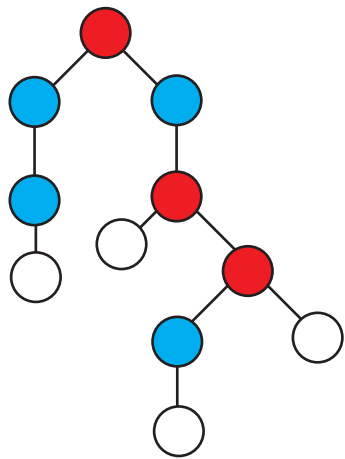
output alphabet

arity 2



arity 0





two copies of the input tree,  
connected by a binary node  
in the root





input alphabet

arity 1

arity 0

output alphabet

arity 0

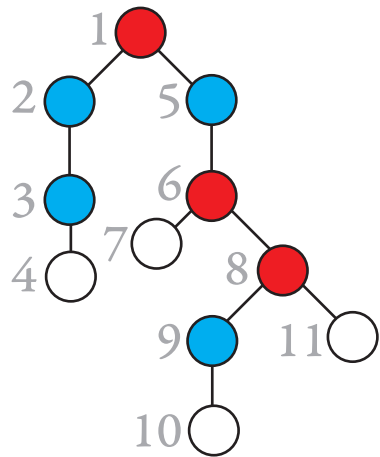
arity 0

arity 0

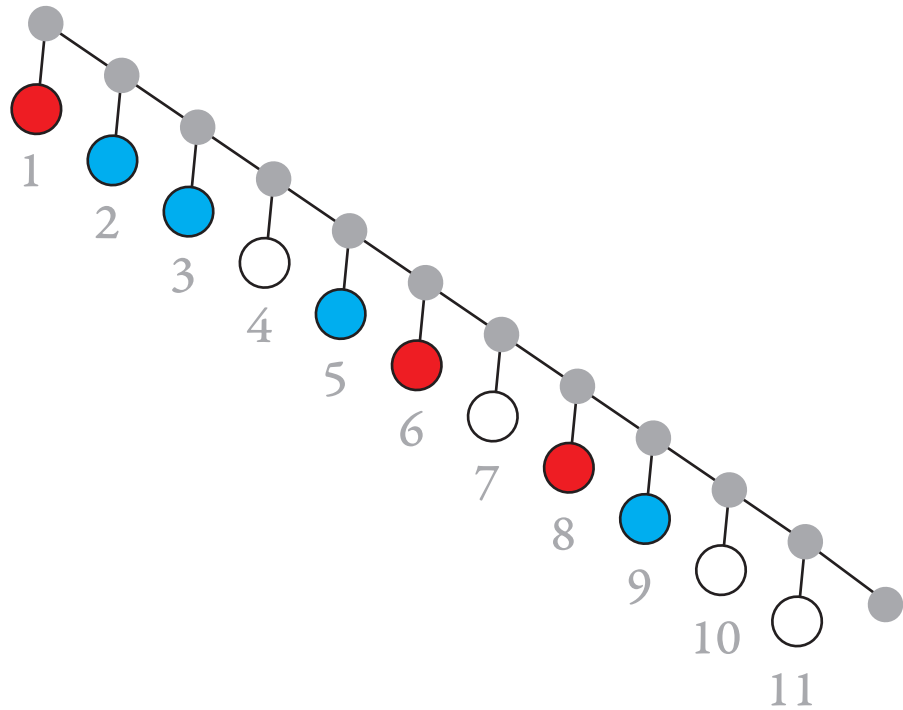
arity 2

arity 0





$\mapsto$









a term of arity 4



a term of arity 0



