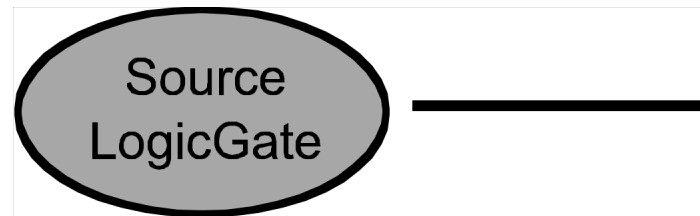


Additions to SBGN object model

A. Sorokin, S. Moodie

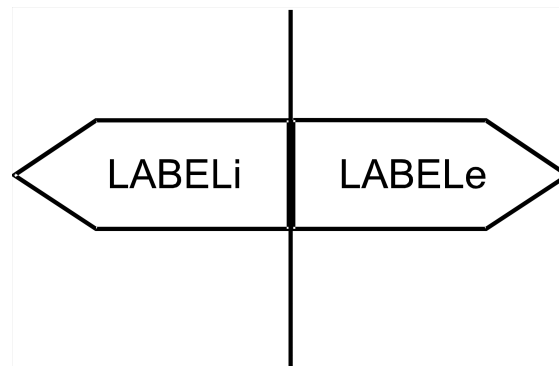
Truth arc

- Connecting Logic gates to each other
- Is not Consumption arc
- Visually identical to Consumption arc (may be not final gaps)



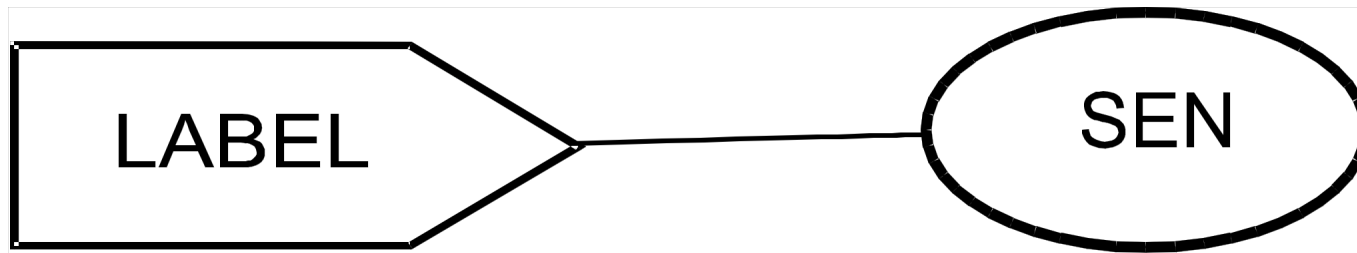
iTag

- Represents module interface
- Require two tags to define mappings between internal and external SN



Equivalence arc

- Arc connecting Tag with SEN
- Is not Consumption arc
- Visually identical to Consumption arc

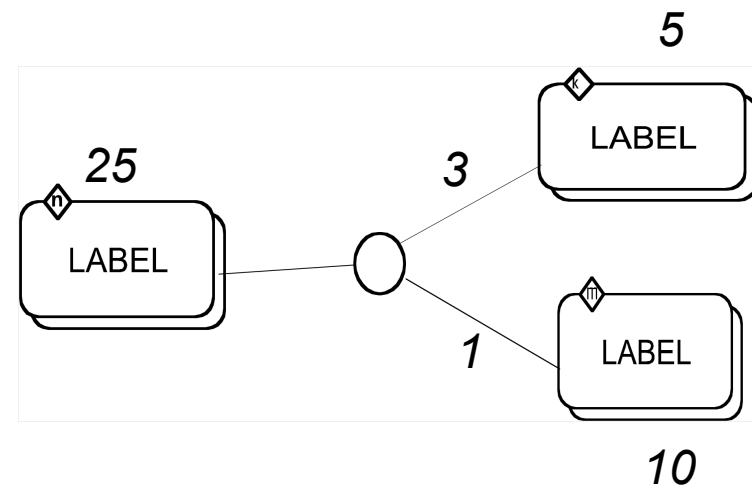
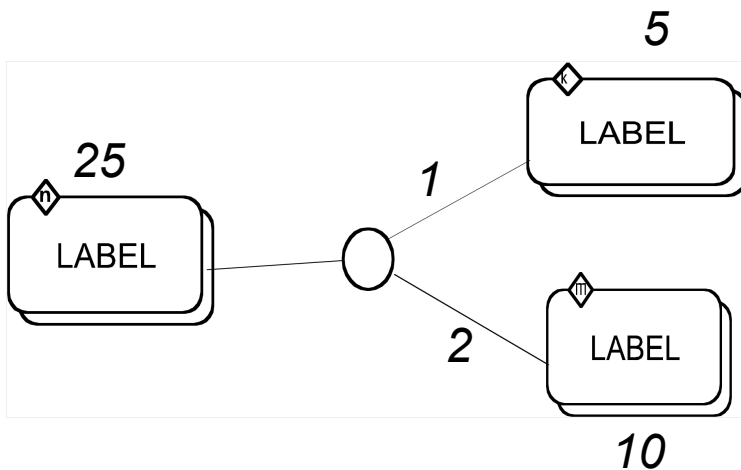


Source/Sink

- Visually identical
- Semantically and syntactically different
- In syntax part they treated separately
- Resolution
 - Source/Sink is 1-degree node, so definition of source and sink could be derived from type of arc

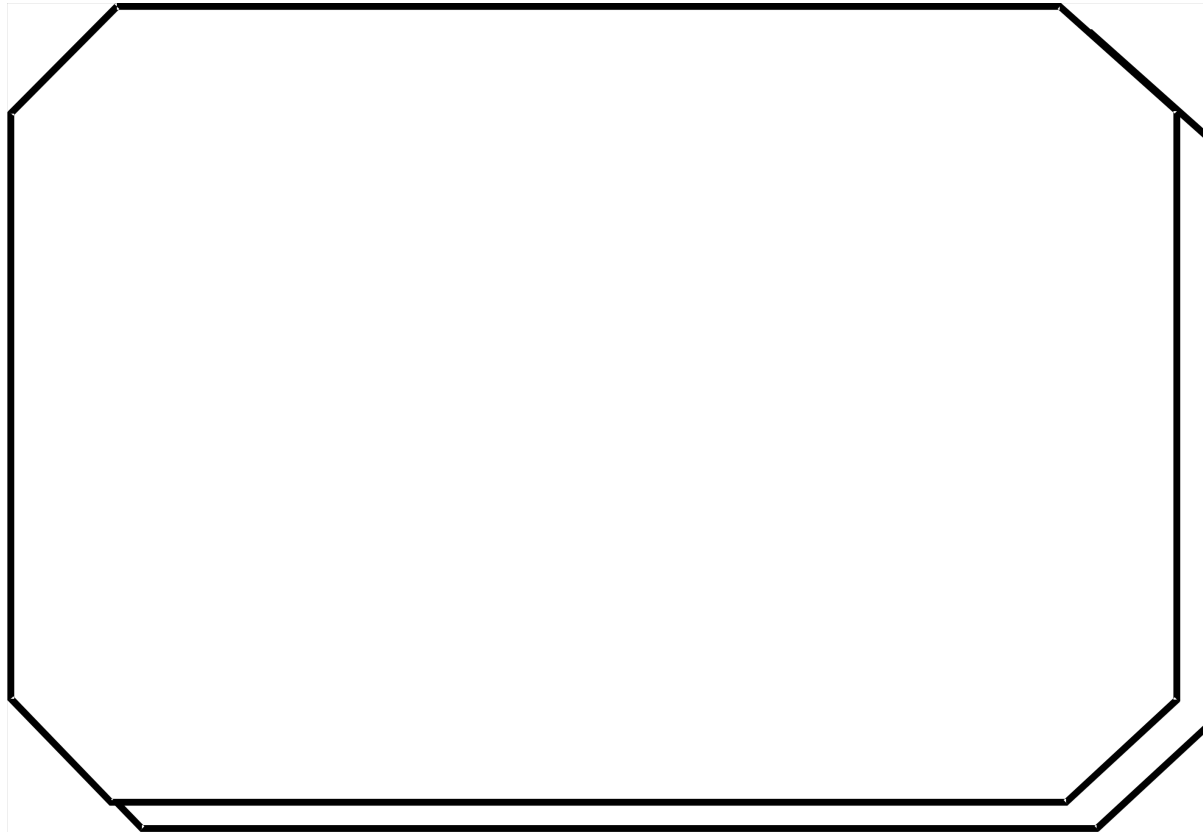
Cardinality (stoichiometry)

- Association/dissociation mainly
- Asymmetrical dissociation of multimers
 - $N=j*K+i*M$ ($25=2*10+1*5$; $25=1*10+3*5$)



Complex multimer

- Is not defined (add for consistency)
- Didn't decided



Naming problem

- ST is not strictly state transition
 - We can rename it to Process diagram notation
- Is calling State/Entity node
 - Separate spec into three sections for ST, ER, AF