

Table 4.1 The definite clause grammar. Terms in bold are reserved terms in the grammar (i.e. words reserved for use by the system); terms starting with a capital letter are variables; \Rightarrow means 'can take the form of'.

FormalSentence \Rightarrow Statement if FormalConditions
FormalSentence \Rightarrow Statement
Statement \Rightarrow Cause Causes Effect where Causes is an element of the set:{ causes1way,causes2way }
Statement \Rightarrow AttributeStatement
Statement \Rightarrow not (AttributeStatement)
Statement \Rightarrow link (influence,Thing,Thing)
Statement \Rightarrow link (Link,Object,Object)
Statement \Rightarrow link (Link,ProcessBit,ProcessBit)
Statement \Rightarrow link (Link,ProcessBit,Object)
Statement \Rightarrow comparison (Attribute,Object,Comparison,Object)
FormalConditions \Rightarrow FormalConditions and FormalConditions
FormalConditions \Rightarrow FormalConditions or FormalConditions
FormalConditions \Rightarrow Statement
FormalConditions \Rightarrow ActionBit
FormalConditions \Rightarrow ProcessBit
AttributeStatement \Rightarrow att_value (Object,Attribute,Value)
AttributeStatement \Rightarrow att_value (ProcessBit,Attribute,Value)
AttributeStatement \Rightarrow att_value (ActionBit,Attribute,Value)
Cause \Rightarrow AttributeStatement
Cause \Rightarrow ProcessBit
Cause \Rightarrow ActionBit
Cause \Rightarrow Object
Cause \Rightarrow not (Cause)
ActionBit \Rightarrow action (Action,Object,Object)
ActionBit \Rightarrow action (Action,Object)
Effect \Rightarrow AttributeStatement
Effect \Rightarrow ProcessBit
Effect \Rightarrow ActionBit
Effect \Rightarrow not (Effect)
Process_bit \Rightarrow process (Process)
Process_bit \Rightarrow process (Object,Process)
Process_bit \Rightarrow process (Object,Process,Object)
Thing \Rightarrow Object
Thing \Rightarrow ProcessBit
Attribute \Rightarrow atom
Process \Rightarrow atom
Link \Rightarrow atom
Object \Rightarrow atom
Object \Rightarrow part (Object,Object)
Action \Rightarrow atom
Comparison \Rightarrow Atom where Atom is an element of the set:{ greater_than, less_than, same_as, different_from }
Value \Rightarrow Atom Where Atom is an element of the set:{ increase, decrease, change, no_change }
Value \Rightarrow Atom
Value \Rightarrow Number Where Number is either a floating point number or an integer
Value \Rightarrow range (Value,Value)