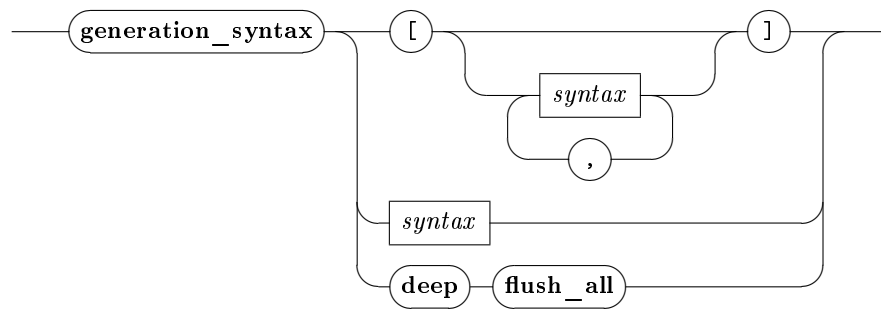


# Contents

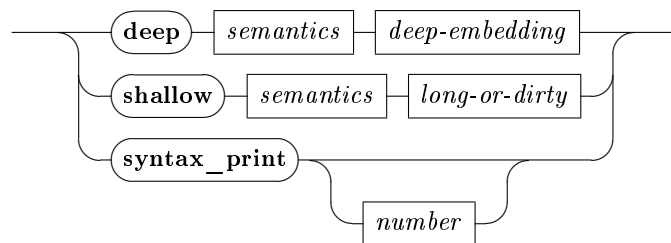
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## 0.0.1 The Meta Compiler

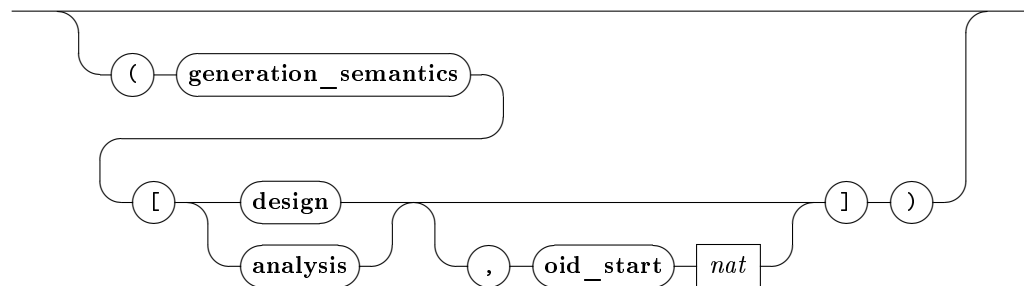
**generation-syntax** :  $theory \rightarrow theory$



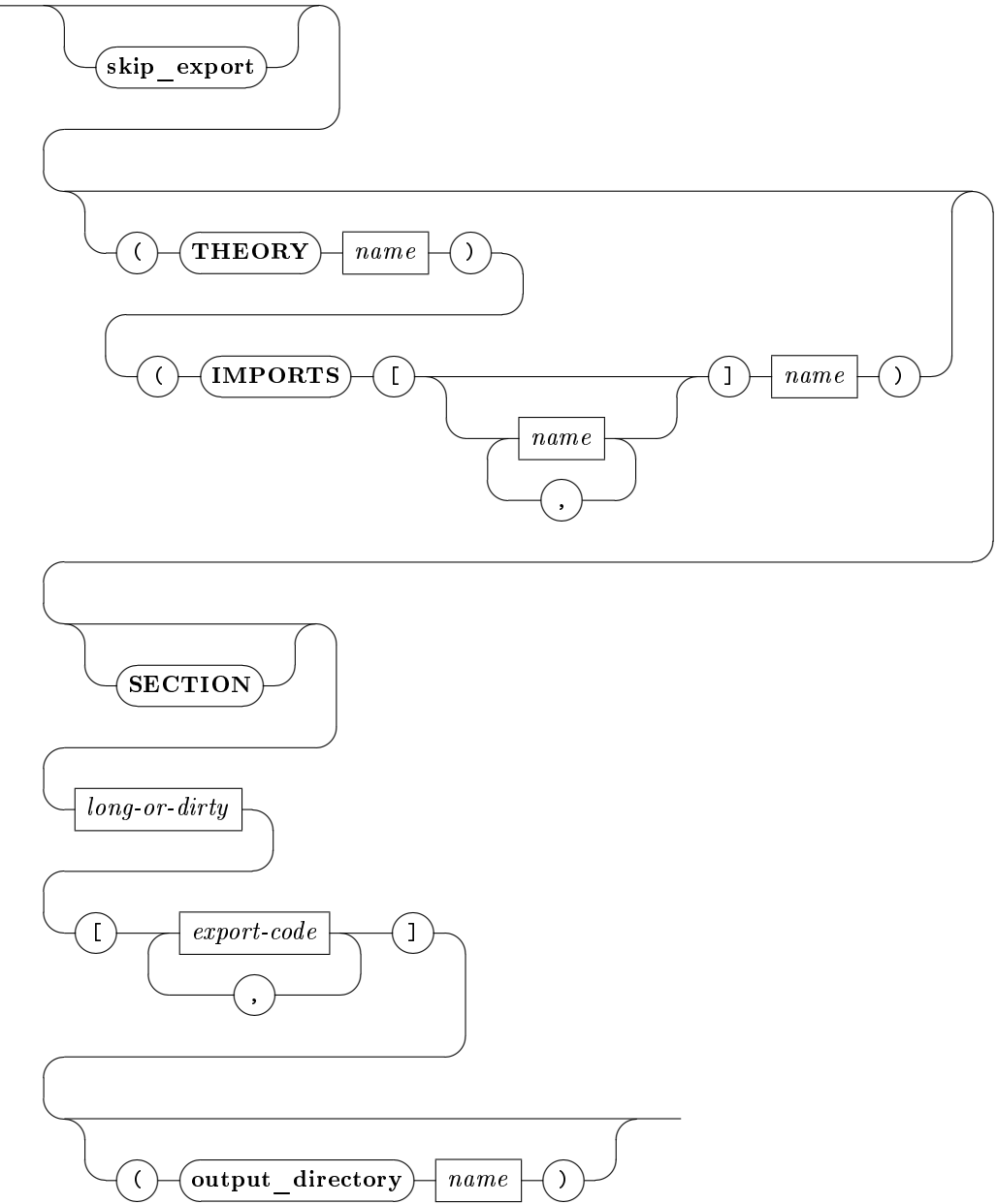
*syntax*



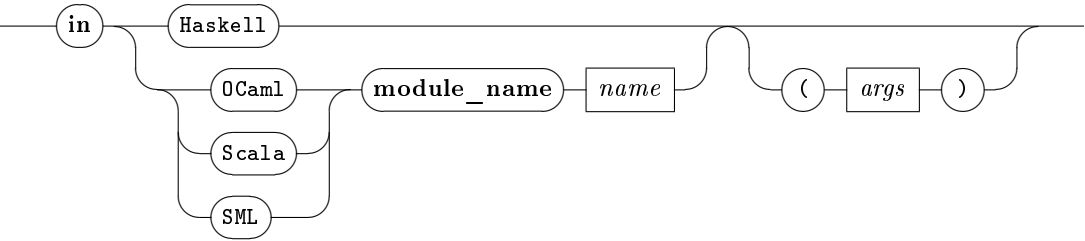
*semantics*



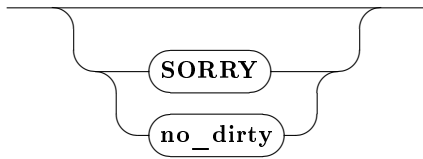
deep-embedding



export-code

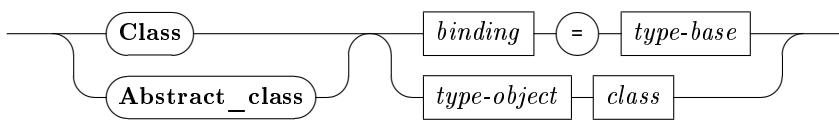


*long-or-dirty*

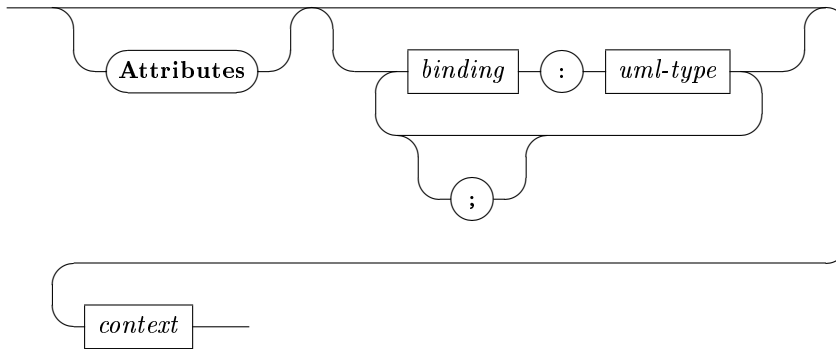


## 0.0.2 UML/OCL: Extended USE Grammar

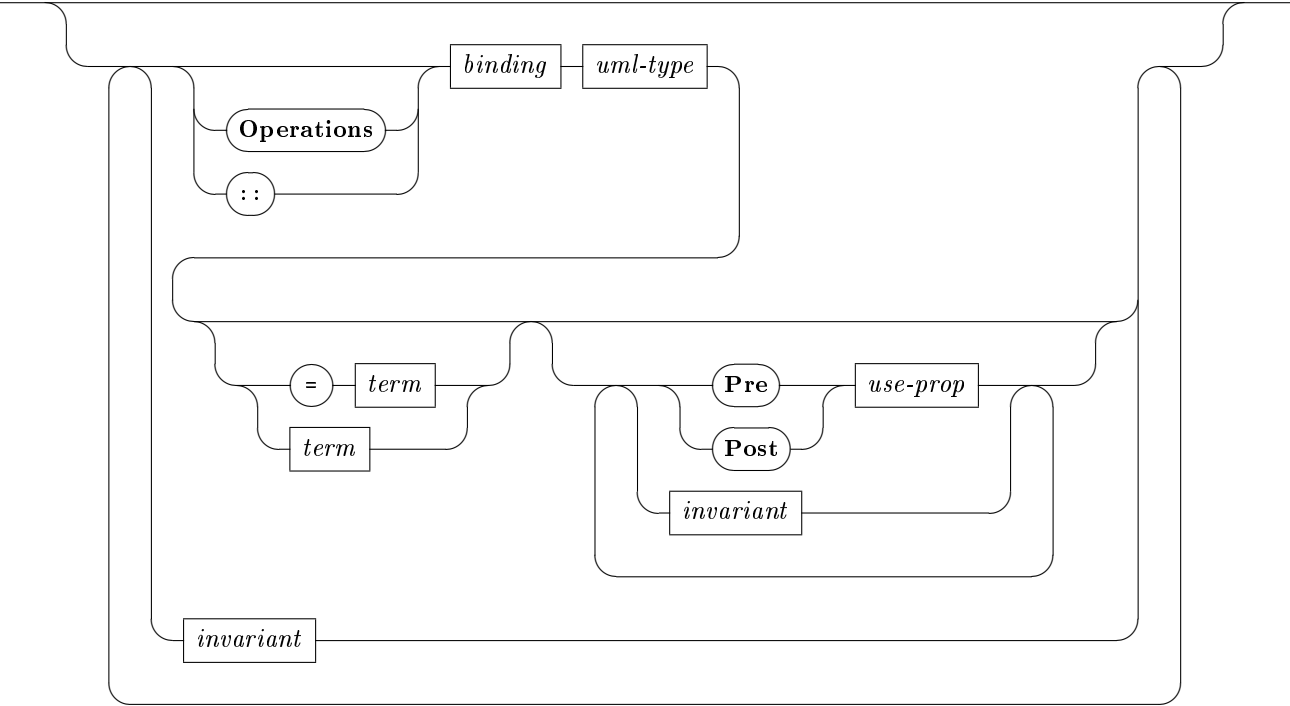
**Class** : *theory* → *theory*  
**Abstract-class** : *theory* → *theory*



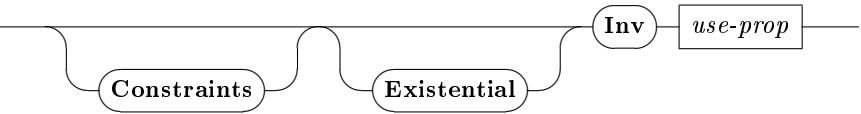
*class*



context

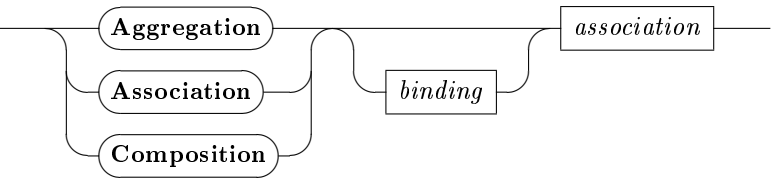


invariant

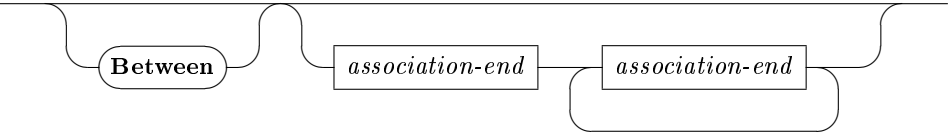


.....

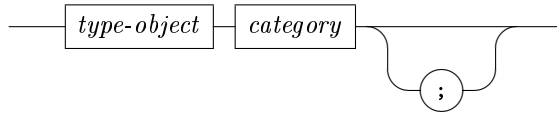
**Aggregation** :  $theory \rightarrow theory$   
**Association** :  $theory \rightarrow theory$   
**Composition** :  $theory \rightarrow theory$



association

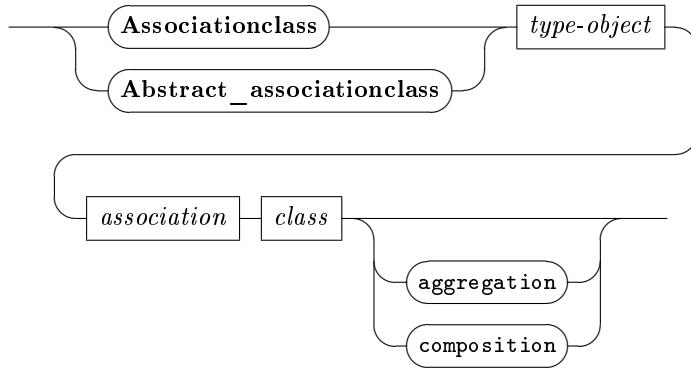


*association-end*



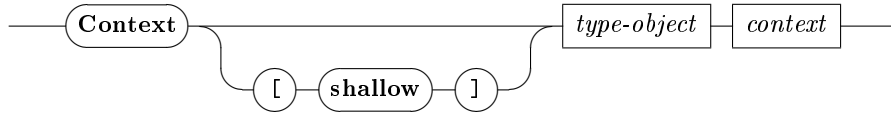

---

**Associationclass** :  $theory \rightarrow theory$   
**Abstract-associationclass** :  $theory \rightarrow theory$



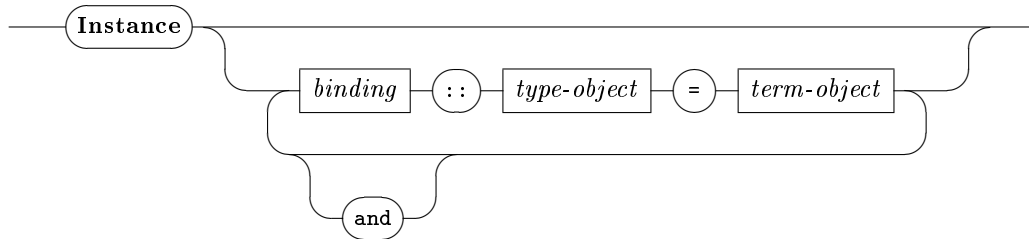

---

**Context** :  $theory \rightarrow theory$

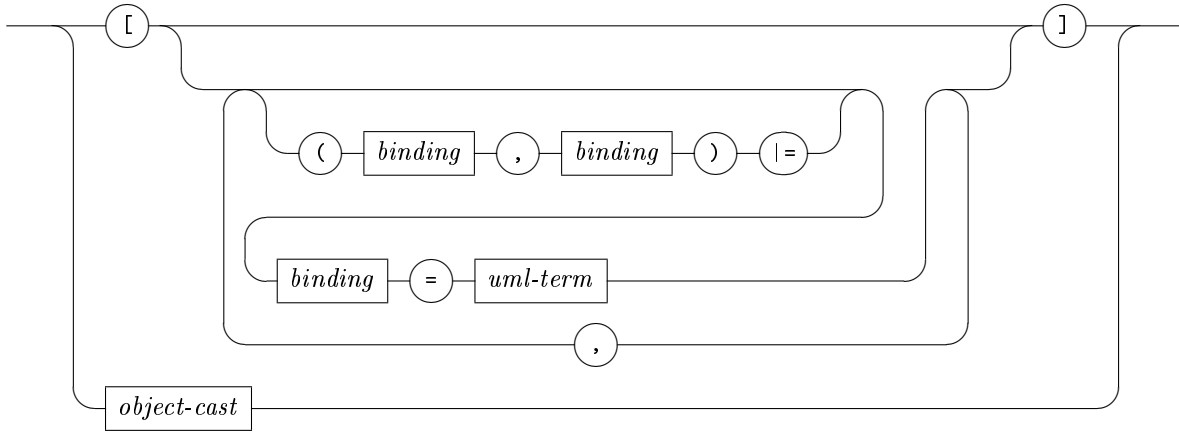



---

**Instance** :  $theory \rightarrow theory$



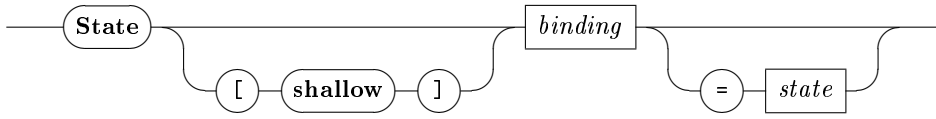
*term-object*



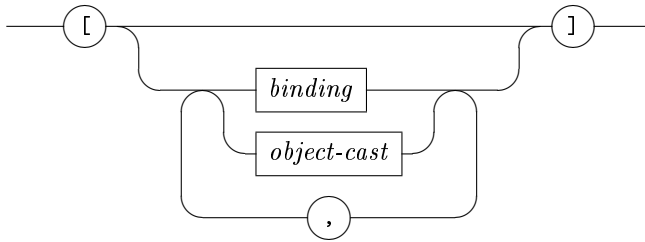
*object-cast*



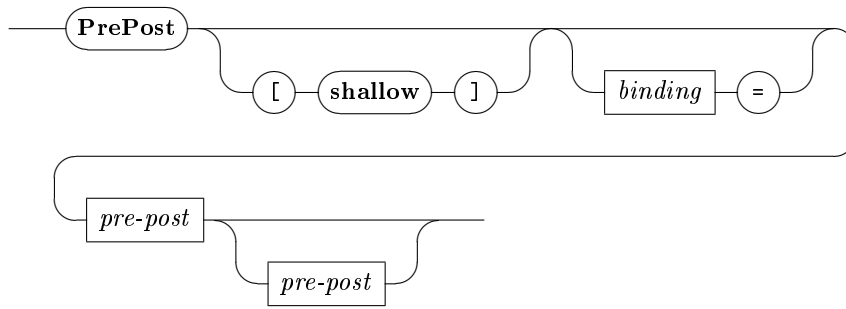
**State** :  $theory \rightarrow theory$



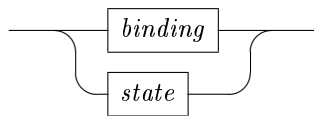
*state*



**PrePost** :  $theory \rightarrow theory$

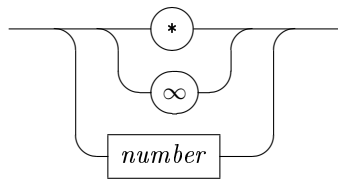


*pre-post*

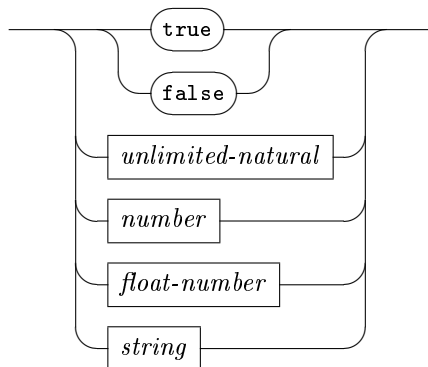


### 0.0.3 UML/OCL: Type System

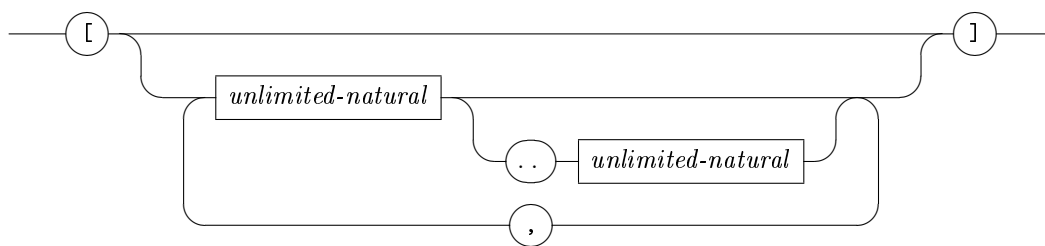
*unlimited-natural*



*term-base*

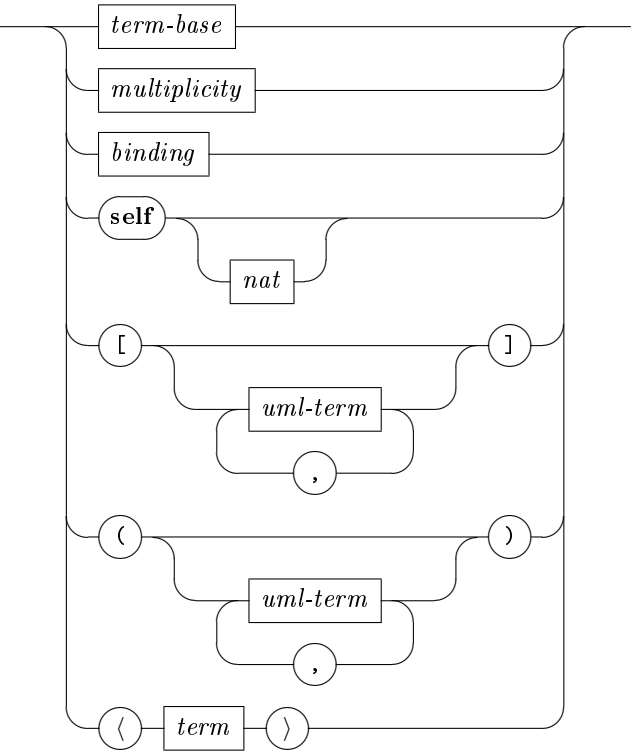


*multiplicity*

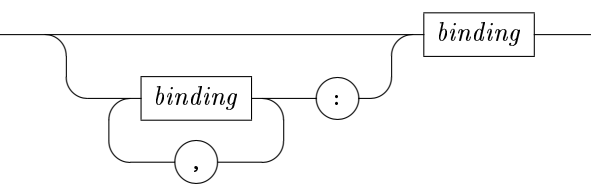




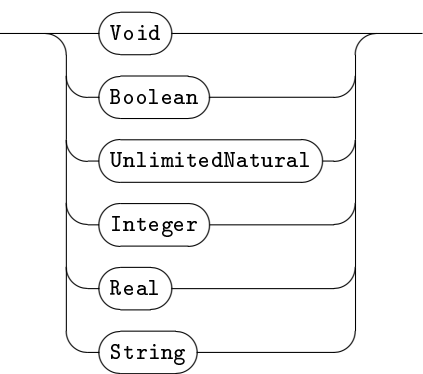
*uml-term*



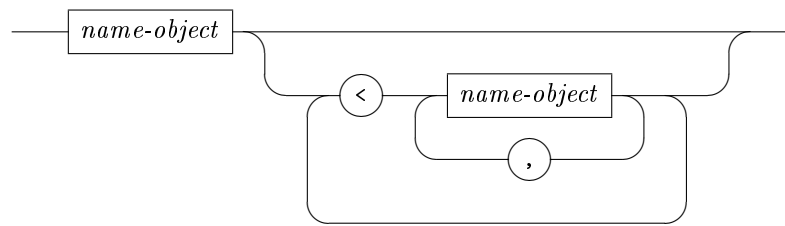
*name-object*



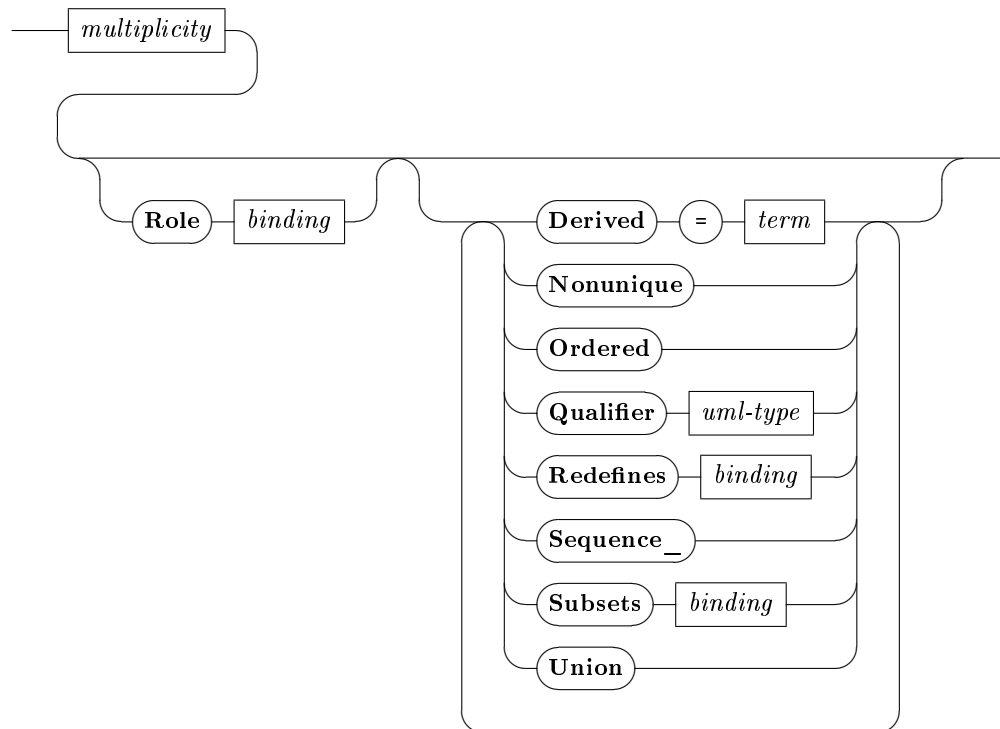
*type-base*

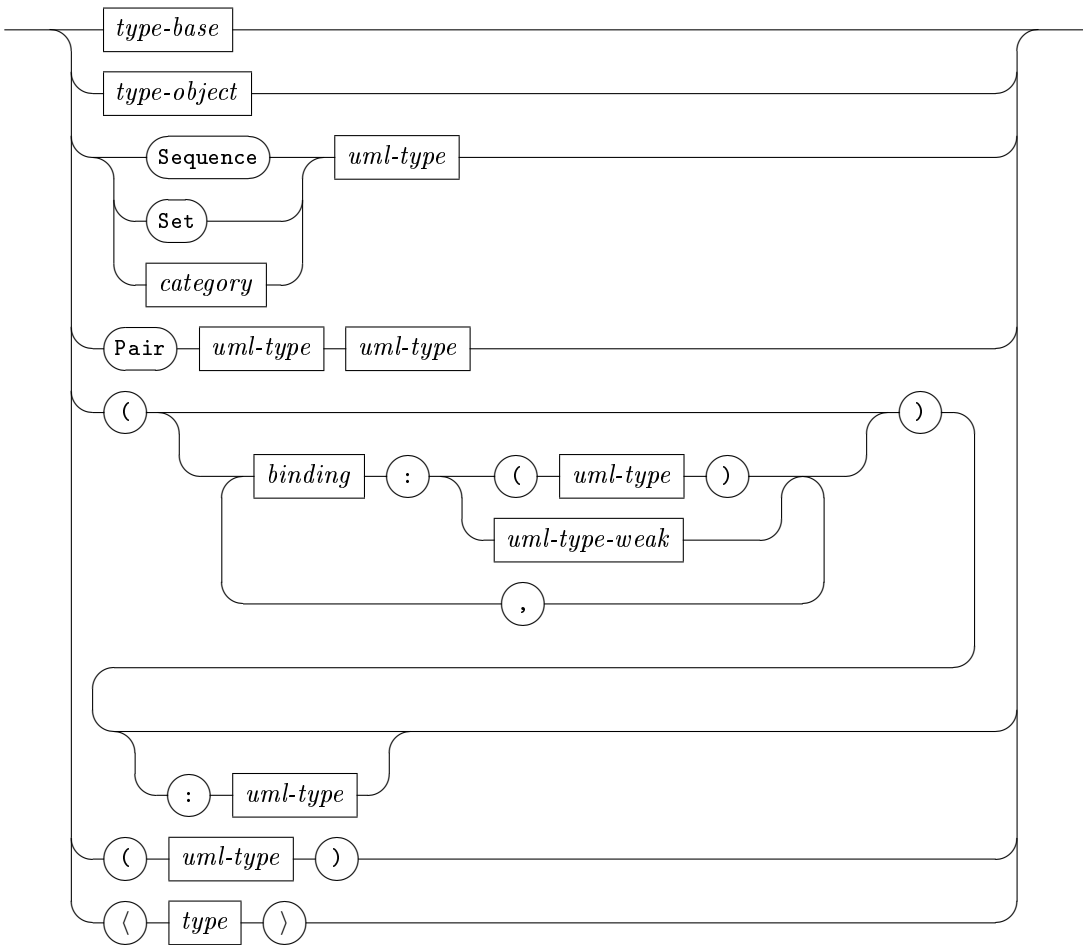


*type-object*

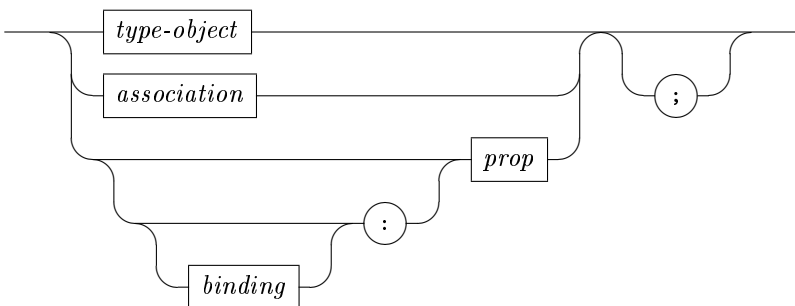


*category*



$$uml\text{-}type$$


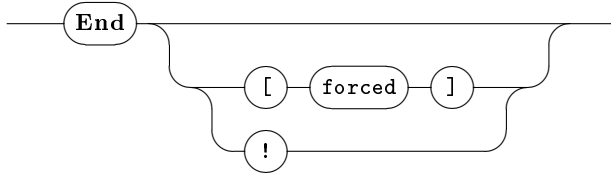
*use-prop*



`uml_type_weak` is like `uml_type` except that `type_object` can not contain quantified names.

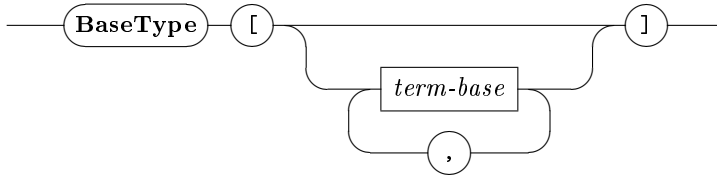
#### 0.0.4 UML/OCL: Miscellaneous

**End** :  $theory \rightarrow theory$



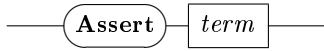

---

**BaseType** :  $theory \rightarrow theory$



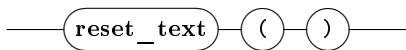
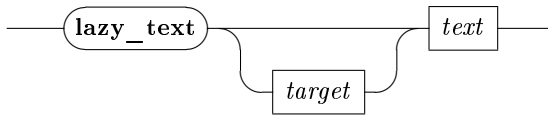
### 0.0.5 Featherweight OCL: Library

**Assert** :  $theory \rightarrow theory$   
**Assert-local** :  $local-theory \rightarrow local-theory$



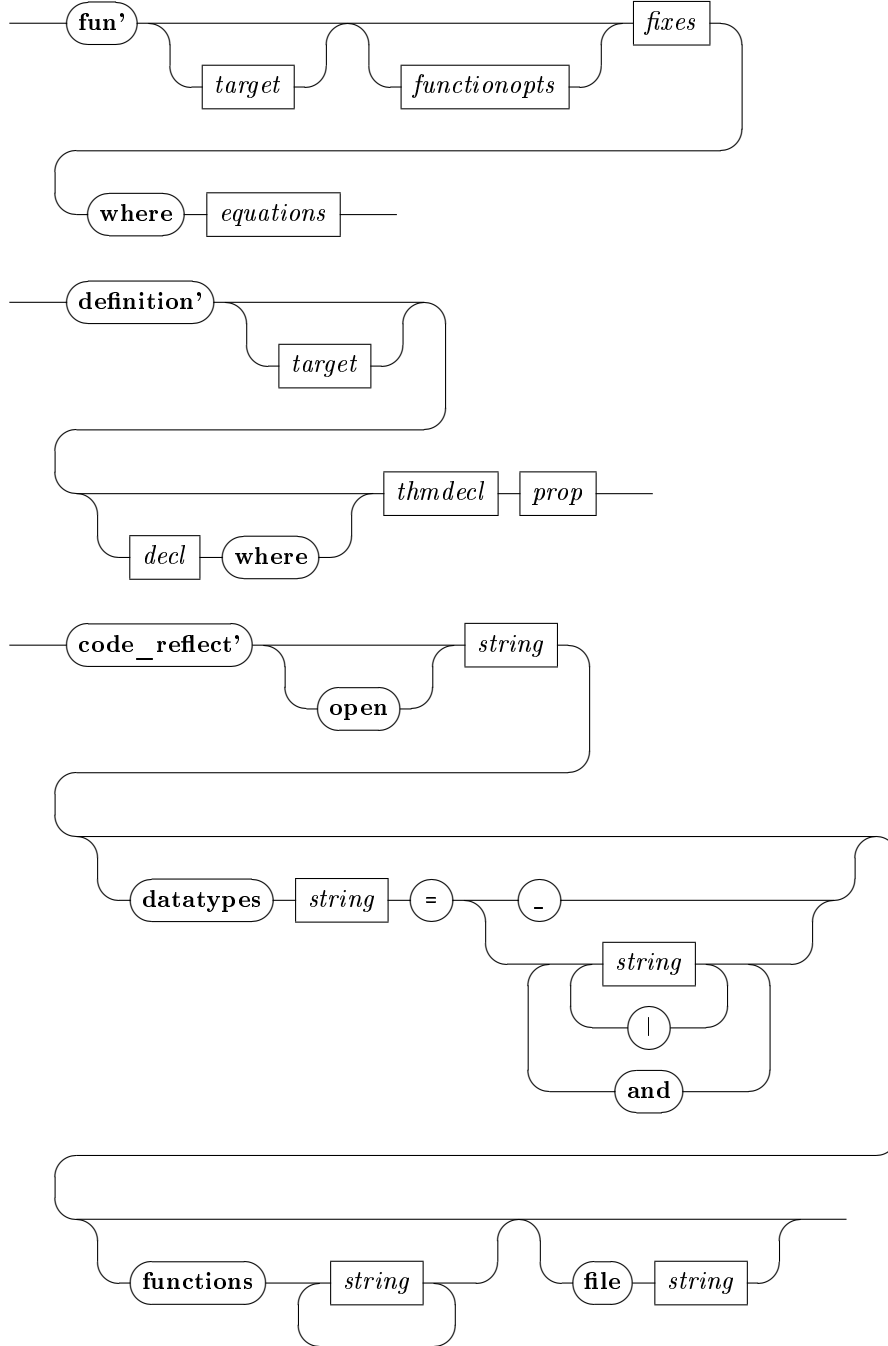
### 0.0.6 Featherweight OCL: Auxiliary

**lazy-text** :  $local-theory \rightarrow local-theory$   
**apply-text** :  $local-theory \rightarrow local-theory$   
**reset-text** :  $local-theory \rightarrow local-theory$



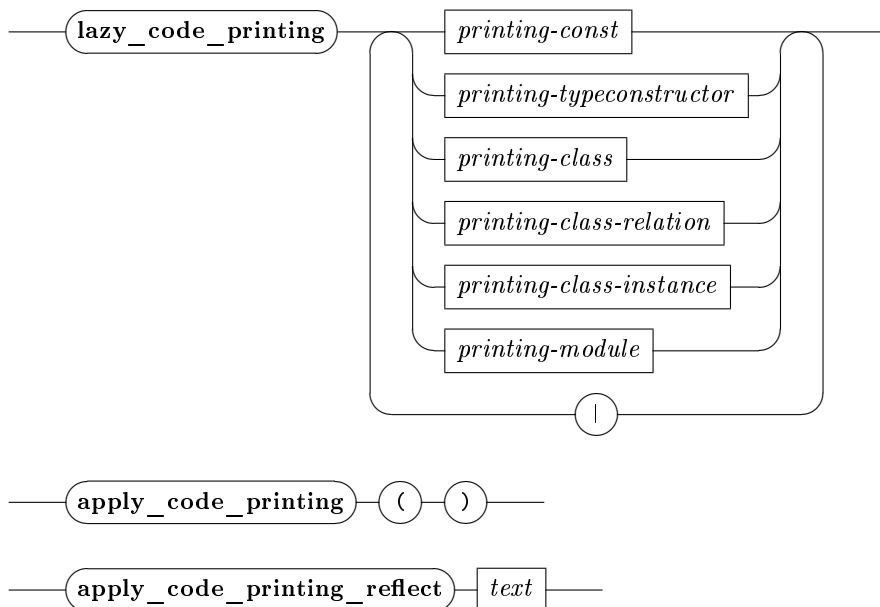
## 0.0.7 Featherweight OCL: Compiler

$\text{fun}' : \text{local-theory} \rightarrow \text{local-theory}$   
 $\text{definition}' : \text{local-theory} \rightarrow \text{local-theory}$   
 $\text{code-reflect}' : \text{theory} \rightarrow \text{theory}$



---

**lazy-code-printing** :  $theory \rightarrow theory$   
**apply-code-printing** :  $theory \rightarrow theory$   
**apply-code-printing-reflect** :  $local-theory \rightarrow local-theory$



**0.1 ...**

[1]





# Bibliography

[1] ...