



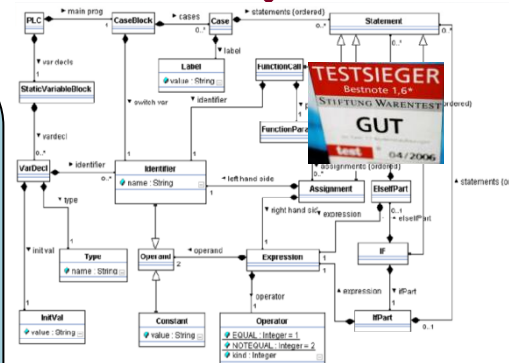
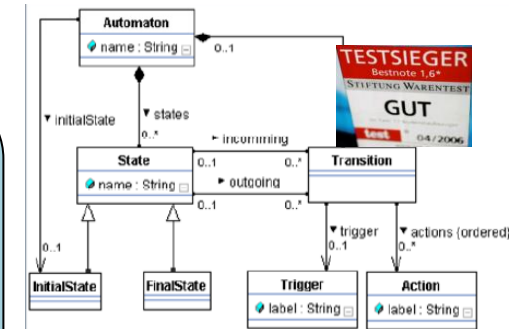
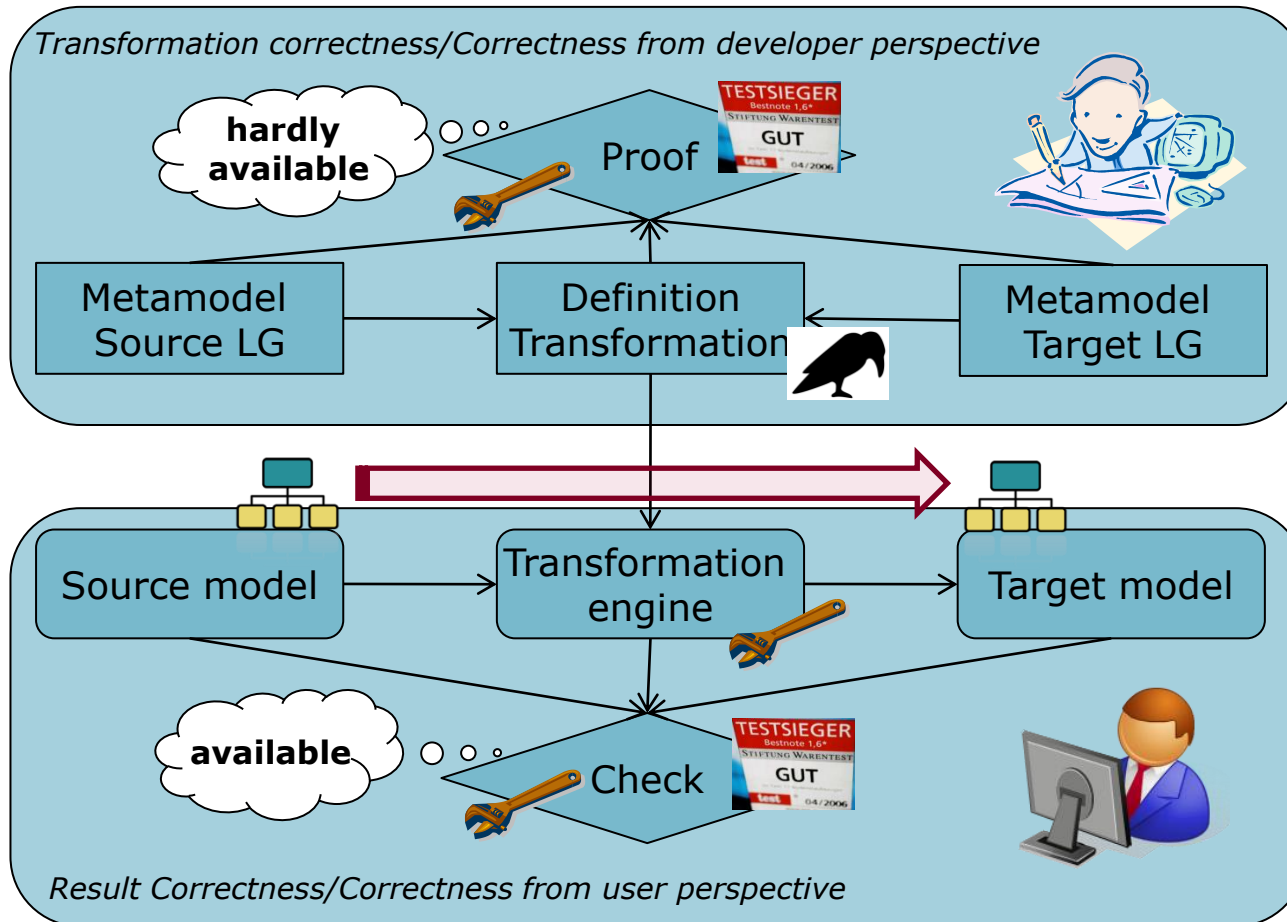
Correct Model Transformations CorMorant

Leen Lambers

CAMPaM Workshop 2012

CorMorant: Objectives

2

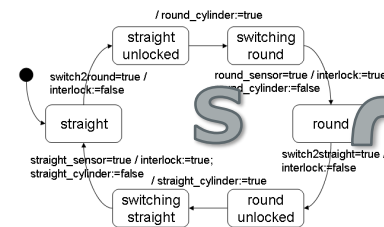
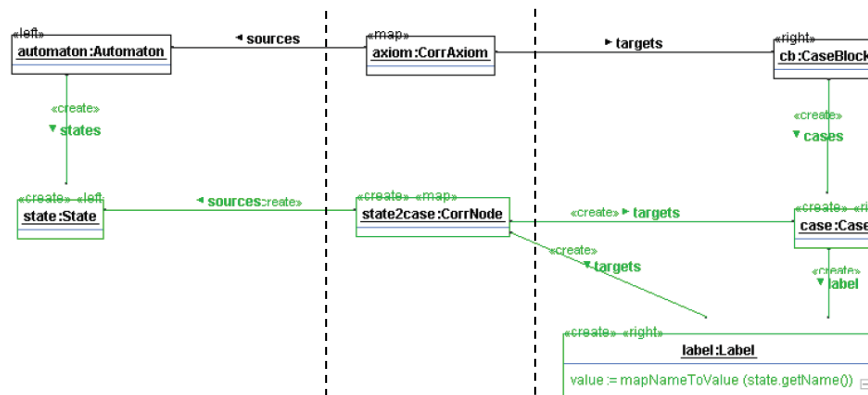


CorMorant: Relational Specification and Implementation



3

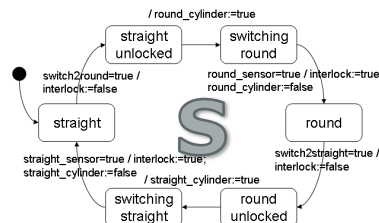
Triple Graph Grammar (TGG) describes *how* input – and output models are *related*.



```
VAR
state:INT:=1;/setto'straight'/
END VAR;
CASE state OF
1:/currentstateis'straight'/
IF switch2round=true THEN
interlock:=false;
state:=2;/setto'straightunlocked'/
END IF;
2:/currentstateis'straight
unlocked'/
roundcylinder:=true;
state:=3;/setto'switchinground'/
...
END CASE;
```

How to bridge the gap between relational specification and implementation?

- I. flexible formalization
- II. concepts to derive conform implementation
- III. automatic conformance testing



TGG Model
Transformation
Engine



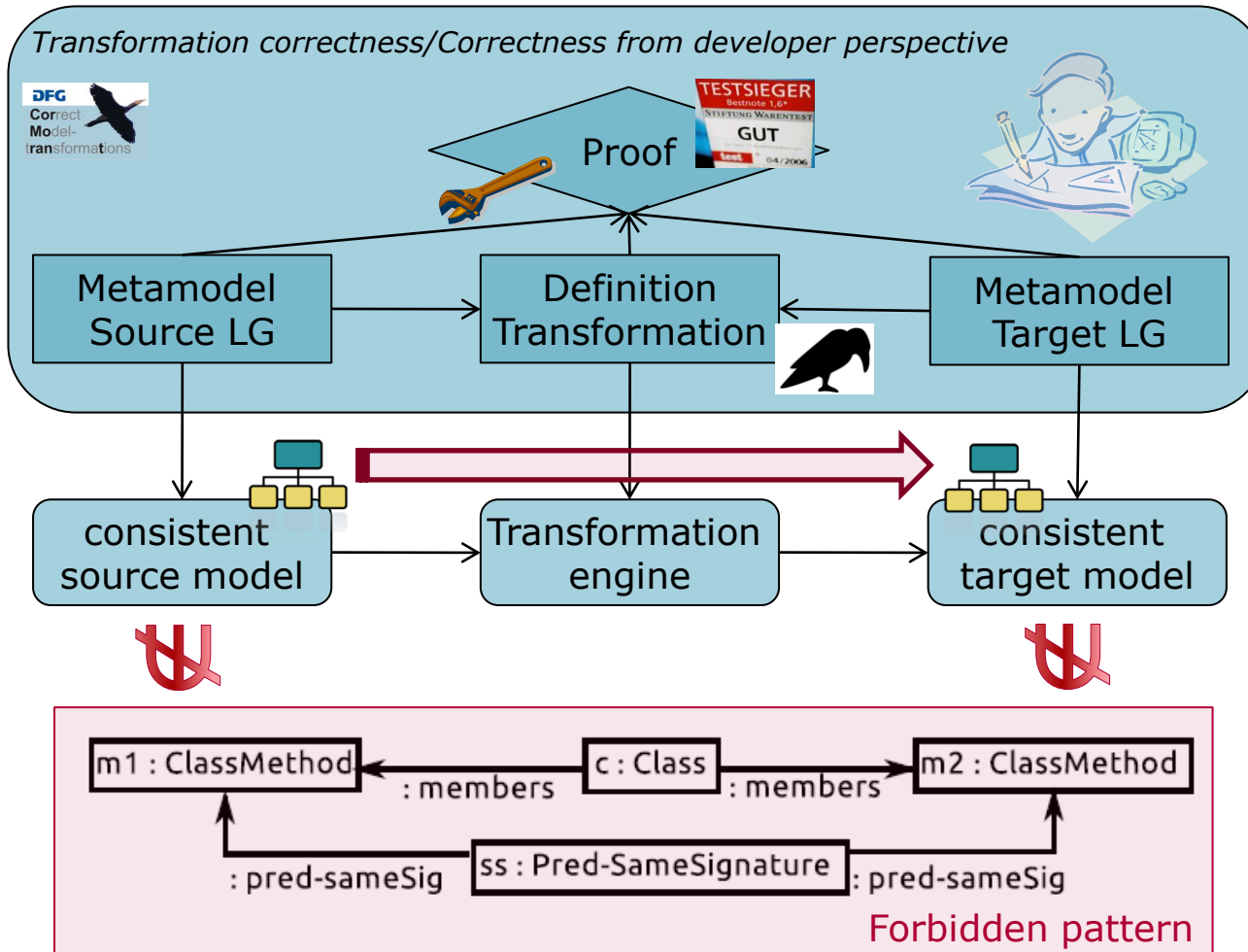
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CorMorant

Consistency Preservation



4



- Typed GT ensures metamodel conformance of source and target model
- What about additional **well-formedness constraints** ?

CAMPaM

5

- topics for discussion:
 - role of and challenges for model transformation in multi-paradigm modeling
 - analysis of model transformations / property specification
- criteria for success:
 - knowledge exchange w.r.t above topics
 - problem identification + brainstorming w.r.t above topics