Translating Platform-Independent Code into Natural Language Texts

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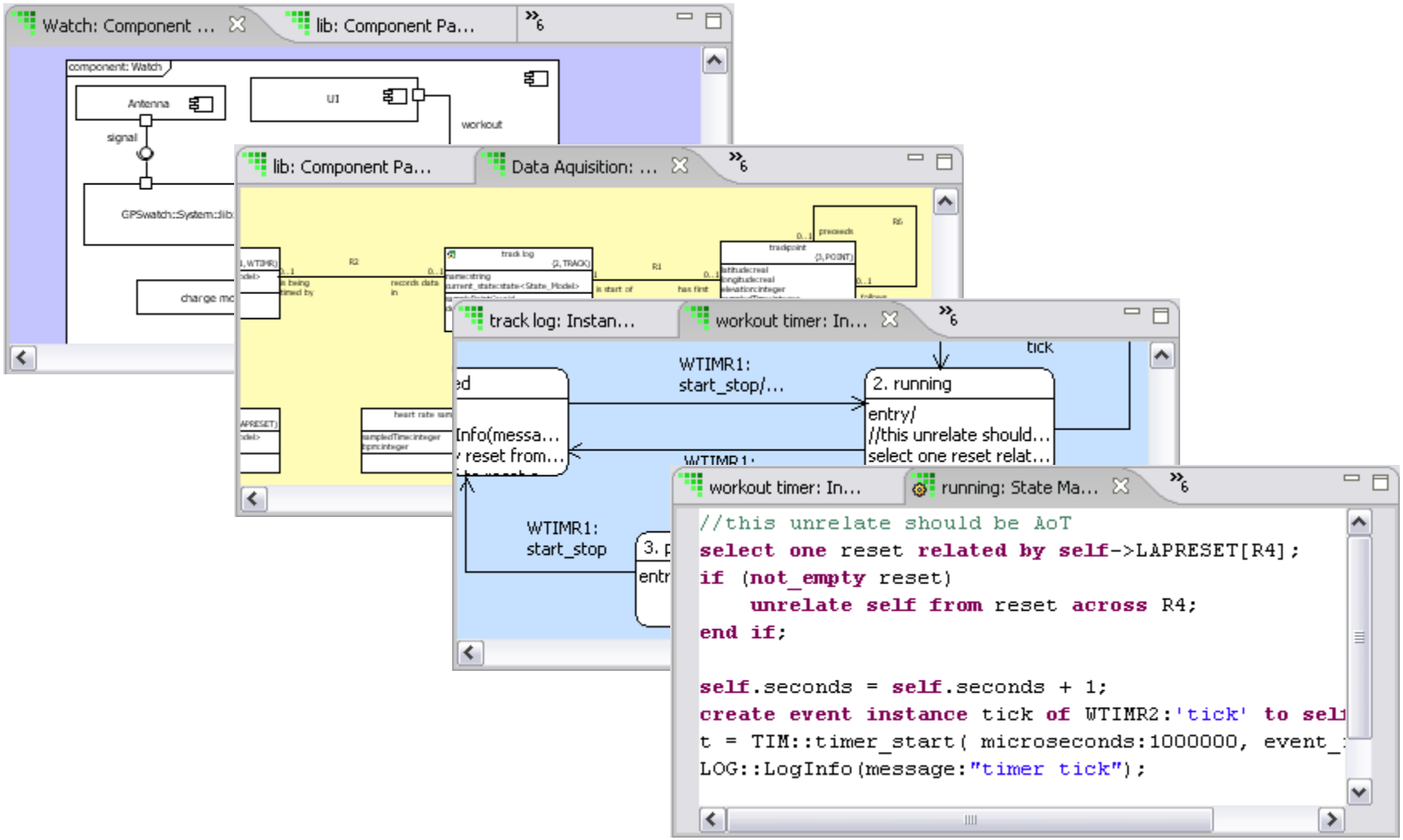
Motivation


IF YOU LEARNED TO SPEAK LOJBAN, YOUR COMMUNICATION WOULD BE COMPLETELY UNAMBIGUOUS AND LOGICAL.
YEAH, BUT IT WOULD ALL BE WITH THE KIND OF PEOPLE WHO LEARN LOJBAN.

Problem and context



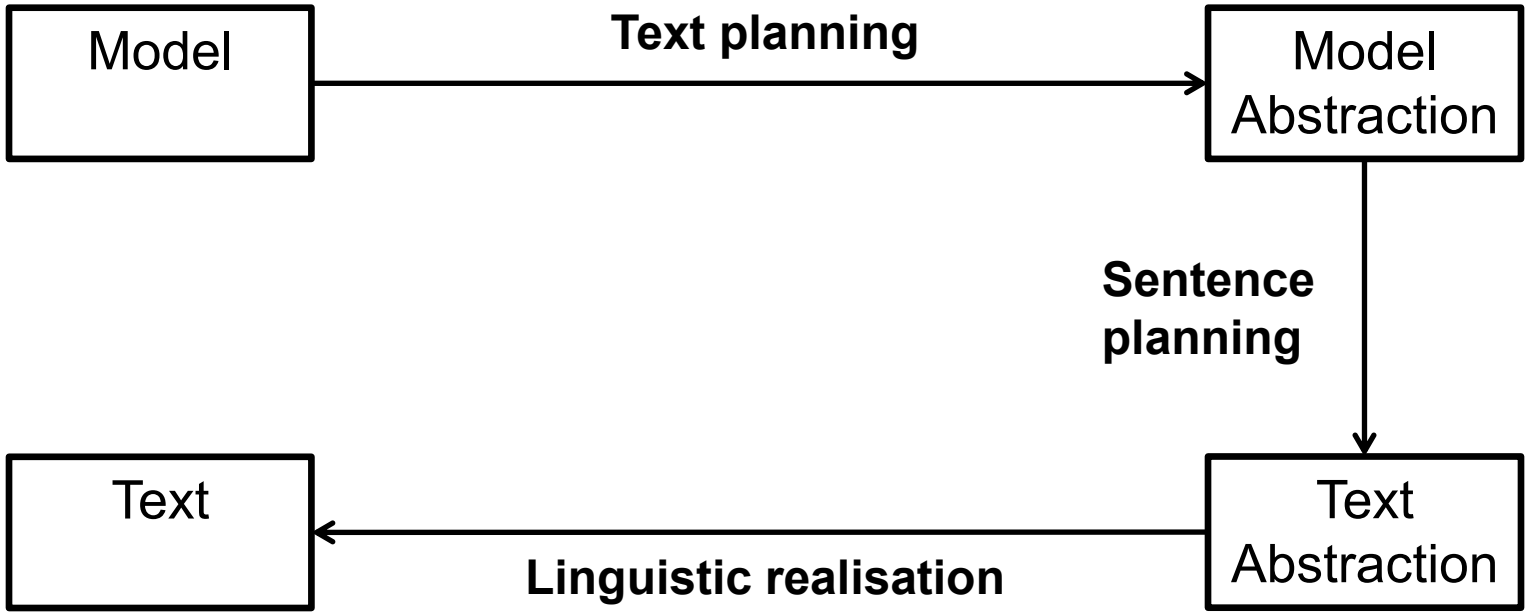
Possible solution

Everybody knows how to consume text

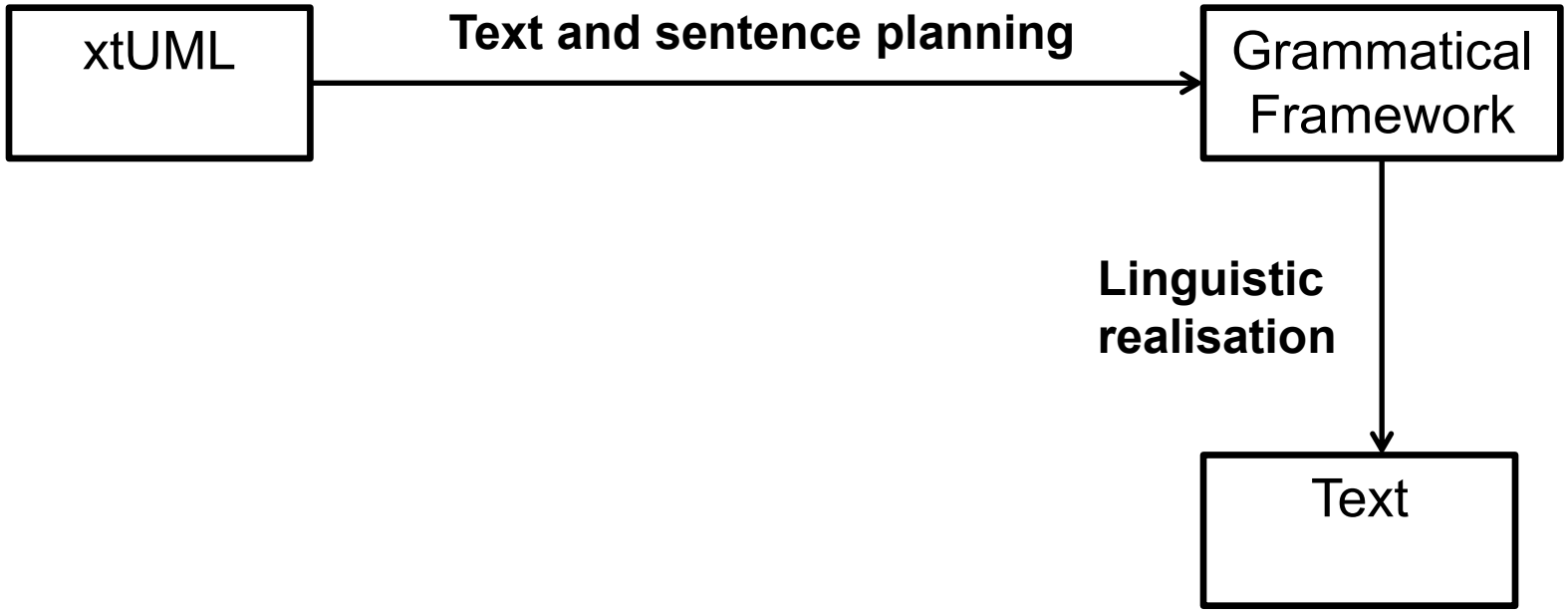
System Architect at Ericsson

M2T: Model-to-Text

NLG: Natural language generation



Case study


xtUML
Text and sentence planning
Grammatical Framework
Linguistic realisation
Text

Examples

Action language	English
create object instance res of Reservation;	res refers to a Reservation
relate res to self across R4;	res and the BookingProcess share information
select many ress related by room -> Reservation[R2];	ress refers to many Reservations

Conclusion

- First attempt to translate Platform-Independent code into natural language text
- The challenge is not the transformation as such but
  - what is an appropriate abstraction?
  - how are the concepts of the metamodel mapped into linguistic concepts?
  - (e.g. should O_OBJ be mapped to mkCN, mkN or mkPN?)
- The approach needs industrial evaluation