Instance Based Meta-Model Generation

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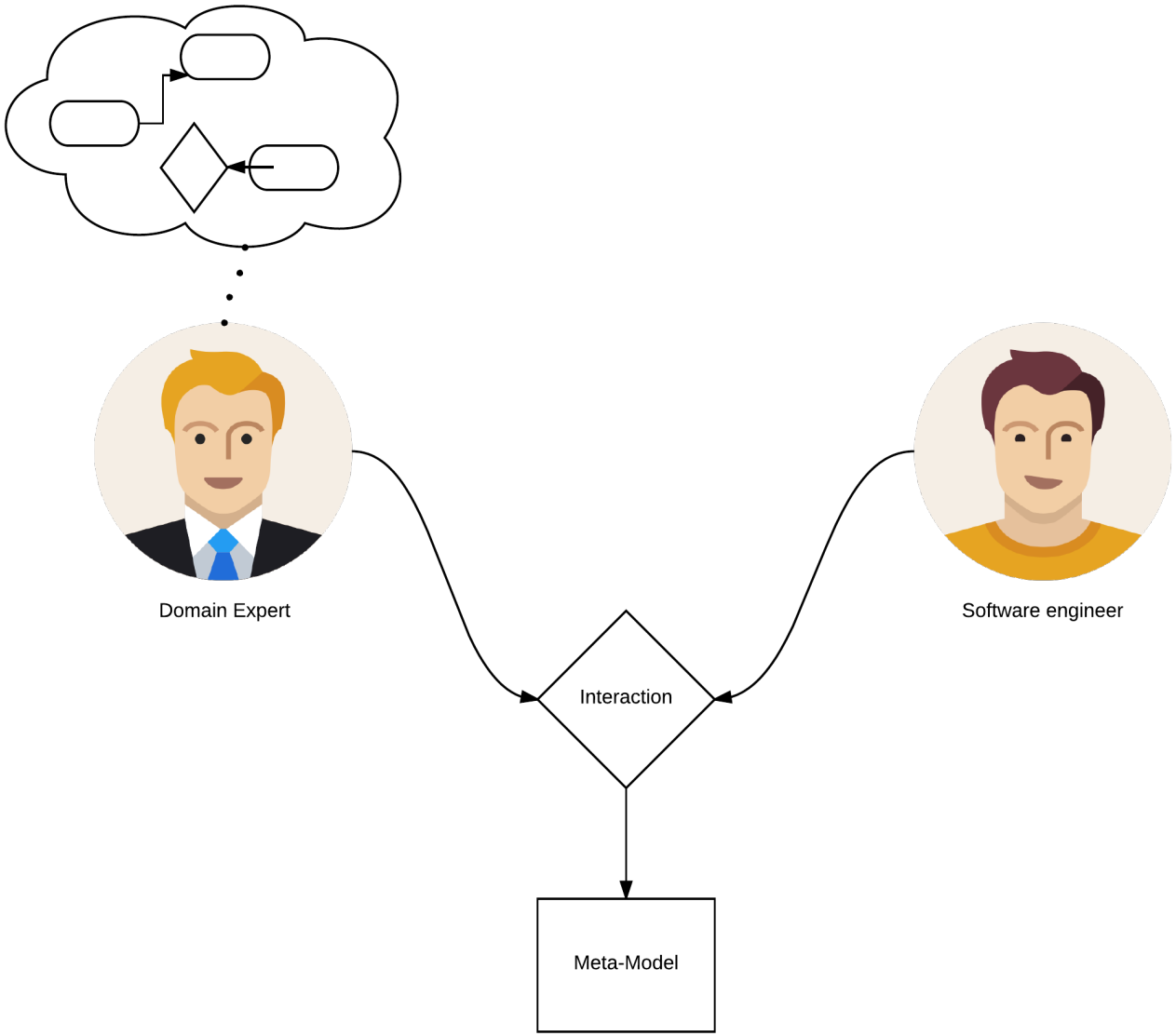
Overview

Introduction



Related Work

- [Kainz, 2011]: model to meta-model transformations in EMF

  Kainz (2011)
  Automated Model-to-Metamodel Transformations Based on the Concepts of Deep Instantiation

- [Lopez-Fernandez, 2015]: model examples together with user feedback to generate a meta-model

  Lopez-Fernondez (2015)
  Example-driven meta-model development

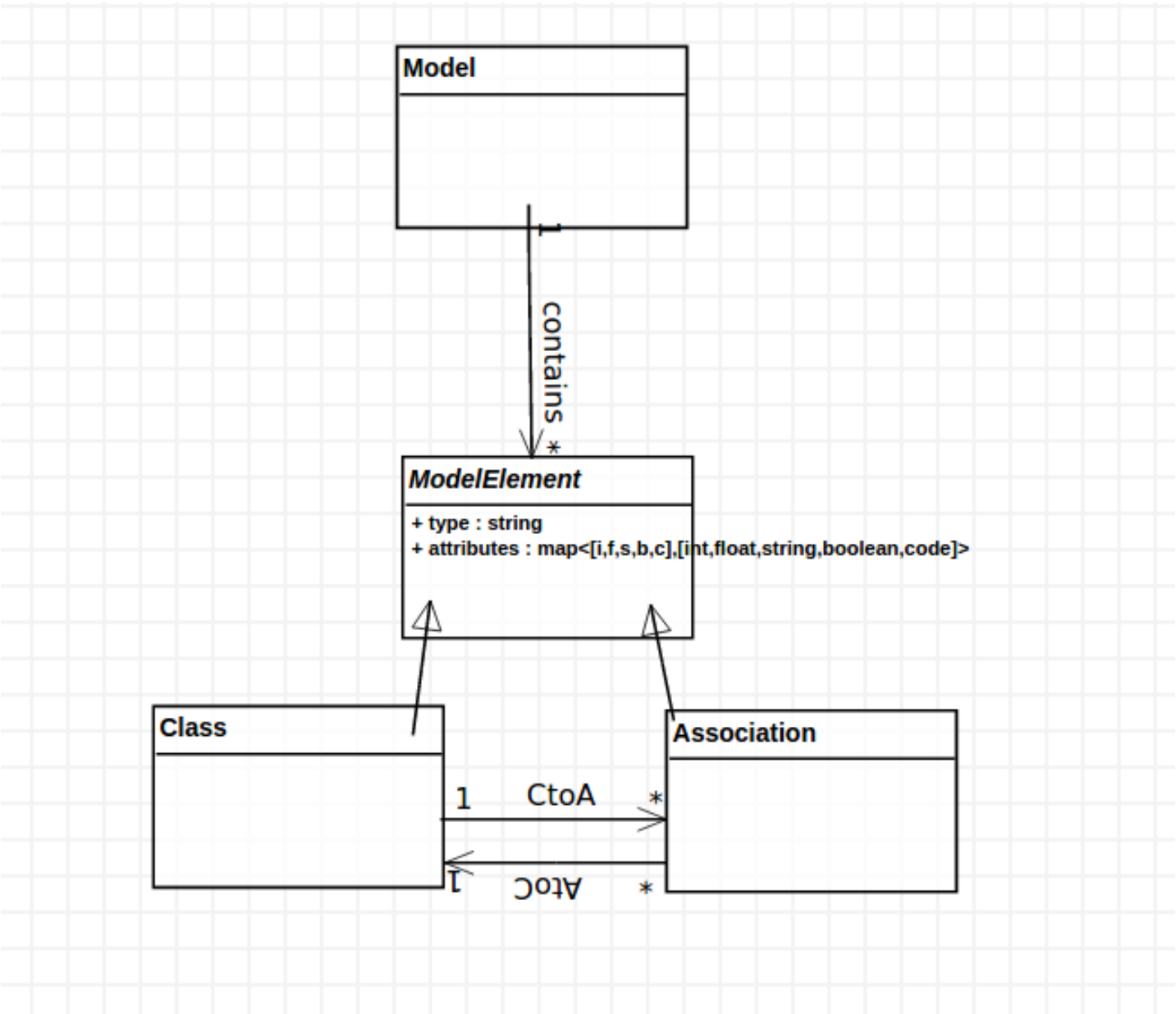
MM genearation in AToMPM [Syriani et al., 2013]

Model to meta-model generation in 7 steps:

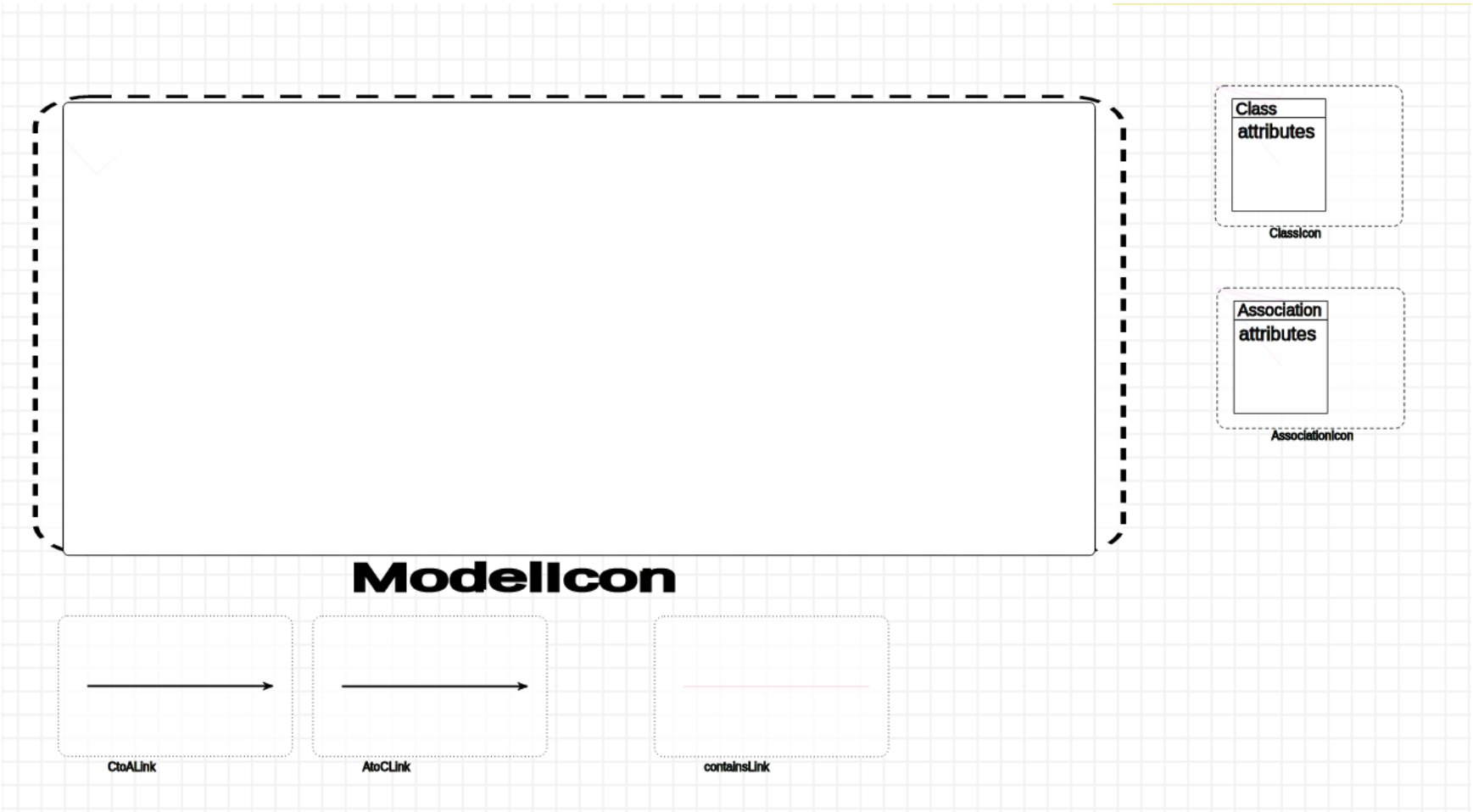
1. Generic MM
2. Create example models
3. Model transformations into abstract syntax
4. Manually check abstract syntax
5. Default concrete syntax generation
6. Manually change concrete syntax icons
7. Create models using newly generated MM

Syriani et al. (2013)
AToMPM: A Web-based Modeling Environment

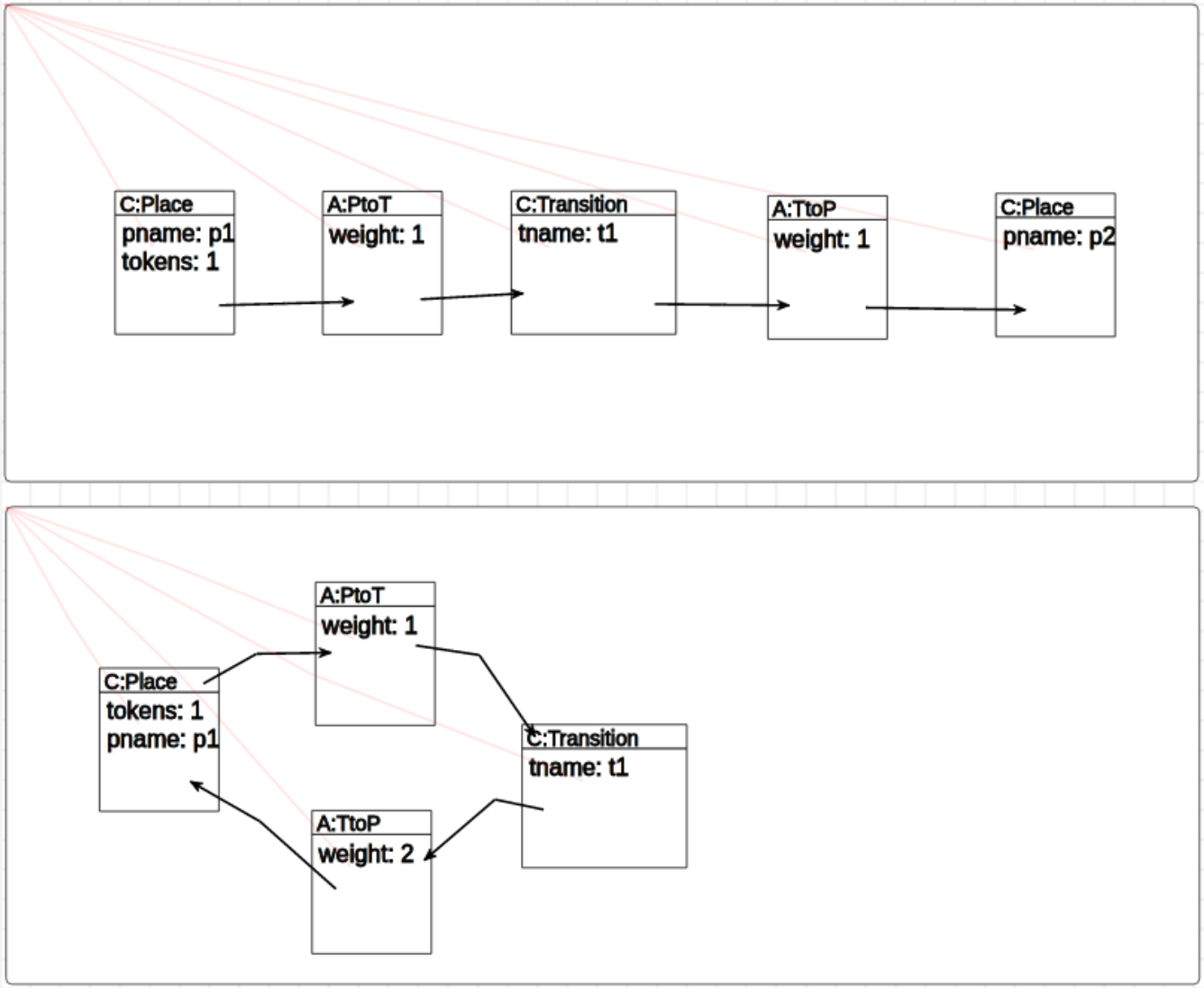
Generic Meta-Model: Abstract Syntax



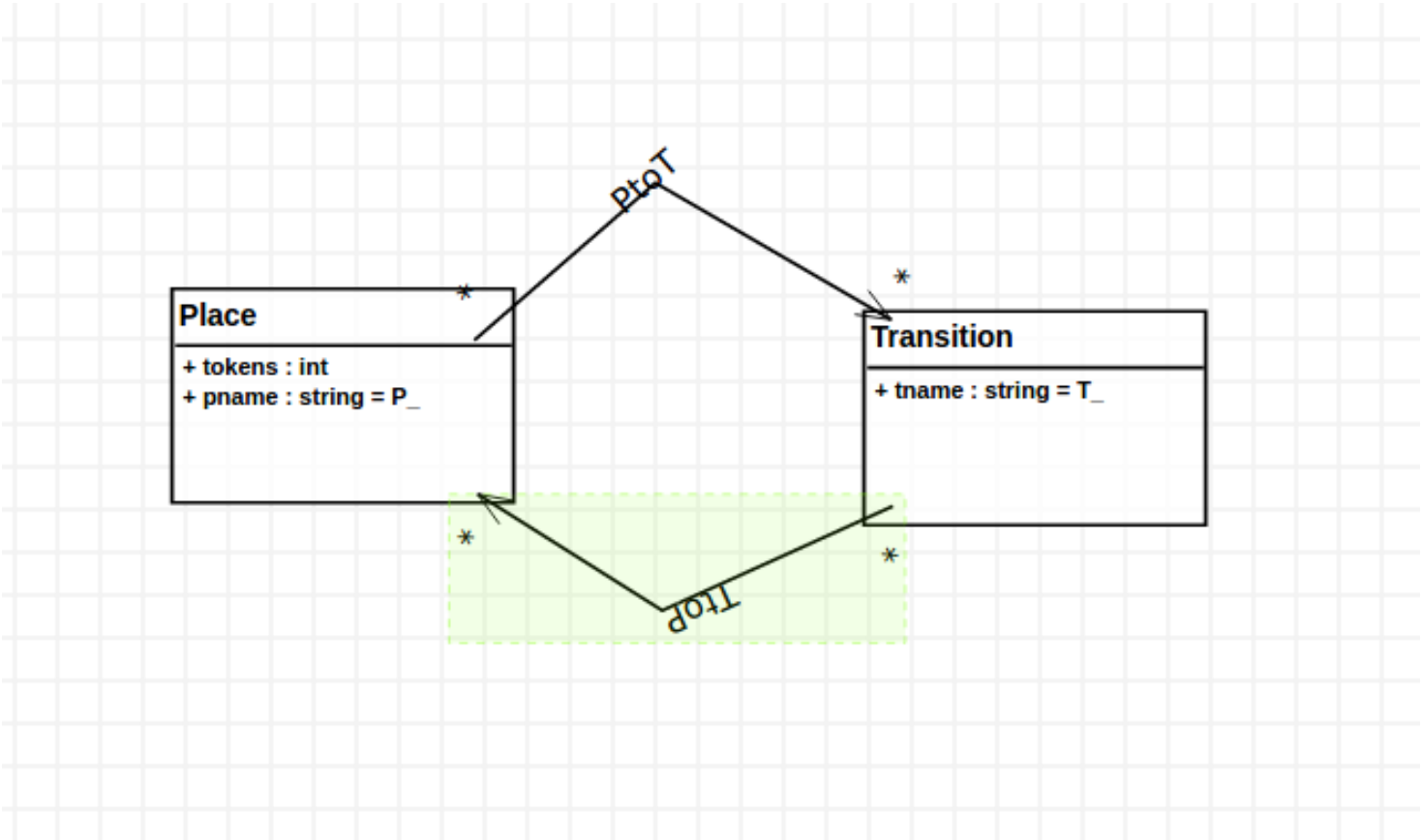
Generic Meta-Model: Concrete Syntax



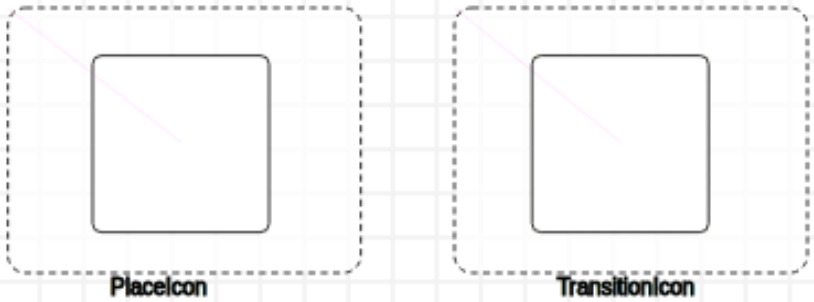
Create Example Models

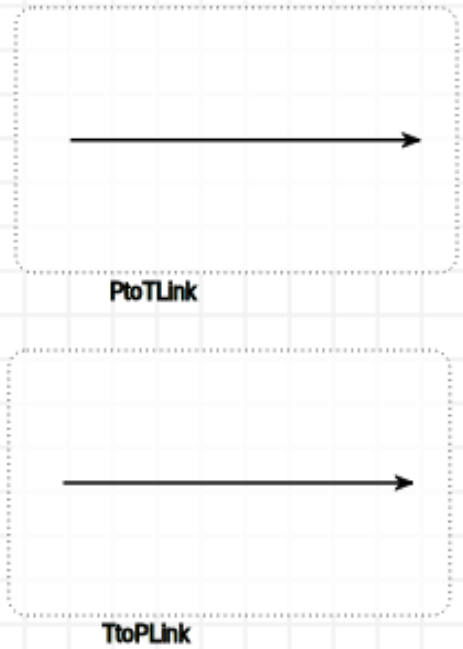


Model transformations into abstract syntax



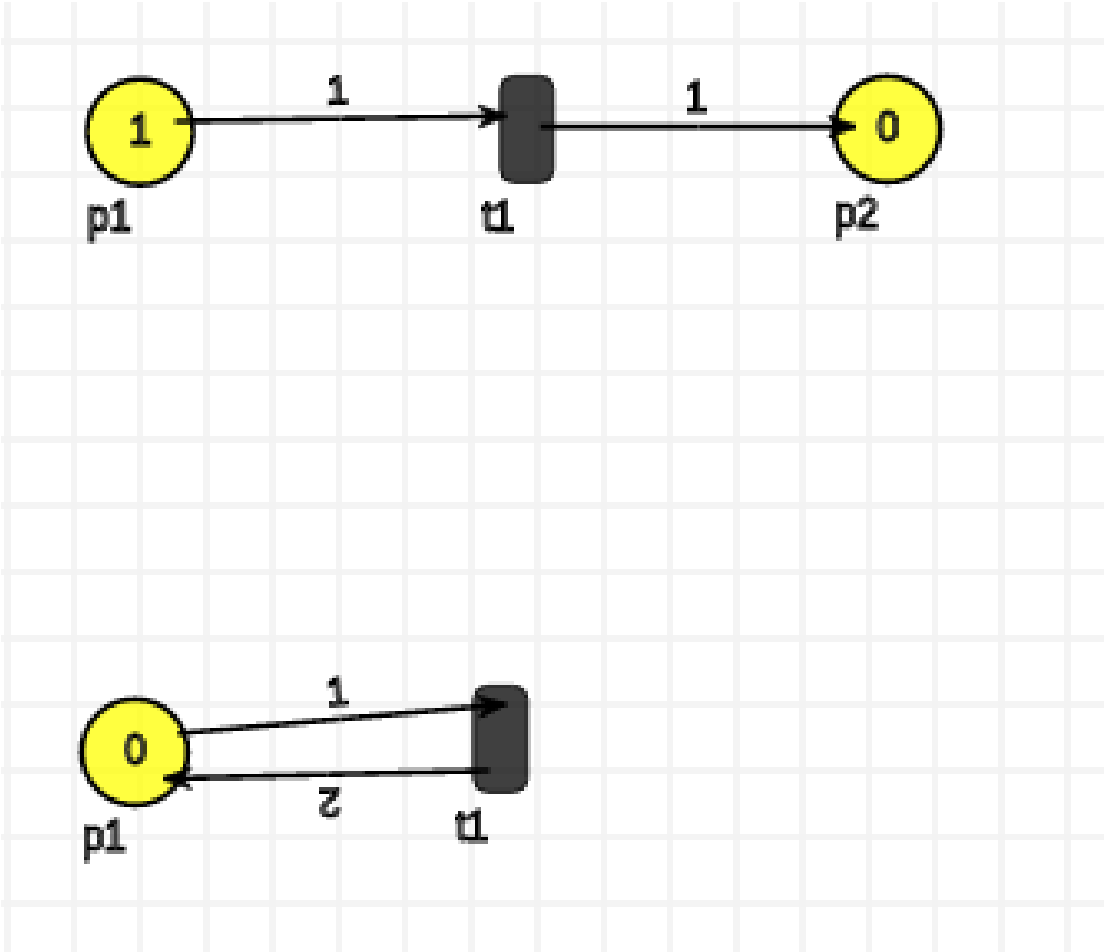
Default concrete syntax generation





Manually change concrete syntax icons

Create models using newly generated MM



Conclusion

- related work
- differences: AToMPM, visual
- proposed approach
- todo: syntax generation, model generation

Questions?