

# TYTLES summary

# Why types for lexical semantics?

- ▶ generative lexicon, coercion, learning, meaning in flux, dynamic system
- ▶ dependent types
- ▶ probability
- ▶ computability

- ▶ types can remain constant over change of witnesses/inhabitants
- ▶ possibility of observing new witnesses of a type
- ▶ different from a Montagovian notion of sense: function from possible worlds to extensions — if you change the extension the sense changes
- ▶ the type a word is associated with can also change — structured types allow us to give an account of change not available in a Montagovian sense

## Papers relating to some kind of dynamic aspect of types

- ▶ Stergios Chatzikyriakidis, Mathieu Lafourcade, Lionel Ramadier and Manel Zarrouk. Type Theories and Lexical Networks: Using Serious Games as the Basis for Multi-Sorted Typed Systems
- ▶ Staffan Larsson. Perceptual Meaning in TTR Judgement-based Semantics and Conceptual Spaces
- ▶ Simon Dobnik. Interfacing Language, Spatial Perception and Cognition in Type Theory with Records
- ▶ Ellen Breitholtz. Are Widows Always Wicked? Learning concepts through enthymematic reasoning
- ▶ Bruno Mery. The Relative Complexity of Constraints in Co-Predicative Utterances
- ▶ Livy Real and Alexandre Rademaker. An Overview on Portuguese Nominalisation
- ▶ Seohyun Im and Chungmin Lee. A Developed Analysis of Type Coercion Using Asher's TCL and Conventionality

- ▶ Frames in hybrid logic  $\approx$  frames as record (types)
- ▶ can expressions of hybrid logic be thought of as record types (event types)?
- ▶ Laura Kallmeyer, Timm Lichte, Rainer Osswald, Sylvain Pogodalla and Christian Wurm. Quantification in Frame Semantics with Hybrid Logic

- ▶ story of Martin-Löf and donkey anaphora
- ▶ DRT conditionals sort of reinvented dependent types
- ▶ no corresponding general strategy in standard model theoretic semantics

## Some uses of dependent types

- ▶ specific indefinites — Justyna Grudzinska and Marek Zawadowski. A Puzzle about Long-distance Indefinites and Dependent Type Semantics
- ▶ enthymemes/topoi — Ellen Breitholtz. Are Widows Always Wicked? Learning concepts through enthymematic reasoning
- ▶ presupposition — Daisuke Bekki and Miho Satoh. Calculating Projections via Type Checking; Ribeka Tanaka, Koji Mineshima and Daisuke Bekki. Factivity and Presupposition in Dependent Type Semantics

- ▶ probability associated with vagueness
- ▶ probability associated with type judgements vs. probability of possible worlds
- ▶ Peter Sutton and Hana Filip. Probabilistic Mereological TTR and the Mass/Count Distinction

- ▶ tractability more likely than with traditional possible world semantics
- ▶ Pepijn Kokke. Formalising type-logical grammars in Agda

# Conclusion

- ▶ a broad span of approaches, different type theories
- ▶ but common assumptions and goals
- ▶ we should keep talking ...