## Team Semantics and Dependence Linguistic and Philosophical Applications

Marco Degano Maria Aloni

MoL January Projects Presentations 8 December 2021

### Who we are



Marco Degano



Maria Aloni

### Who we are



Marco Degano



Aleksi Anttila



Maria Aloni



Jialiang Yan

## What is this project about?

Registration

## What is this project about?

Four Case Studies

$$M,\,i\models Pxy \Longleftrightarrow \langle i(x),i(y)\rangle \in P^M$$

$$\begin{array}{c|cccc} & x & y \\ \hline i & a_1 & b_1 \end{array}$$

## What is this project about?

$$M, T \models Pxy \Leftrightarrow \forall i \in T : \langle i(x), i(y) \rangle \in P^{M}$$

$$i_{1} \quad a_{1} \quad b_{1}$$

$$i_{2} \quad a_{2} \quad b_{1}$$

$$i_{3} \quad a_{3} \quad b_{2}$$

$$i_{4} \quad a_{4} \quad b_{2}$$

Four Case Studies

$$M, T \models Pxy \Leftrightarrow \forall i \in T : \langle i(x), i(y) \rangle \in P^{M}$$

$$M, T \models dep(x, y) \Leftrightarrow \qquad \qquad i_{1} \quad a_{1} \quad b_{1}$$

$$\forall i, j \in T : i(x) = j(x) \Rightarrow i(y) = j(y)$$

$$i_{2} \quad a_{2} \quad b_{2}$$

$$i_{3} \quad a_{3} \quad b_{3}$$

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 Linguistic and Philosophical Applications of Team Semantics and Dependence Logics

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$$i_{4} \quad a_{4} \quad b_{4}$$

 $M,T \models NE \Leftrightarrow T \neq \emptyset$ 

 Partly related to Maria's project 'NØthing is Logical' (NihiL): https://www.marialoni.org/Nihil

### Four Case Studies (1 & 2)

### (1) Free Choice

- a. You are allowed to take project A or project B.  $\Diamond(A \lor B)$
- b.  $\leadsto$  You are allowed to take project A and you are allowed to take project B.  $\Diamond A \land \Diamond B$

### Four Case Studies (1 & 2)

### (1) Free Choice

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- b. → You are allowed to take project A and you are allowed to take project B.
   ◊A ∧ ◊B

#### (2) Modified Numerals

- a. The MoL offered at least three projects. --> ignorance

### Four Case Studies (3 & 4)

#### (3) Exceptional Scope

- a. Every student read all papers that a famous professor wrote.  $(\exists > \forall)$
- b. A student read all papers that every famous professor wrote.  $*(\forall > \exists)$

## Four Case Studies (3 & 4)

### (3) Exceptional Scope

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#### (4) Marked indefinites

- a. *Ivan xočet speť kakoj-to romans.* Ivan wants sing which-indef. romance
  - 'Ivan wants to sing some [specific] romance.'
- b. *Ivan xočet spet' kakoj-nibud' romans.* Ivan wants sing which-indef. romance
  - 'Ivan wants to sing some [non-specific] romance.'
    (from Paduvceva 1985)

## Organization

### Assessment (pass/fail):

- Class presentation
- Short project

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#### Schedule:

- Week 1: 3 Introductory lectures
- Week 2: Guest lecture by Aleksi + Presentations
- Week 3: Individual meetings + Project
- Week 4: Project
- (The project takes place on-campus, but remote participation is possible for each activity.)

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### • Homepage:

https://m-degano.github.io/teaching/
january-project/

# Prerequisites

An interest in the topic

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 (Students who have taken SfS might find this project a natural continuation of SfS's approach.)

Detailed cross-linguistic study

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Novel modelling of linguistic phenomena

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Design of an experimental study

Detailed cross-linguistic study

Novel modelling of linguistic phenomena

Design of an experimental study

Mathematical aspects of the frameworks

## Registration Deadline

- If you are interested in this project, please contact the instructors by email before 22 December 2021.
- (In special cases, we will accept later registrations, but we would like to have an idea of the number of students before the Christmas break.)

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THANK YOU!