

Discussion: Matrix Reloaded

Interaction between Matrix Developers and other Grammar Engineers



- How can we optimize the Grammar Matrix so that it is as useful as possible for as many language as possible?
- What can we learn from DELPH-IN grammars (and offer them)?
 - When are matrix types or library provided analyses not what the grammar engineer would have liked?
 - What additions would be nice to have in the near future?
 - Which analyses for a particular phenomenon exist in different languages
- How can we collaborate on this?



The Matrix Customization System's Grammar Components

- Matrix.tdl: general types meant to be useful for most languages
- Libraries: providing analyses for widespread phenomena, and language specific behavior of cross-linguistic phenomena



Updating the Matrix

- matrix.tdl is continual work in progress
 - e.g. COMPS $\langle \rangle$ was removed from the *head-subj-phrase* to accommodate VSO word order
- Lately, it has been more or less stable
- Several matrix-based grammars have been created:
 - what feedback do they provide?

Actively using feedback...

A workshop will be held at DELPH-IN 2011



- How can we increase collaboration between grammar engineers?
 - Are there ways that do not take too much time?
 - Some initial ideas/requests on the following slides...
- Preparations for the Matrix Collaboration Workshop:
 - What should this meeting be like?
 - pre-meeting discussion via the matrix mailinglist
 - (exceptionally) feel encouraged to change matrix.tdl...



Useful Feedback for Matrix developers

- matrix.tdl:
 - Is there anything you changed or liked to change?
 - Where there constraints you had to remove?
 - Which types are used in your grammar and which are not?
 - (Are there types in your grammar that might be cross-linguistically applicable)
- libraries:
 - Which analyses did not behave as you expected (unclear userinterface, wrong assumptions on how language behaves)?
 - Did you encounter any bugs in the system?
 - Where there phenomena that you completely reimplemented?



Some ideas for collaboration

- When discovering:
 - types in matrix.tdl that are language specific
 - bugs or unexpected behavior of the customization system
 - that you need to completely through the customized analysis out to implement a phenomenon in your grammar correctly
- ...please report to matrix-dev@u.washington.edu
- A repository with all DELPH-IN grammars (where new versions are uploaded)
 - Engineers working on different languages can see how a particular phenomenon is implemented in other grammars
 - Library developers can see how a particular phenomenon is implemented in medium to large scale grammars
 - Matrix developers can investigate how matrix.tdl is used (which types) and (if applicable) what changes the engineer made in matrix.tdl



- A DELPH-IN grammar repository, where grammars are regularly updated
- Other forms of collaboration between grammar engineers?
- Matrix Reloaded?
- The workshop in Seattle next year?

