

XMG: (more) Dimensions

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Dimensions

- XMG descriptions are made into dimensions, using dedicated languages
- A dimension usually corresponds to a level of linguistic description
- Accumulations in different dimensions are independent
- XMG is extensible → new dimensions can be created
- Existing dimensions are: syn, sem, iface, morph, frame

Share information between dimensions

If accumulations are independant, how do we share content between them

- Unification variables (if the two contributions are done in the same class)
- Interface: a global feature structure to share information between dimensions
- The interface is used as a dimension:

```
...  
<iface>{ [a1=v1, ... , an=vN] }  
...
```

The <sem> dimension

- The <sem> dimension allows to describe semantic representations such as the ones in [Gardent and Kallmeyer, 2003]
- Two different types of statements: declarations of predicates and overscoping relations
- A predicate comes with an optional label and arguments:

| ?L:Pred(?Arg1, ... , ?ArgN)

- An overscoping relation takes as arguments two labels

| ?L1 << ?L2

Exercise

- Extend the existing metagrammar using the `<sem>` dimension
- Every generated tree should have a semantic counterpart



Gardent, C. and Kallmeyer, L. (2003).

Semantic Construction in FTAG.

In Proceedings of EACL 2003, pages 123–130, Budapest.