

Ways of Evaluation of the Annotators in Building the Prague Czech-English Dependency Treebank

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Performance

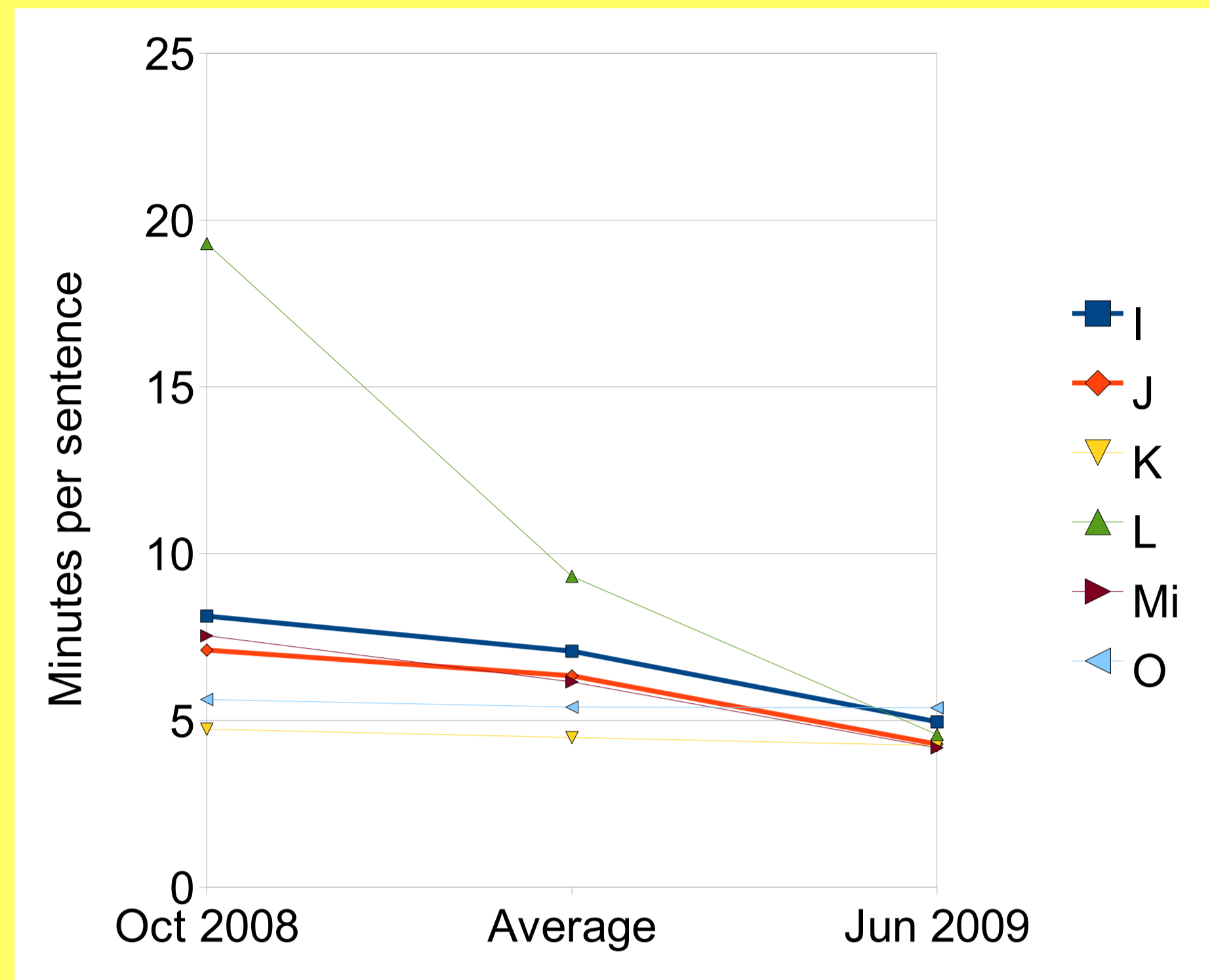
The annotators book the **time** spent working to a web form.

Average **speed**:
9.2 sentences per hour.

No one gets **slower** over time.

The fastest annotator is at the **same** time the one with lowest error rate and highest agreement with others.

Used to determine the **wages**.



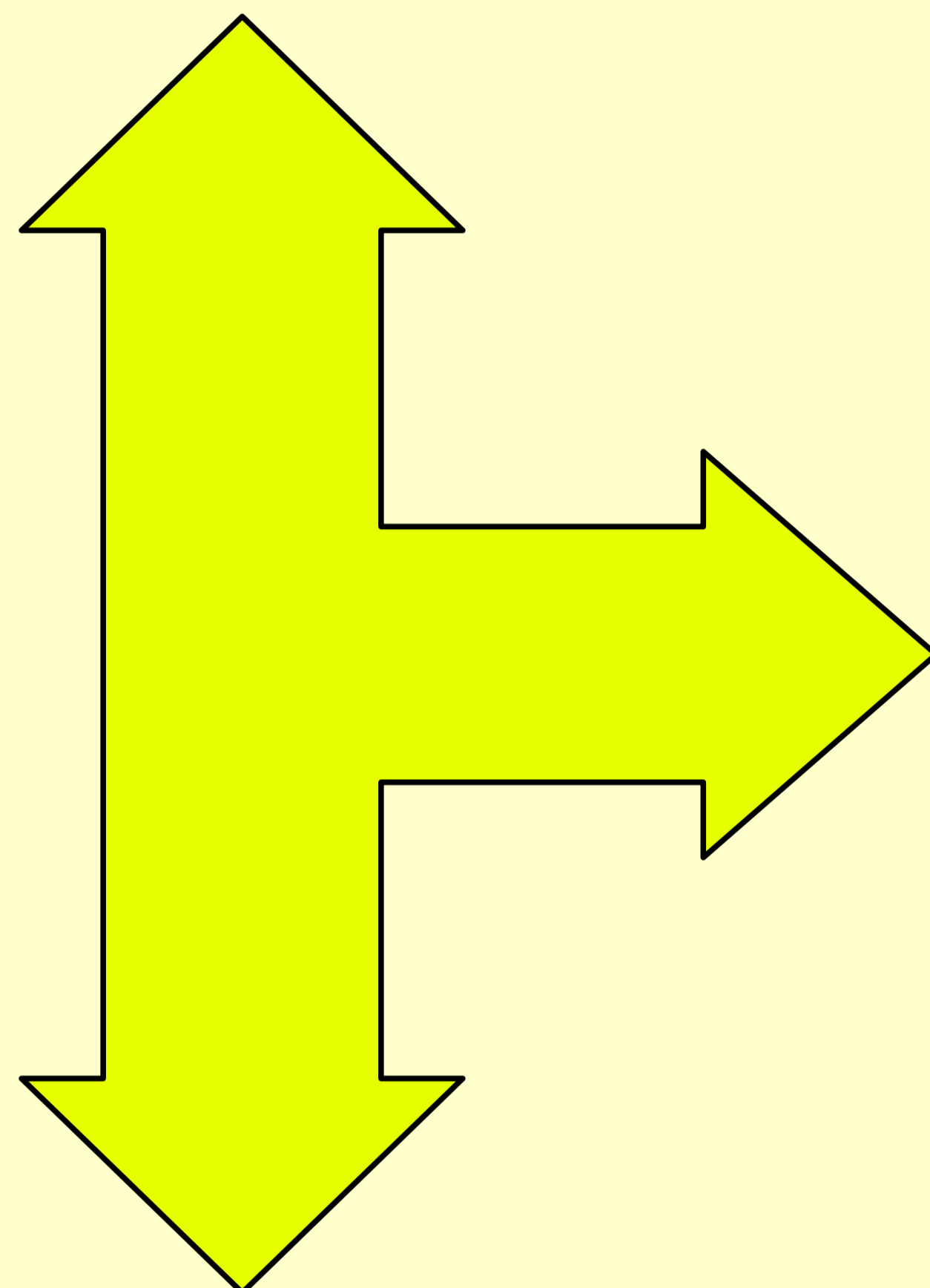
Prague Czech-English Dependency Treebank

Penn Treebank texts (WSJ part) translated to Czech.

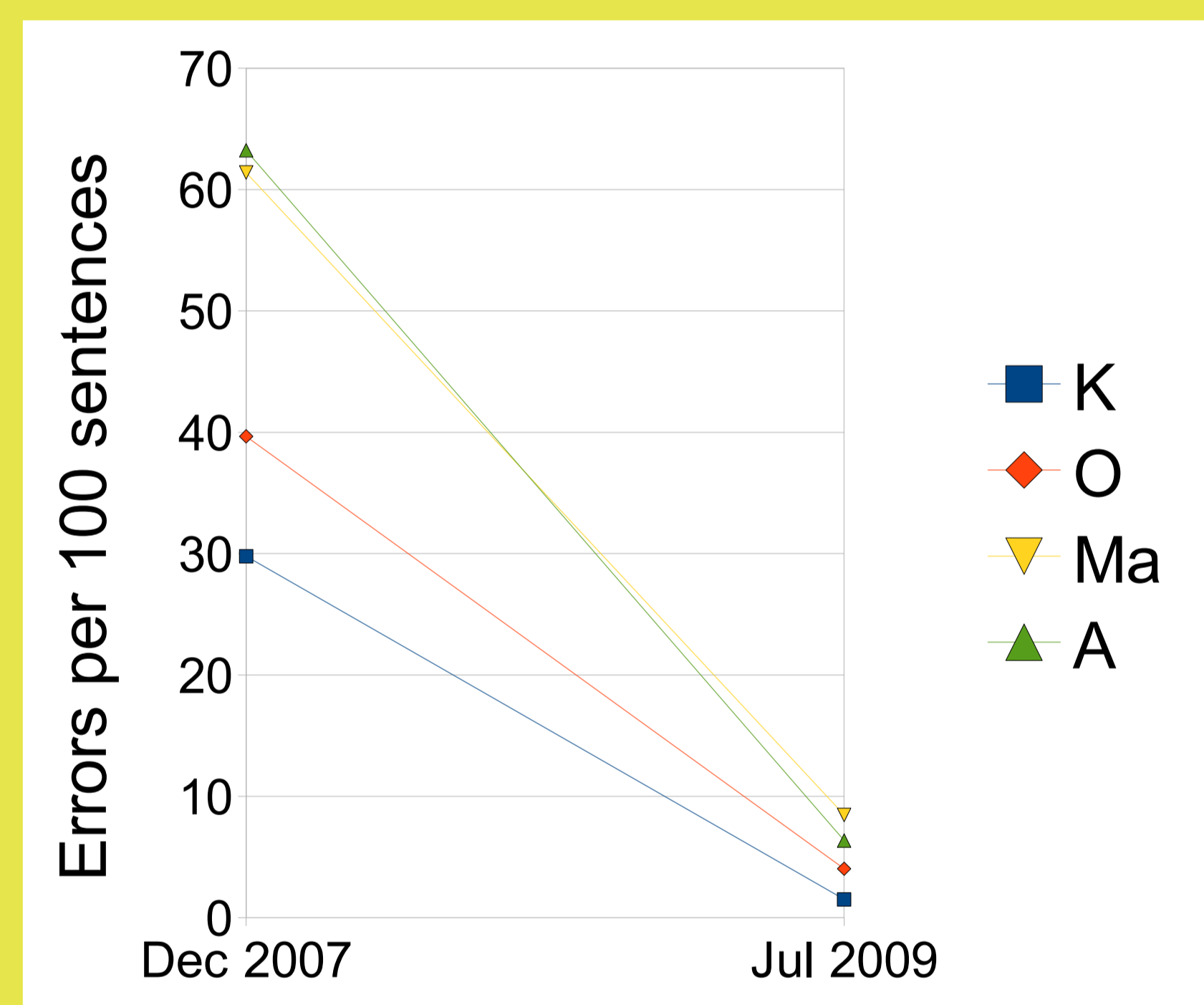
Stand-off annotation principle:
4 layers of annotation.

Tectogrammatical layer:
39 possible attributes per node
(8.42 used in average).

How to judge
the **quality** of
the annotation?



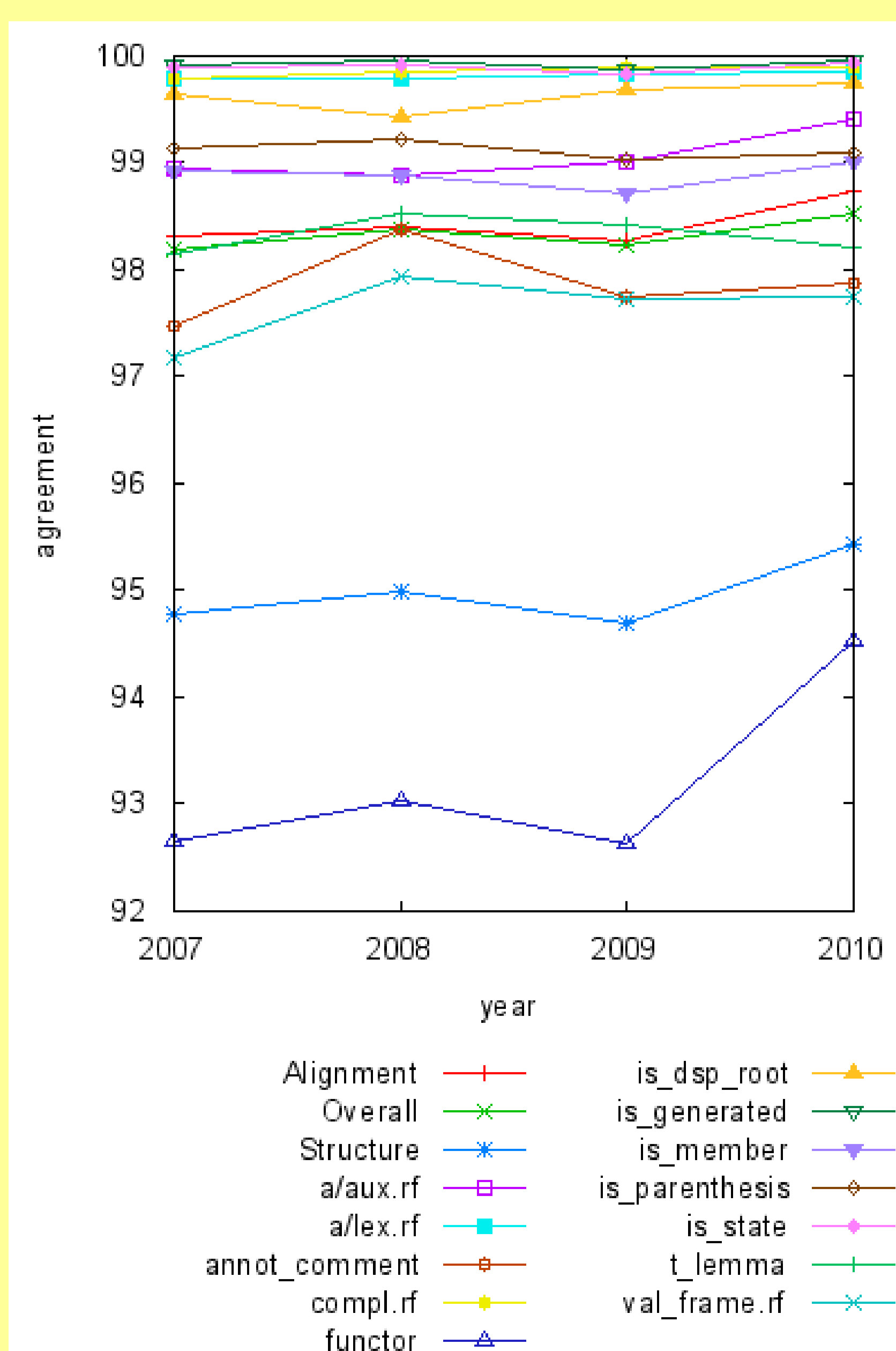
Error rate



Numbers from different periods can not be compared directly (different data, checking procedures, rules etc.), but the **rank** of the annotators remains similar.

No "gold standard" data → automatic checking procedures

Inter-annotator agreement



No "gold standard" data → **all pairs** of annotators compared.

Non-trivial task: deleted and added nodes complicate the **alignment**.

Baseline: output of a parser. The agreement between any two annotators is always higher than the agreement between the baseline and the worst annotator.

PCEDT (Czech part)

Annotation tool: Tree editor **TrEd**.

Format: **PML** (Prague Markup Language).

Annotation scheme: similar to Prague Dependency Treebank 2.0.

1st phase of annotation: 4 years, 4-7 annotators.

49208 sentences, over 1 million tokens. Almost 10% annotated in parallel.