MOLTO — Multilingual Online Translation

Non multa, sed multum not quantity but quality

MOLTO's mission is to develop a set of tools for translating texts between *multiple languages* in *real time* with *high quality*. MOLTO will use multilingual grammars based on semantic interlinguas.

In the trade-off between **coverage** and **precision**, MOLTO opts for precision. Our tools target the **producers** of information, as opposed to **consumers**. This means greater demands on quality, but fortunately the coverage can be limited. MOLTO builds on the idea of **controlled language**, making it more general and scalable.

Tool	Consumer	Producer
Quality	browsing	publishing
Input	unpredictable	predictable
Coverage	unlimited	limited

The MOLTO approach is orthogonal to consumer tools like Google Translate.
Google deals with millions of concepts, whereas we aim to scale up from 100's to 1,000's of concepts without losing precision.

Technology: (1) multilingual GF grammars as translation programs (2) domain ontologies as basis of domain interlinguas (3) statistical methods to add robustness and help automate grammar production.

Languages: Bulgarian, Catalan, Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Polish, Romanian, Russian, Spanish, Swedish.
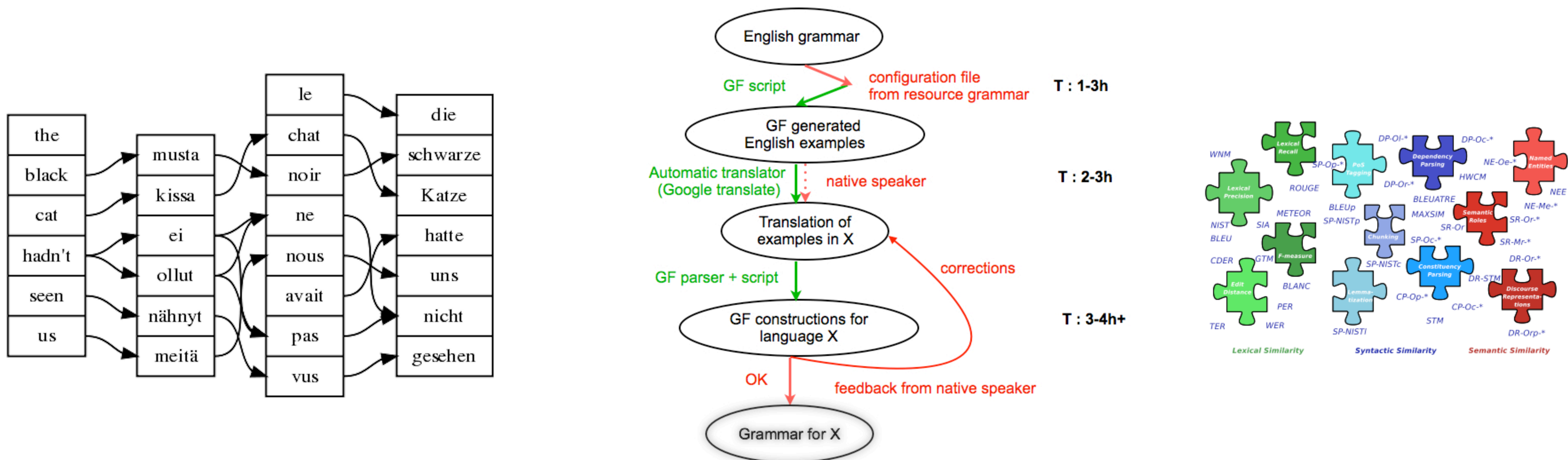
MOLTO explores several aspects of hybrid GF-SMT methods. We already have:
(1) grammar-based phrase alignments (2) learning grammars from SMT models (3) rich evaluation metrics (IQMT).

Case studies: (1) mathematical exercises (2) patents in pharmaceutical domain (3) museum object descriptions (4) traveller's phrasebook.

Tools produced: (1) translator plug-ins for web pages and for mobile devices (Android) (2) grammar development tools on desktops and in the cloud (3) GF-OWL two-way translation (4) hybrid GF-SMT components.

MOLTO engineering tools already available: (1) grammar IDE in the cloud (2) the Resource Grammar API for 18 languages