Corpus Query System Bonito
Recent Development

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- Big text corpora
  - very useful source of linguistic information
  - used for research, language teaching, lexicography ...
- Corpus query systems (CQS)
  - enable people to work with large text data
  - comfortable searching and querying corpora

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  - developed at Masaryk university, Czech Republic
  - fast searching mechanism, powerful query language
  - user-friendly interface
  - wide variety of languages
  - extending by adding new functions according to users needs
- Newly added functions
  - saving outputs in XML
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- Manatee
  - low-level corpus processing
  - fast searching even in very big corpora (billions of words)
- Bonito
  - graphical user interface
  - works through standard web browser
    $\longrightarrow$ platform independent
  - written in Python language
  - templating engine for generating web pages

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Example

Home | **Concordance** | Word List | **Word Sketch** | Thesaurus | Sketch-Diff

View options | Sample | Filter | Sort | Frequency | Collocation | Save

Corpus: **British National Corpus**
Hits: **769**
conc description

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A0D	Chandlers and Gardners upon the Feast of	**Corpus**	Christie ,) : The three Shepherds
A0K	ethnography , are often missing from the finite	**corpus**	of empirical observation . This transformational
A0K	outside the usual limits of the body or	**corpus**	of collected material . In my own case
A1A	to convey this knowledge , whether as a	**corpus**	or a skill . The conveying need not , indeed
A1B	that can be pointed to as constituting the	**corpus**	or the canon of Pound 's criticism . The
A68	made the suggestion that he should sleep in	**Corpus**	but take his meals in his old college of
A68	wet blanket . In those days the Fellows of	**Corpus**	were rather proud of the briskness of their
ABS	mounted . Greatness trickled from the	**corpus**	of his image , his career now like a gutshot

Saving outputs in XML format

- HTML outputs in Bonito 2
  - suitable for viewing the search results
  - bad for their saving and further processing
- Two saving options added
  - Text
  - XML

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- Text and XML saving implementation
  - many possible outputs
  - new template for each possible output
- XML structure
  - different for each kind of output
  - self-explaining XML tags
  - good structuralization of the data

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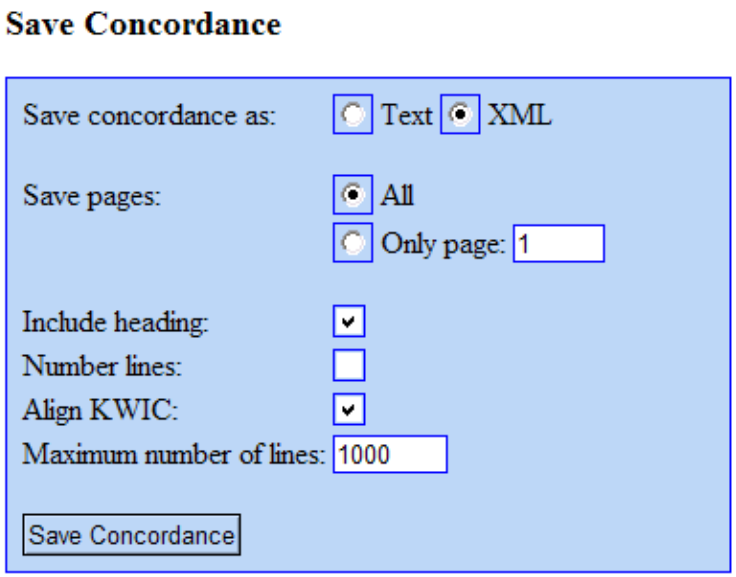
Save Concordance
Save concordance as:
Text
XML
Save pages:
All
Only page:
1
Include heading:
Number lines:
Align KWIC:
Maximum number of lines:
1000
Save Concordance

```
<concordance>
  <heading>
    <corpus>bnc</corpus>
    <hits>769</hits>
    <query>lc,[word="corpus"|lemma="corpus"] 769 </query>
  </heading>
  <lines>
    <line>
      <ref>A0D</ref>
      <left_context>Chandlers and Gardners upon the Feast of </left_context>
      <kwic> Corpus </kwic>
      <right_context> Christie , ) : The three Shepherds </right_context>
    </line>
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    </line>
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Localization Mechanism

- Motivation
  - worldwide use of the system
- Templating engine
  - old templating engine not suitable for the localization
  - switching to the Cheetah Templating Engine
  - translating all templates
- Translation
  - using gettext tools

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  - preferred language in web browser
  - setting he UI language according to the user
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  - corpora in different encodings
  - $\longrightarrow$ using UTF 8
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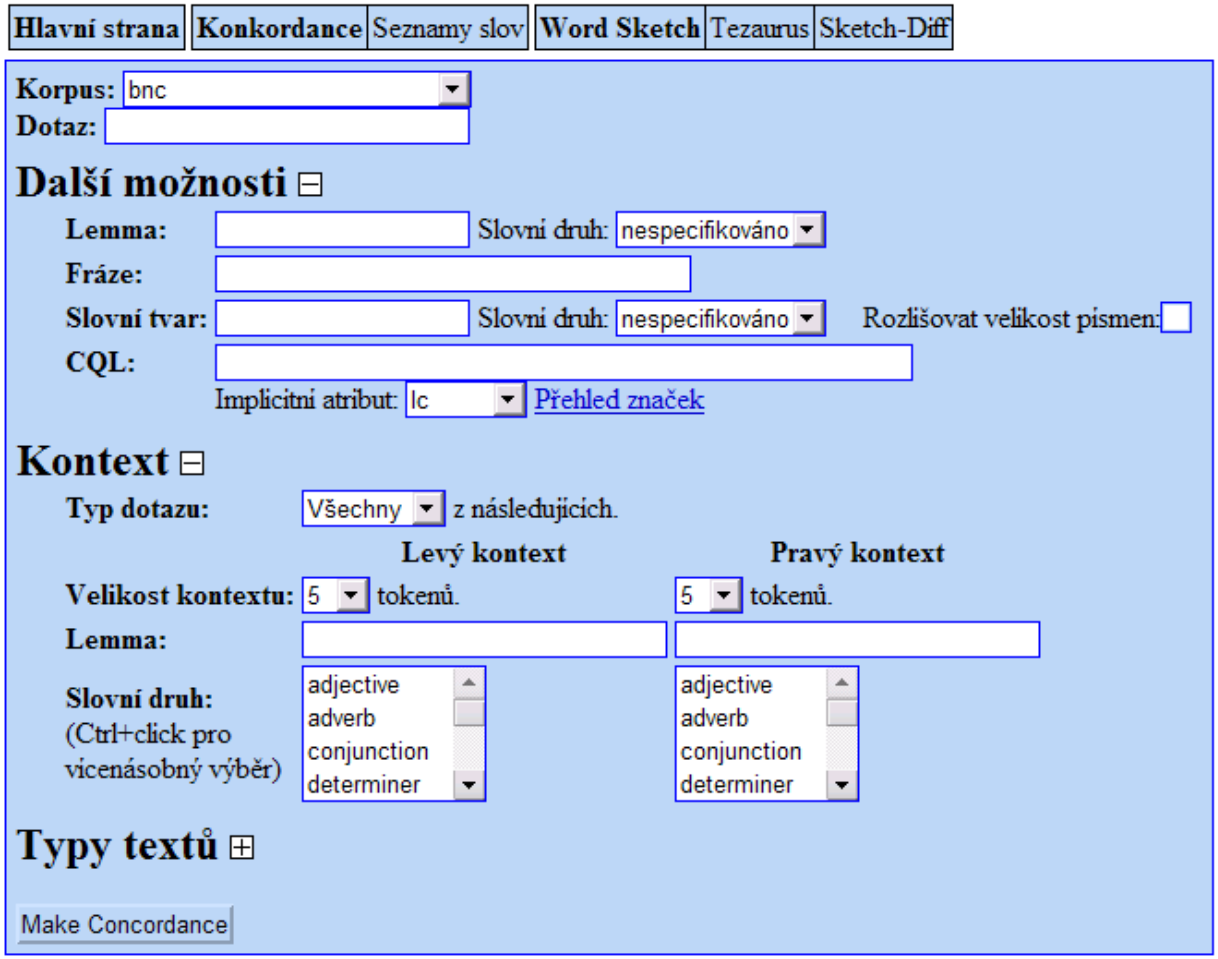

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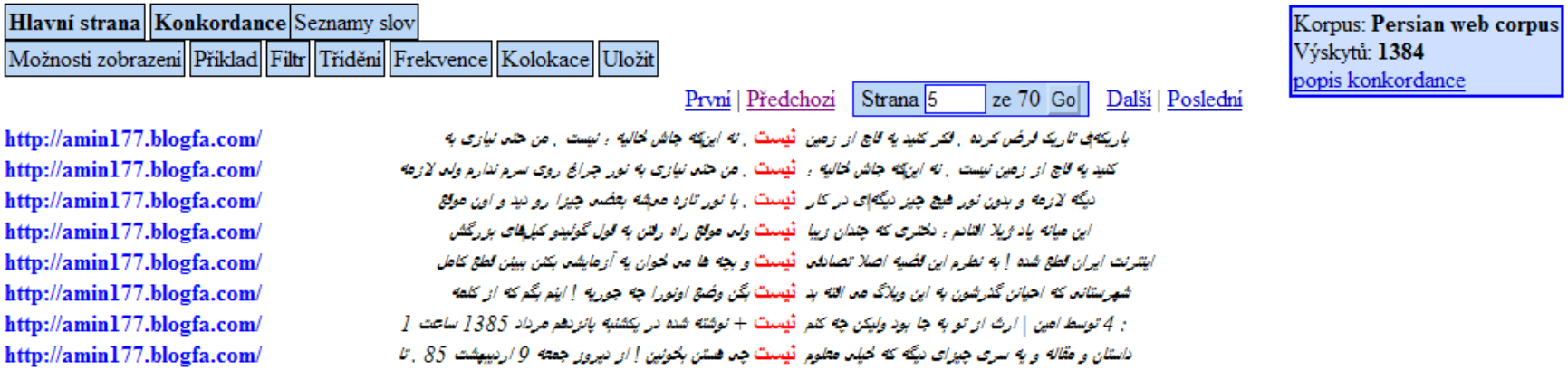

Conclusions and Future Directions

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