Link to Slides:
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Custom OR Off-the-shelf Software: Making the Right Choice for Corpus Analysis

IEEE ProComm | July 20-21, 2020
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AGENDA

- Introduction
- Corpus Analysis Approaches
  - Programming
  - Corpus Software
- Comparison: Programming vs. Corpus Software
- Conclusion

What is a corpus?

A corpus is a collection of naturally-occurring language text, chosen to characterize a state of variety of language (Sinclair, 1991).

Two approaches & RQs

Programming

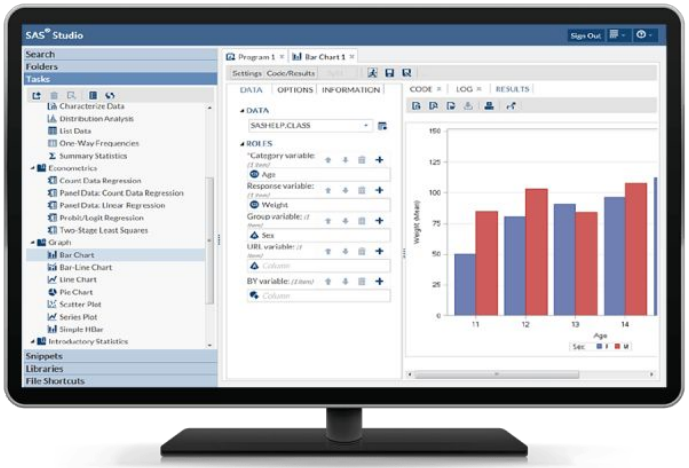
OR

Corpus Software

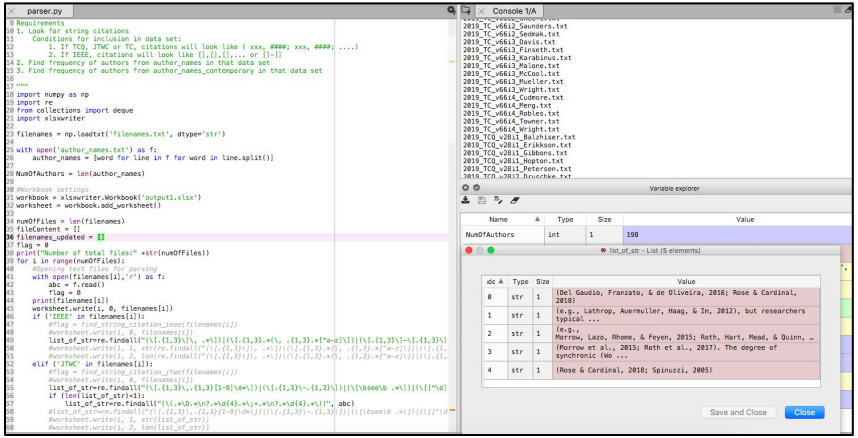
RQ1: What are the affordances and limitations of each approach?
RQ2: How should researchers make appropriate choices?

Programming

Commercial Software



Open-source languages



Programming basics for corpus analysis

1. Determine a dataset and clean it for parsing

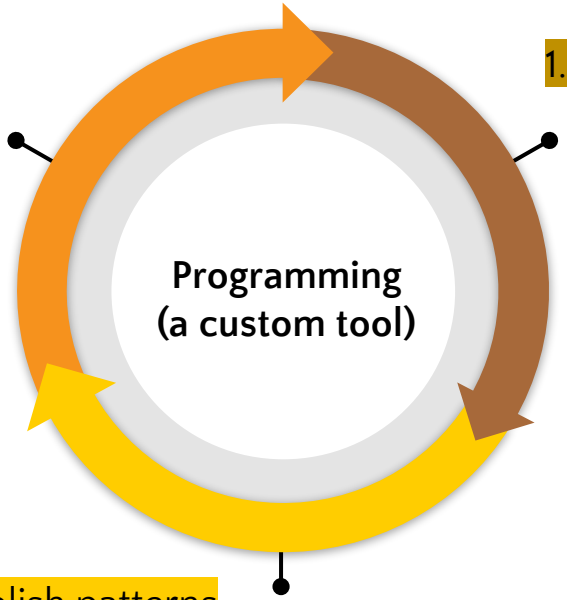
   Journal articles (777) in PDF format were converted to .TXT and cleaned up to see if formatting was accurate

2. Establish patterns

   Patterns for string citations were established by manual analysis for each of the journal types and regexes were created

3. Code patterns to retrieve results

   The code for parsing combined with the regexes was run to identify all the sting citations in the corpus

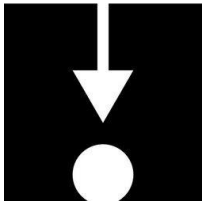


Corpus software packages

AntConc

WordSmith

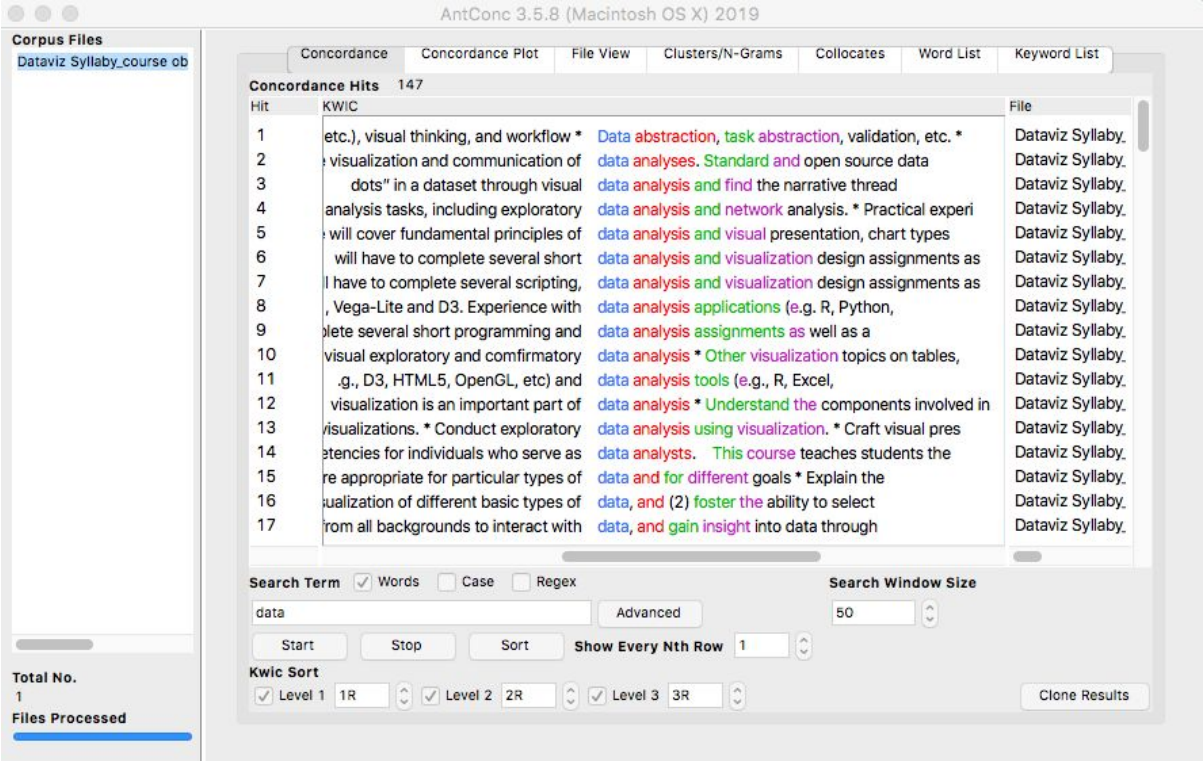
Wmatrix



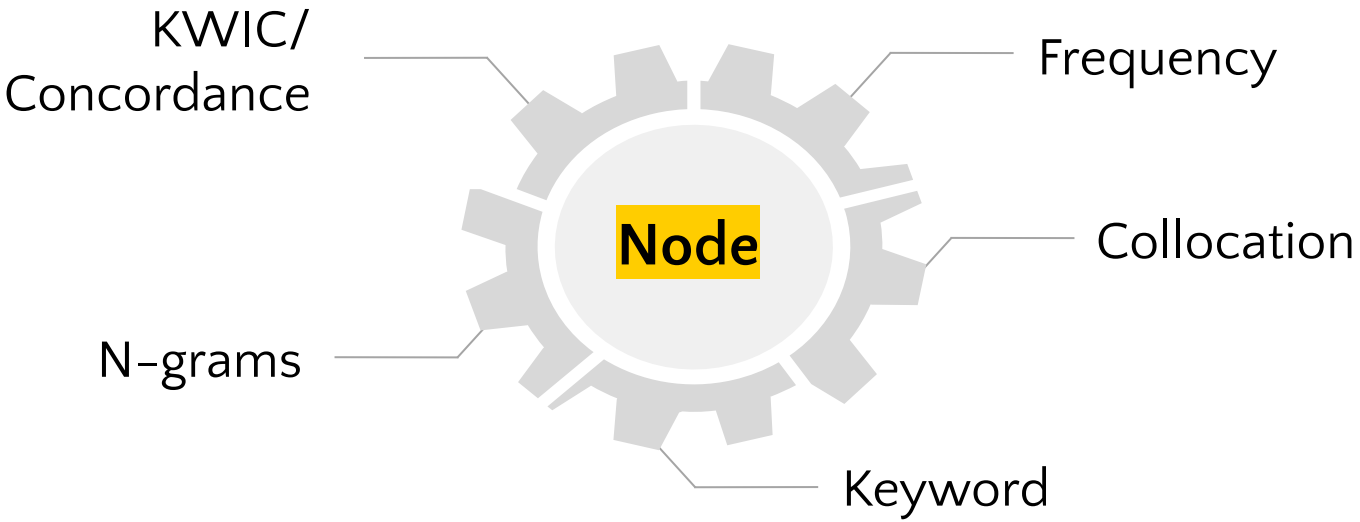
LancsBox

Sketch Engine

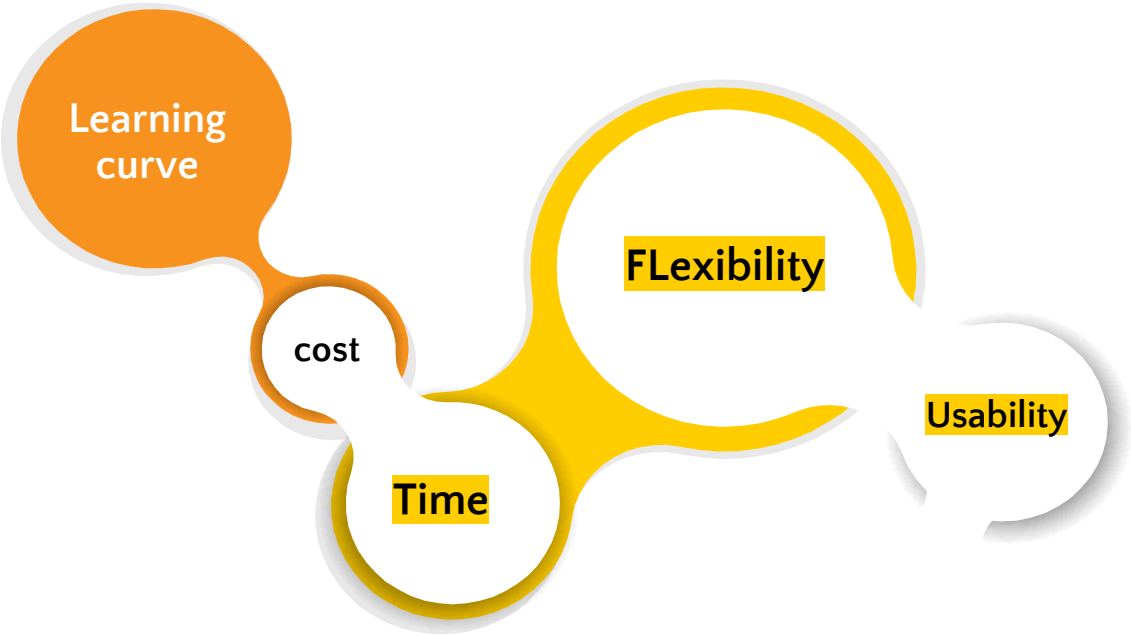
Corpus software interface



Key corpus linguistics concepts



Comparison: programming vs. software



Differences: learning curve

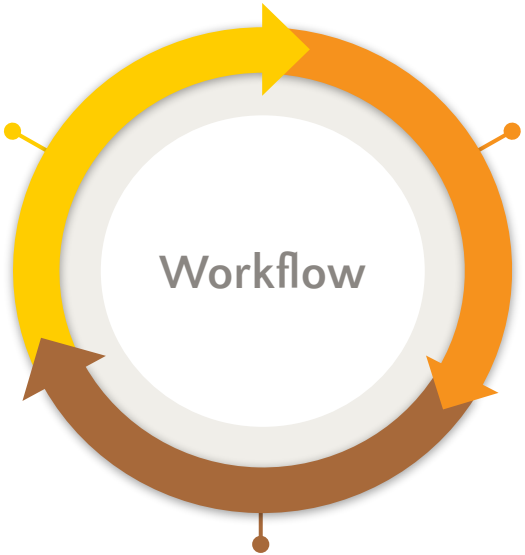
	Knowledge needed
Programming	syntax, variables, data structures, algorithms, and debugging
Corpus software	basic corpus linguistic concepts & how to apply them in context

Differences: cost

	Free	Subscription needed
Programming	Python, R	SAS, MATLAB
Corpus software	AntConc, LancsBox	Wmatrix, Sketch Engine, WordSmith tools

Differences: time/labor

1. Pre-processing data



2. Computational operations

3. Contextual analysis

Differences: flexibility

	Ratings
Programming	★★★★☆
Corpus software	★★★☆☆

Differences: usability/accessibility

	Ratings
Programming	★★★☆☆
Corpus software	★★★★☆

Conclusion

- Each approach has its own merits and demerits when used for computational social science research.
- Analyzing the differences will help scholars make informed decisions about choosing appropriate approaches in corpus research.

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Thanks!

Any questions ?

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