Exploratory Search Missions for TREC Topics

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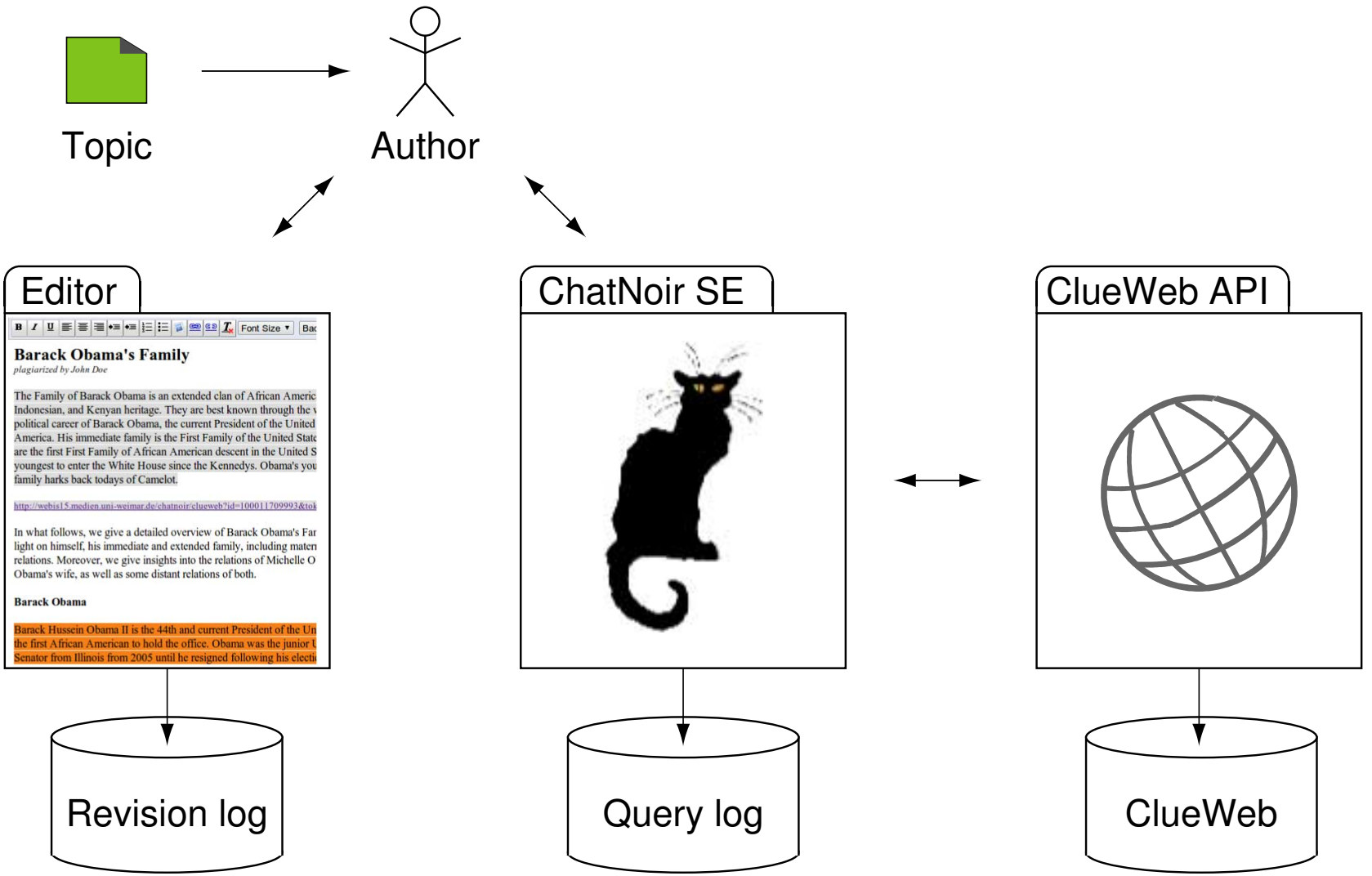
www.webis.de

Background

- Dataset for studying text reuse / plagiarism from web sources
- PAN workshop at CLEF
- Previous datasets: real plagiarism or algorithmically generated
- This time: crowdsourcing to freelance authors

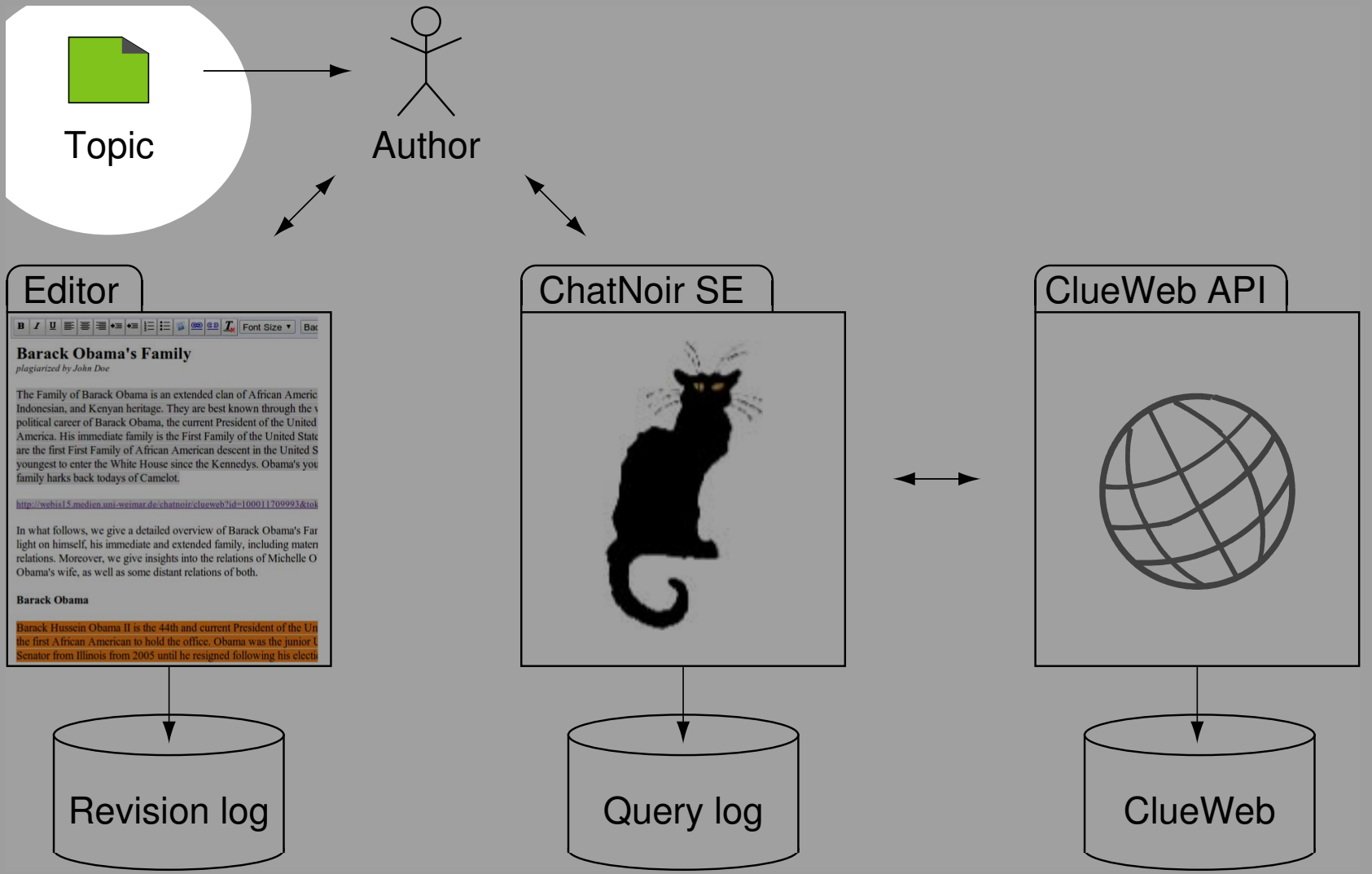
Background

Corpus Construction



Background

Topics



Background

Topics

Example topic:

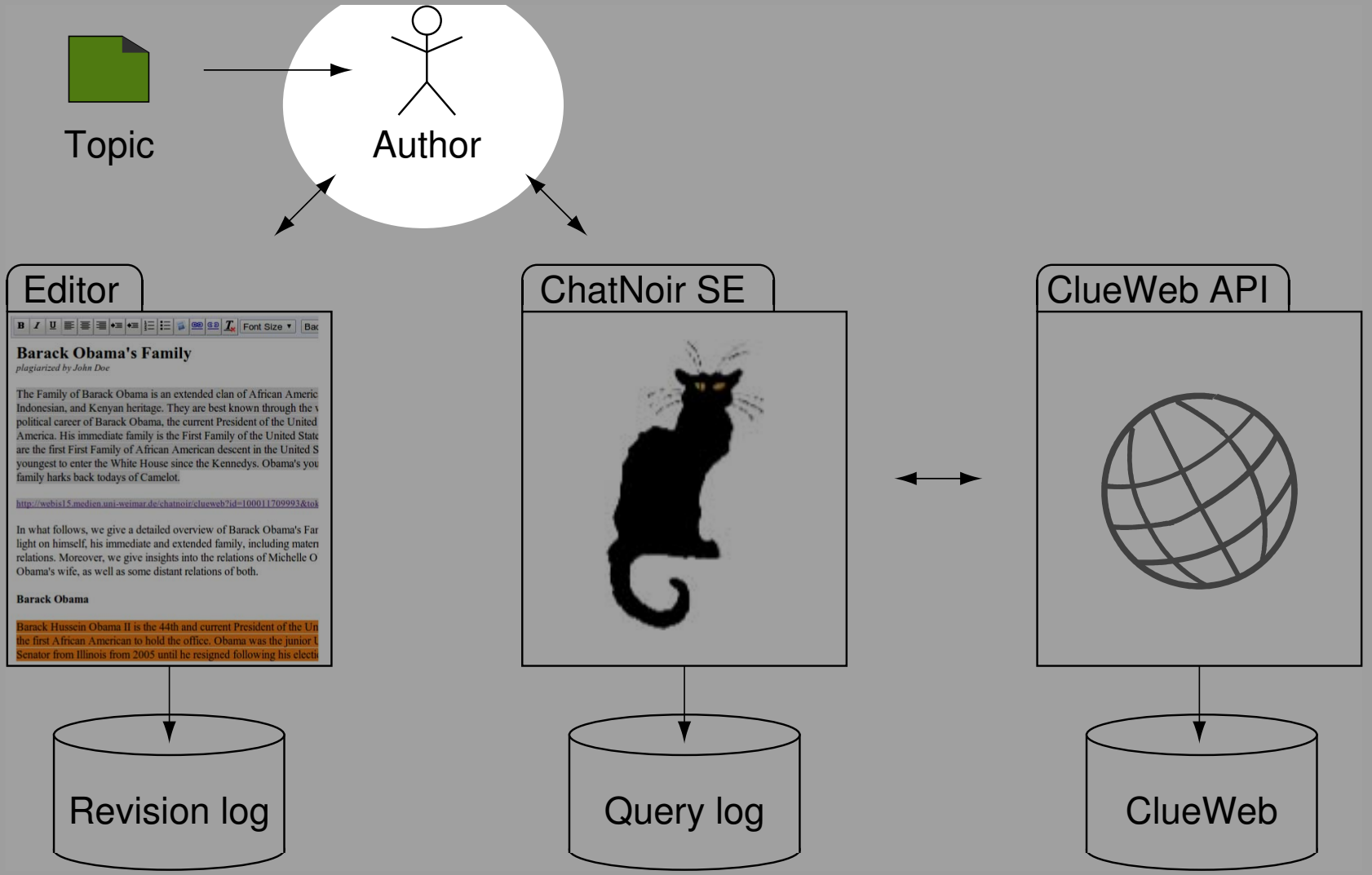
> *Obama's family*.
>
> Write about President Barack Obama's family history, including genealogy, national origins, places and dates of birth, etc. Where did Barack Obama's parents and grandparents come from? Also include a brief biography of Obama's mother.

Original topic 001 of the TREC Web Track 2009:

> *Query.* obama family tree
>
> *Description.* Find information on President Barack Obama's family history, including genealogy, national origins, places and dates of birth, etc.
>
> *Sub-topic 1.* Find the TIME magazine photo essay "Barack Obama's Family Tree."
>
> *Sub-topic 2.* Where did Barack Obama's parents and grandparents come from?
>
> *Sub-topic 3.* Find biographical information on Barack Obama's mother.

Background

Authors



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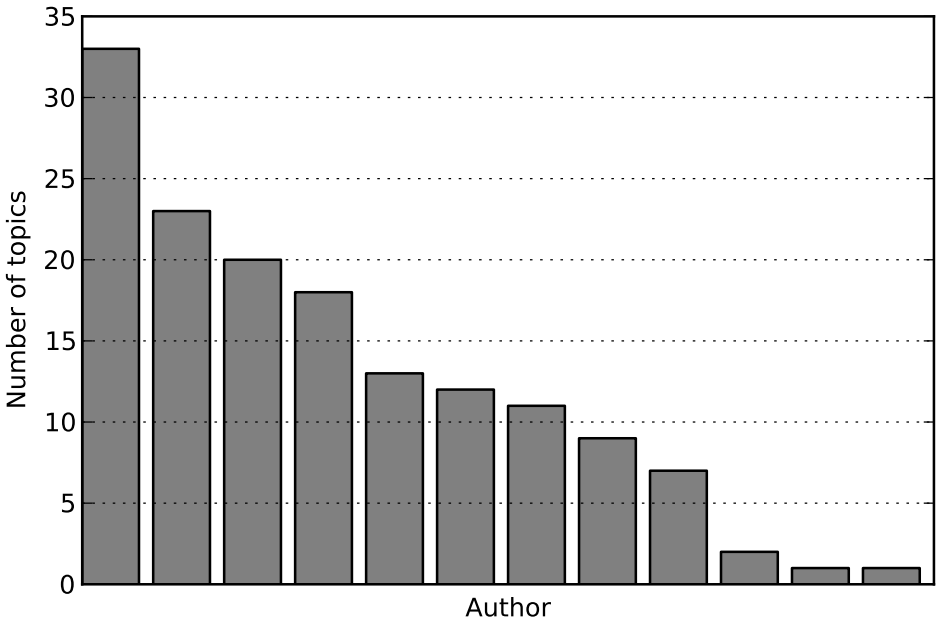
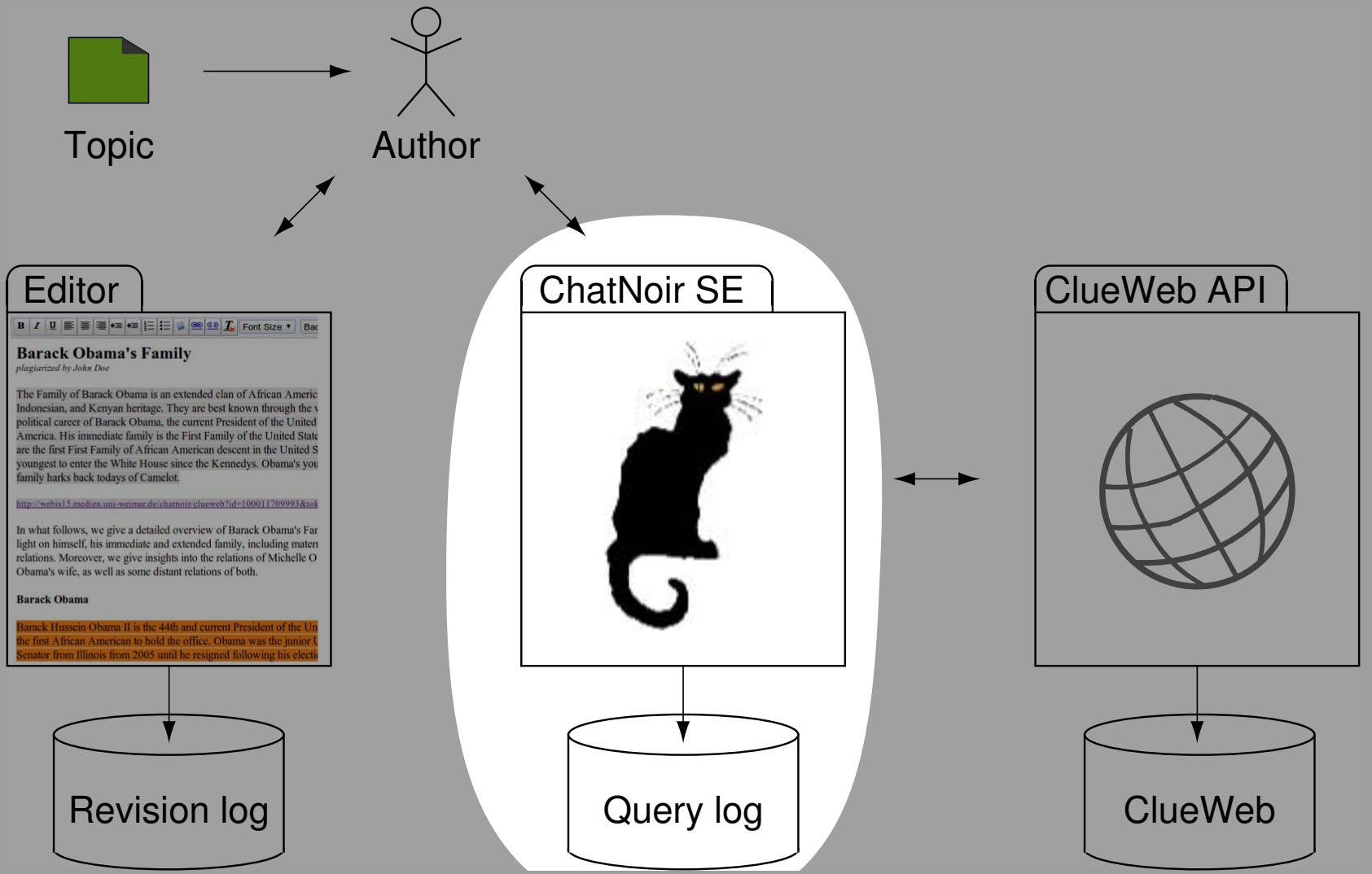


Author Demographics	
Age (Median)	37
Years Writing (Median)	8
Academic degree	
Postgrad	33%
Undergrad	25%
English	
Native	67%
Second Language	33%

- 12 Professional writers hired on oDesk [www.odesk.com]
- Fluent English speakers with several years writing experience

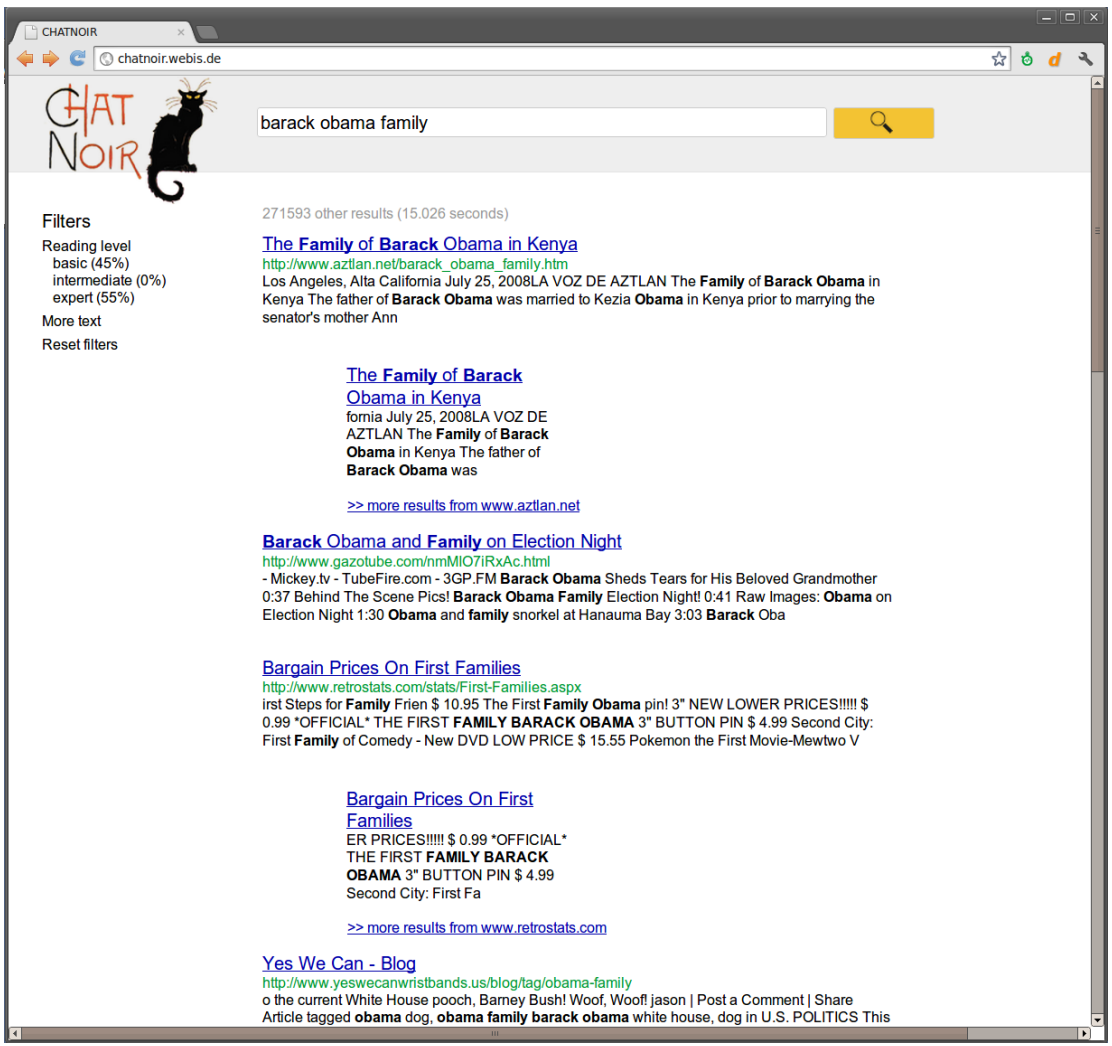
Background

Search engine and query log



Background

Clueweb search engine



[chatnoir.webis.de]

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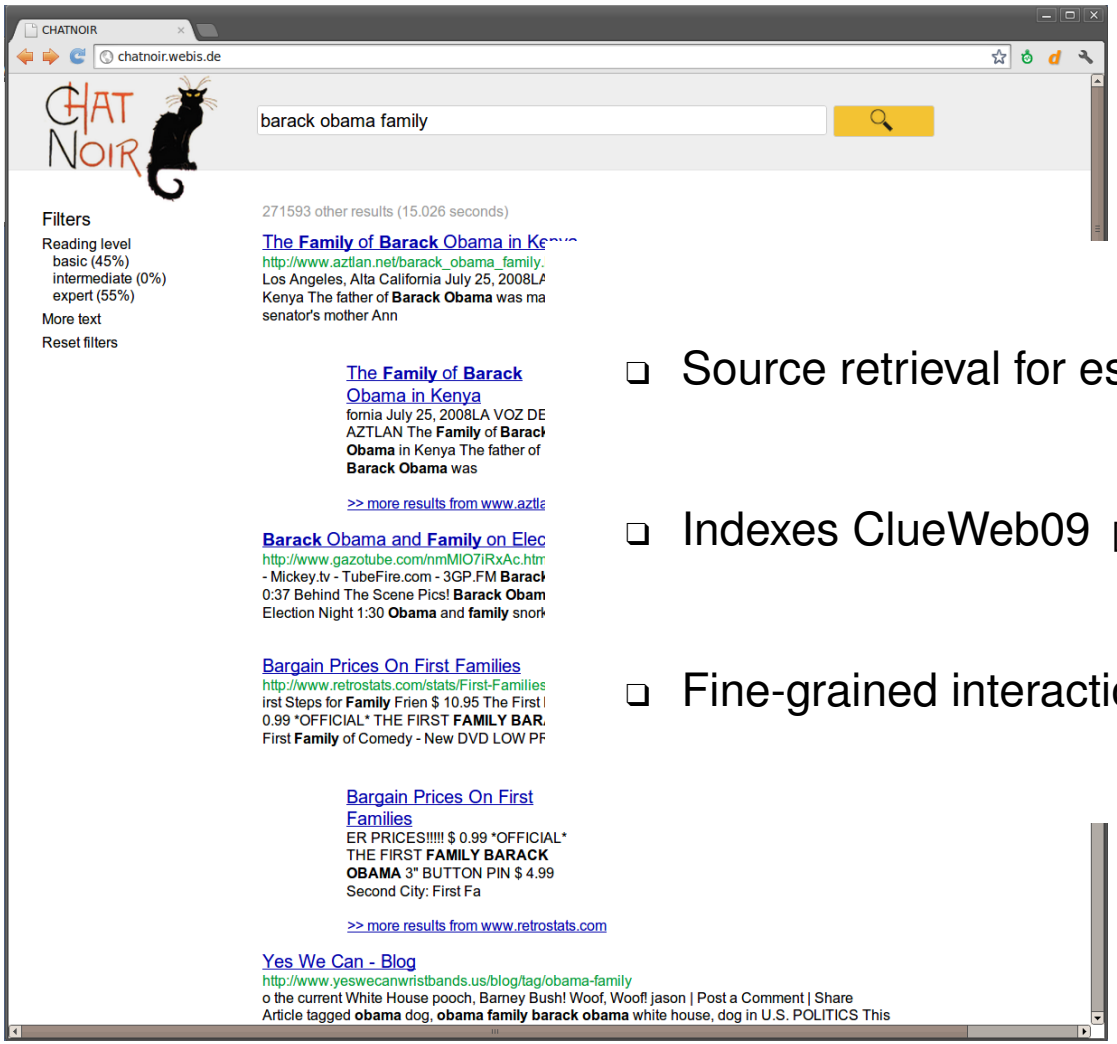

- Source retrieval for essay writing
- Indexes ClueWeb09 [lemurproject.org/clueweb09]
- Fine-grained interaction logs

[chatnoir.webis.de]

Query logs

Basic stats

Corpus Characteristic	Distribution min	avg	max	stdev	$\sum$
Queries					13 651
Queries / Topic	4	91.0	616	83.1	
Clicks					16 739
Clicks / Topic	12	111.6	443	80.3	
Clicks / Query	0	0.8	76	2.2	
Sessions					931
Sessions / Topic	1	12.3	149	18.9	
Days					201
Days / Topic	1	4.9	17	2.7	
Hours					2068
Hours / Writer	3	129.3	679	167.3	
Hours / Topic	3	7.5	10	2.5	

Findings so far

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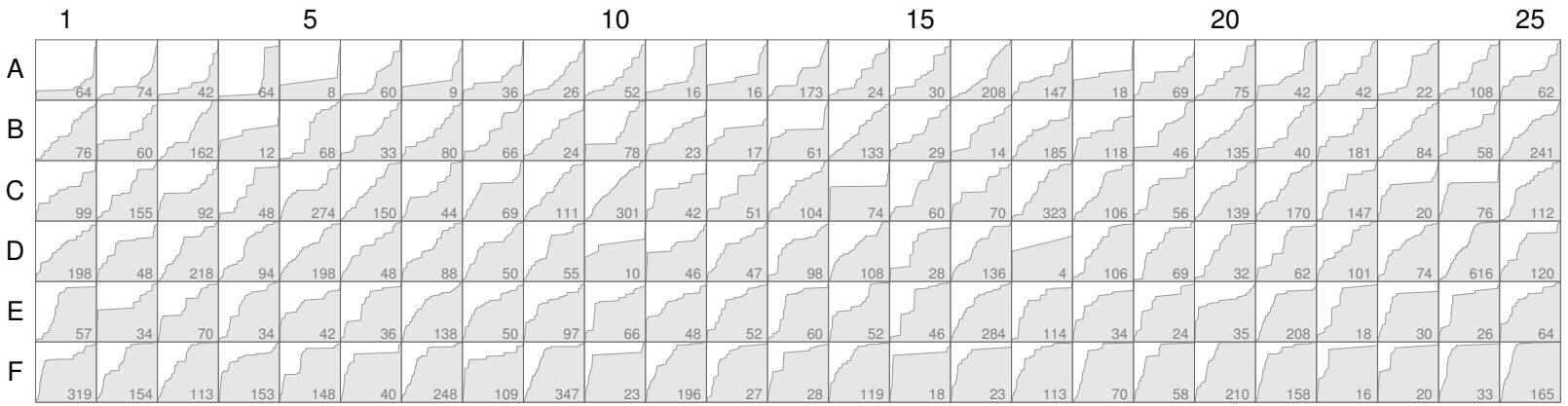
Distribution of Queries Over Time



Distribution of queries over time.

- fraction of posed queries (y-axis) over elapsed time (x-axis) between the first query until essay completion
- each cell represents one of 150 essays
- the numbers denote the total amount of posed queries
- the cells are sorted by area under the curve

Findings so far

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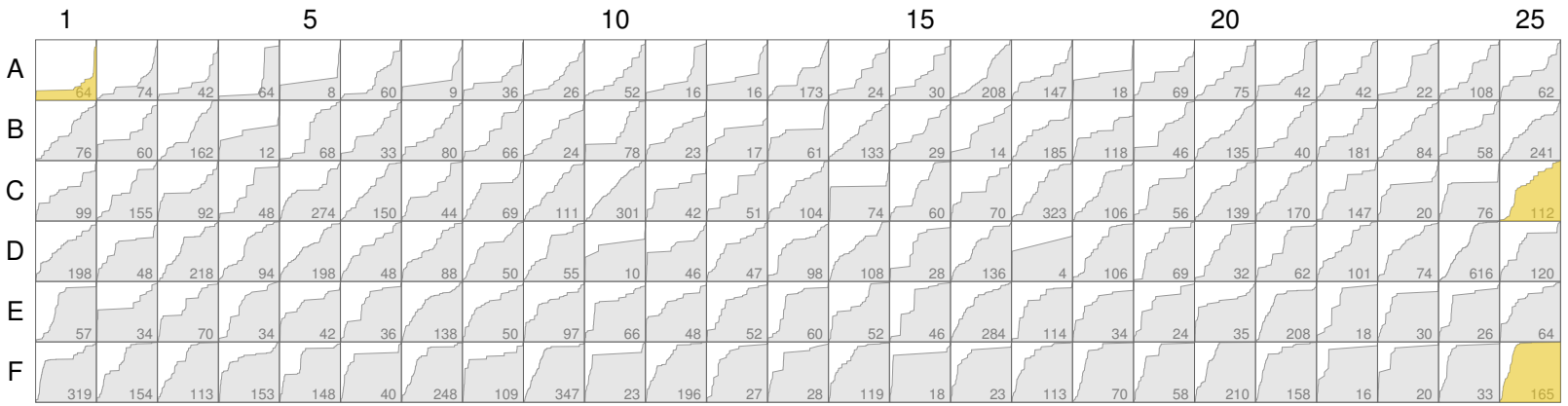

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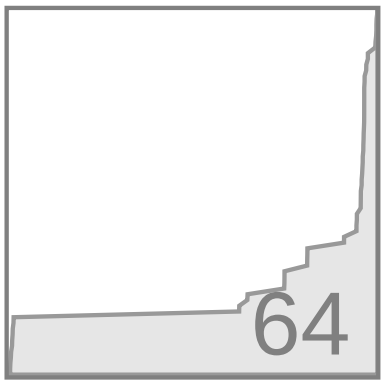

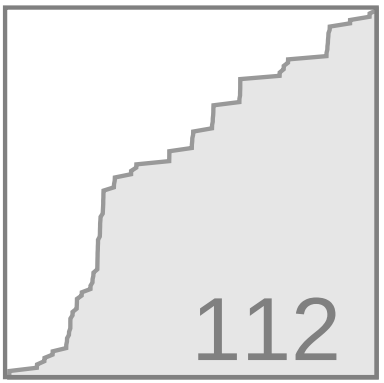

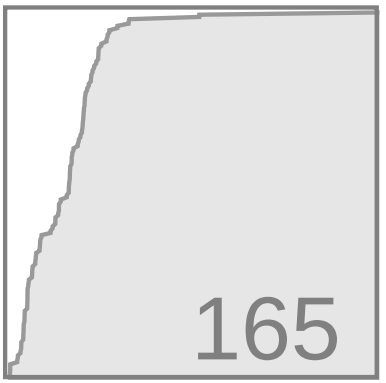

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2. 150 exploratory search missions for TREC web track topics
3. First appraisal indicates wide spectrum of search behavior
4. Data will be publicly available: http://webis.de/research/corpora

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Thank you for your attention!