

CLARIN ERIC and CLARIN-IT <u>Francesca Frontini</u> - *CLARIN Board of Directors* Monica Monachini - *National Coordinator CLARIN-IT* Istituto di Linguistica Computazionale - ILC CNR









- What is CLARIN ERIC?
- What does CLARIN-IT offer?
- Some exercises to showcase CLARIN services

CLARIN ERIC



Common Language Resources and Technology Infrastructure













https://www.clarin.eu/

CLARIN in a nutshell



- has the **ESFRI ERIC** status since 2012, **Landmark** since 2016
- provides easy and sustainable access for scholars in the humanities and social sciences and beyond
 - to digital language data (in written, spoken, video or multimodal form)
 - and advanced tools to discover, explore, exploit, annotate, analyse or combine them, wherever they are located
 - through a **single sign-on** environment
- serves as an ecosystem for **knowledge sharing**
- is an integral part of **the European Open Science Cloud**
 - See <u>clarin.eu/eosc</u>

CLARIN data and communities

- Newspaper archives
- Literary texts
- Parliamentary records
- Literary texts
- Historical letters
- Broadcast archives
- Oral History data
- Social Media data
- L-2 Learner Resources
- Survey data
- For the CLARIN Resource Families initiative, see: https://www.clarin.eu/resource-families

- Digital humanities
- Linguistics and Philology
- Translation and Lexicography
- Literary Studies
- History
- Political and Social Sciences
- Media Studies
- Culture, Folklore, Anthropology
- Speech therapy
- General Public

...

CLARIN today

- **21 members**: (AT, BG, CY, CZ, DE, DK, EE, FI, GR, HR, HU,IS, IT, LT, LV, NL, NO, PL, PT, SE, SI)
- 3 observers: FR, UK, ZA
- > 68 centres (25 CTS certified data centres)



federated login



central harvesting of metadata



chained services







Read more about CLARIN-UK

Data & Tools	More	Latest N	lews	More	Events	More
Corpose Constantinal Cymraeg Cyfors	CorCenCC Corpws Cenedlaethol Cymraeg Cyfoes – the National Corpus of Contemporary Welsh	₩₩₩₩	New members of the CLARIN_UK consortium 18 November 2020 Welcome aboard!			Lancaster Symposium on Innovation in Corpus Linguistics 2021 Wednesday 23 June, Online

https://www.clarin.ac.uk/

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	CLAR	RIN-UI	K Infrastr	Infrastructure for Digital Language Resources and Tools						
CLARIN-UK	Home	Centres 👻	Resources 👻	People	News	Events	Courses	Blog	About	
			#LancsBox							
Read more	about CLAR	IN-UK	BNC							
			CKLD							
Data &		More	CLAWS			More	Even	ts		<u>More</u>
Tools		MOLE	CLiC							
			CorCenCC		s of		and the	-	Lancaster Symposium	
OF C	CorCenCC		CQPweb		JK				on Innovation in Corpus	
Torpus Cenediaethol Cymraeg Cyfoes	Corpws Cenedlaethol Cymraeg		ELAR		um				Linguistics 2021	
	Cyfoes – the National Corp	us	GATE		ber				Wednesday 23 June, Online	
	of Contemporary	/	GATE Cloud							
	Welsh		Hansard at Huddersfield		-		Centre Corpus		Corpus Linguistics	

https://www.clarin.ac.uk/

CLARIN Resource families

Corpora

- Computer-mediated communication corpora
- Corpora of academic texts
- Historical corpora
- L2 learner corpora
- Literary corpora
- Manually annotated corpora
- Multimodal corpora
- Newspaper corpora
- Parallel corpora
- Parliamentary corpora
- Reference corpora
- Spoken corpora

Lexical Resources

- Lexica
- Dictionaries
- Conceptual Resources
- Glossaries
- Wordlists

Tools

- Normalization
- Named entity recognition
- Part-of-speech tagging and lemmatization
- Tools for sentiment analysis

Spoken corpora in the CLARIN infrastructure

Corpora with transcriptions and audio recordings

Corpus	Language	Description	Availability
Arabic Speech Corpus	Arabic	The corpus is available for download from a dedicated webpage.	\odot Download
		For a relevant publication, see Halabi (2016).	
DIALEKT v1: dialectal corpus with multi-tier transcription	Czech	This corpus contains traditional dialectological material, mostly unprepared monologue-type speech.	Q Concordancer
Size: 100,000 words		The corpus is available download (upon request) and through the concordancer KonText.	Ownload
Annotation: orthographically and phonetically (dialect features) transcribed, MSD- tagged, lemmatised		For a related publication, see Komrsková et al. (2018).	
Licence: Academic Licence Agreement for Czech National Corpus Data			



https://www.clarin.eu/resource-families

The technical infrastructure





<u>clarin.eu/fair</u>

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vlo.clarin.eu

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switchboard.clarin.eu

Barack Obama's identity-building in the health care debate: A corpus-assisted discourse study

AUTHOR

Katherina Riesner

Summary, in English

In this study, I demonstrate that identity-building is an important discursive strategy for President Barack Obama in the seven-year long debate surrounding the Affordable Care Act (ACA). The data for the study comes from a 6-million word corpus of speeches that were held by Obama between January 2009 and January 2016, all published by the White House. The speeches are classified according to genre, audience, topic and date of delivery. Throughout the paper, I adopt the notion that identity is intentionally constructed by the speaker and strategically exploited for his communicative goals. With the help of two methodological approaches, I investigate what kind of identities Obama builds. The purely qualitative part of the study deals with three central corpus speeches from a discourse-analytic perspective. In the second, more quantitative part, I use a group of seven verbs with epistemic meaning to trace the usage of two predominant discursive identities in the ACA debate. The results suggest that President Obama repeatedly constructs the identities of father and teacher to persuade his audience. I argue that his use of these identities constitutes an attempt to reach the argumentative goals of effectiveness and reasonableness.

Department/s

Master's Programme: Language and Linguistics

Publishing year 2016

Language English

Full text Available as PDF - 2 MB Download statistics

Document type Student publication for Master's degree (two years)

Topic

Languages and Literatures

Lund University Humanities Lab	register user: anonymous log
IMDI Corpora	Q METADATA SEARCH Q CONTENT SEARCH P MANAGE ACCESS
+ Lund Corpora	Q METADATA SEARCH Q CONTENT SEARCH P MANAGE ACCESS
🕆 🔶 Eline Visser	
🕀 🔶 ESST	🖋 REQUEST ACCESS 🦻 CITATION
+ 🔶 Eye-Tracked Frog Stories	
+ + LANG-KEY	Corpus
+ + Ø LUNDIC	Name The Barack Obama Corpus Title The Barack Obama Corpus
⊕ + Ø REaCHeS	
🗄 🔶 SpaceH	Description
🕀 🔶 Strömgvist-Richthoff	the_barack_obama_corpus_information.txt
+ 🖉 Swedia2000	Description
🗄 🛧 🤗 Tactile Reading	The Barack Obama Corpus (BOC) consists of 6,215,948 words (tokens), which are sourced from nearly 3,500 different texts, dating from
🕀 🔶 Test	January 2009 to January 2016. The texts, all taken from the White House Archives, comprise all speaches held by Barack Obama in his
🗈 🛧 🤗 ThaiSweVideo	official capacity as 44th President of the United States of America. The earliest speech in the BOC is President Obama's inauguration
🖻 🛧 🧶 The Barack Obama Corpus	speech and the last is his final State of the Union speech (January 2016). In total, the corpus includes 34,967 word types, which leads
🚽 🕺 🛑 the_barack_obama_corpus_information.txt	to a type/token-ratio of 0.56.
🖲 🖉 🔵 2009	The files, which display the original titles given to them by the White House, have been tagged for genre, audience type, date and
🖲 🖉 2009	Incritics, introduction of delivery, and principal torics. The genres include remarks, addresses, statements, press conferences, debates and question-
🕂 🙆 🥥 2010	
🕂 🙆 🥥 2010	Description
🗉 🤷 🥥 2011	How to cite this resource:
🕀 👗 🔵 2011	Riesner, Katherina (2017). The Barack Obama Corpus [Data set]. http://hdl.handle.net/10050/00-0000-0000-0003-C53B-4@view
🗉 👗 🔘 2012	
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Riesner, Katherina (2017). The Barack Obama Corpus [Data set]. http://hdl.handle.net/10050/00-0000-0000-0003-C53B-4@view

Search Contributors Help

VLO / Faceted search / Search results

obama

Showing 5 results for (obama 🗙) 🕄

Use the categories below to limit t those matching the selected value	
Language	*
Collection	♦
Modality	♦

The Barack **Obama** Corpus

(Part of Lund University Humanities Lab)

the_barack_obama_corpus_information.txt; The Barack **Obama** Corpus (BOC) consists of 6,215,948
 words (tokens), which are sourced from nearly 3,500 different texts, dating from January 2009 to January
 2016. The texts, all taken from the White House Archives, comprise all speeches held by Barack **Obama** in his official capac...

CLARIN

Results per page:

4-

Q

10

FD

A Landing page for this record at corpora.humlab.lu.se





UDPipe

Please use the following text to cite this item or export to a predefined format:

Straka, Milan and Straková, Jana, 2016, *UDPipe*, LINDAT/CLARIAH-CZ digital library at the Institute of Formal and Applied Linguistics (ÚFAL), Faculty of Mathematics and Physics, Charles University, http://hdl.handle.net/11234/1-1702.



CMDI

BIBTEX

< Share: 🖪 💟



Authors:

Milan Straka, Jana Straková

Description:

UDPipe is an trainable pipeline for tokenization, tagging, lemmatization and dependency parsing of CoNLL-U files. UDPipe is language-agnostic and can be trained given only annotated data in CoNLL-U format. Trained models are provided for nearly all UD treebanks. UDPipe is available as a binary, as a library for C++, Python, Perl, Java, C#, and as a web service. UDPipe is a free software under Mozilla Public License 2.0 and the linguistic models are free for non-commercial use and distributed under CC BY-NC-SA license, although for some models the original data used to create the model may impose additional licensing conditions.



Tool Inventory





switchboard.clarin.eu

Exercise 1

- Go to clarin.eu
- Find the VLO
- Search for texts by Robert Louis Stevenson
 - what can you find?
 - which format is the corpus in?
 - where are they hosted?
- On the Links tab, use the three dots (...) to activate the Switchboard.
 - Explore with Voyant or
 - Process with **UDpipe**

CLARIN Knowledge Infrastructure









Digital Humanities Course Registry





https://www.clarin.eu/content/clarin-for-researchers https://www.clarin.eu/content/knowledge-sharing

Knowledge Centres

List of all 22 CLARIN K-centres with expertise in specific linguistic topis

Click on the full name of the K-centre to go to its landing page, and click on the acronym to see its full organisation details

ACE CLARIN Knowledge Centre for Atypical Communication Expertise

Areas of competence	Atypical communication encompasses language and speech as encountered during (second) language acquisition and development, and in language disorders, but also more broadly in bilingual language development and in sign language. ACE is specialised in this type of research and concomitant infrastructural issues related to data acquisition, processing and sharing, which is typically highly characterised by sensitivity issues. For data storage and access the centre collaborates with MPI's TLA (The Language Archive) which is a CLARIN B Centre and also based in Nijmegen.
Audiences served	- linguists; - psychologists; - neuroscientists; - computer scientists; - speech and language therapists; - education specialists
Types of services	 how-to documents; - access to document templates; - Access to data; - Depositing; - FAQ; - Helpdesk; - Technical support
ls portal for language(s)	-
Other languages covered	-
Modalities covered	- Audio: speech; - Text; - Video: sign language
Linguistic topics	- Language acquisition (L1 and L2); - language disorders; - Language learning
Language processing	
Data types	-
Resource families	- Spoken corpora; - Manually annotated corpora; - Multimodal corpora
Generic topics	- Critical Data Management; - Legal and ethical issues
Other keywords	- Language acquisition; - sign language; - language pathologies
Tour de CLARIN	Introduction Interview

https://www.clarin.eu/content/knowledge-centres

CLARIN and Open Science

- Promoting the sharing and re-use of data through sustainable data registries
- All integrated datasets available in open access for research purposes
- Adherence to the FAIR data principles
 - Findable, Accessible, Interoperable, Re-usable
 - Interoperability through a common metadata framework
- Promotion of responsible data science
- Support for linguistic diversity
 - Data covering more than 1500 languages
 - Tools for many languages
 - Language resources in all modalities
- Strengthening the support for professional SSH researchers (> 500.000 in Europe)

<u>CLARIN: Towards FAIR and Responsible Data Science Using Language Resources.</u>" In: *Proceedings of the Eleventh* International Conference on Language Resources and Evaluation (LREC 2018), May 2018, 3259-3264.

CLARIN-IT - Consortium



CLARIN-IT Consortium

- The Department of Education, Human Sciences and Intercultural Communication of the University of Siena
- The Department of Philology and Literary Criticism of the University of Siena
- The Eurac Research Association (Bolzano)
- The Bruno Kessler Foundation (Trento)
- The Archival and Bibliographical Superintendence of Tuscany (Firenze)
- The Department of Electrical Engineering and Information Technology and the Interdepartmental Research Center "URBAN/ECO" of the University of Naples Federico II

The Catholic University of the Sacred Heart (Milano) has started the membership procedure.



CLARIN-IT Research Topics

- Resources and Tools for the Italian Language
 - create new resources by enriching existing corpora
 - lexical datasets with Linked Open Data
 - specialized corpora for computer-mediated communication.
 - natural language processing and analysis tools, offered as web services and integrated into Weblicht.
- Resources for Regional Languages and Multilingual corpora
 - learner corpus for German, Italian and Czech,
- Speech Archives
 - Grafo, Caterina Bueno Archive
- Digital Classics
 - resources for Ancient Greek and Latin (LOD version of the TEI-dict Perseus Liddell-Scott Jones dictionary)
 - Italian Latinity of the Middle Ages
 - digital editions of ancient fragmentary texts

ILC4CLARIN





ILC4CLARIN: data types





ILC4CLARIN: deposit





Exercise 2

- Find the ILC4CLARIN repository
 - Which is the most represented language in terms of records?
 - What kind of data can you find in Arabic?
 - How do you cite CophiWordNet?
- Try to log in with your institutional identifier, using the Login function (top right)



- [3] dinastia, casa regnante; l'insieme dei sovrani, appartenenti a una stessa famiglia, che si succedono sul trono (<u>casa [3], casa regnante [1], dinastia [1]</u>)
 "la casa di Savoia non ha regnato a lungo sull'Italia"
 - ~
- [4] la famiglia alla quale si appartiene (casa [4])
 "sta pensando di mettere su casa"
- [5] ditta, compagnia, in particolare nel settore dell'editoria e della moda (<u>casa [5]</u>) "casa editrice"
- [6] casella nel gioco degli scacchi (casa [6])

NLP services



URL del servizio: freeling_it (WSDL)

Come usare il servizio

Prova questo servizio attraverso il form sottostante.

De Run	service		
Inputs			Report
) as URL	
input	Choose file No file chosen	or local file	
language	it.cfg 🗸	mandatory optional	
multiword	yes 🔿 no 🖲		
ner	Use Default ❤		
output_format	Use Default ❤		
Reset fields			

CLARIN-ERIC Opportunities for Italian researchers





https://www.clarin.eu/content/funding-opportunities

CLARIN ParlaMint project







Word list

Corpus: ParlaMint-GB 2.0 (British parliament) Subcorpus: COVID_GB ce corpus: ParlaMint-GB 2.0 (British parliament

Reference subcorpus: MPregReference Switch focus and reference (sub)corpus

Towards Comparable Parliamentary Corpora

17 european parliaments including Senato della Repubblica italiana

			rerence (add)corpus				
Corpus: ParlaMint-IT 2.0 (Italian parli Subcorpus: COVID		Page 1 Go	Next >				
		ParlaMint-GB 2.0 (British parliament) : COVID_GB		ParlaMint-GB 2.0 (British parliament) : MPregReference			
Reference corpus: Parla	Mint-IT 2.0 (It	word	frequency	frequency/mill 😔	frequency	frequency/mill	Score
eference subcorpus: R	eference	covid	9,667	412.9	0	0.0	413.9
witch focus and refere	nce (sub)corpu	pandemic	10,341	441.7	1	0.1	402.4
		coronavirus	5.698	243.4	0	0.0	244.4
Page 1 Go N	ext >	Covid	5,676	242.4	0	0.0	243.4
7	ParlaMint-IT 2	lockdown	5,571	237.9	2	0.2	199.1
	Partamint-rr Z	furlough	2,129	90.9	0	0.0	91.9
word	frequency	PPE	1,564	66.8	0	0.0	67.8
oandemia	0	virus	6.009	256.7	<u>40</u>	4.0	51.5
Covid-19	-	distancing	1,853	79.1	<u>6</u>	0.6	50.1
	<u>e</u>	CHIS	<u>860</u>	36.7	0	0.0	37.7
Covid	6	lockdowns	666	28.4	0	0.0	29.4
coronavirus	5	Coronavirus	<u>652</u>	27.8	0	0.0	28.8
ockdown	3	SAGE	572	24.4	0	0.0	25.4
mascherine	3	tracing	1,048	44.8	8	0.8	25.4
ecovery		isolate	1,579	67.4	20	2.0	22.8
WES	-	quarantine	<u>834</u>	35.6	Z	0.7	21.5
	9	masks	908	38.8	2	0.9	20.9
listanziamento	2	vaccine	4,856	207.4	<u>91</u>	9.1	20.6
tamponi	2	trace	1.748	74.7	27	2.7	20.5
fund	3	shielding	492	21.0	1	0.1	20.0
contagi	2	Virtual furloughed	<u>397</u> 396	17.0	0	0.0	18.0
eneration	1	Trace	389	16.9	0	0.0	17.9
mascherina	-	Inaudible	370	15.8	0	0.0	16.8
DPCM		COVID	363	15.5	0	0.0	16.5
		infection	1,697	72.5	36	3.6	16.0
FIBP	1				the second se		
Azzolina	10		31.0	1	0.0	30.9	
virus	<u>9</u>	10	263.9	208	7.6	30.9	
sierologici	10	00	29.0	1	0.0	28.9	

https://www.clarin.eu/content/parlamint-towards-comparable-parliamentary-corpora

Word list

Exercise 3

- Explore the ParlaMint corpora using NoSketch Engine (public): <u>clarin.si/noske/index-en.html</u>.
- Find the Italian corpus
 - Explore the **Corpus info -** how many subcorpora are there?
 - Create a wordlist for the COVID subcorpus
- Keyword extraction
 - extract keywords for the "COVID" subcorpus using the "REFERENCE" as Reference (sub)corpus

CLARIN for researchers



- Contact CLARIN for help with your research
- Visit this page
 - <u>https://www.clarin.eu/content/clarin-researchers</u>
- Participate in CLARIN (virtual) events
 - <u>https://www.clarin.eu/events</u>
- Tour de CLARIN
 - <u>https://www.clarin.eu/Tour-de-CLARIN</u>
- Use CLARIN Training and videolectures

Yankelevich, Tanya, Fiser, Darja, Lenardic, Jakob, Gorgaini, Elisa, & Braukmann, Ricarda. (2020, June). LIBER 2020 - Workshop: SSHOC Train-the-Trainer Bootcamp for Librarians. Zenodo. http://doi.org/10.5281/zenodo.3970799

Contacts



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 - -<u>coordination@clarin-it.it</u>