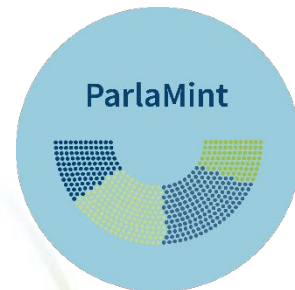


CLARIN Café

Join Our Parliamentary-flavoured Coffee: ParlaMint

Warsaw/Sofia/Ljubljana, 2020-11-03

The agenda



- 13:00–13:10 ParlaMint in a Nutshell: New Comparable Parliamentary Corpora in the Pandemic Era
Maciej Ogrodniczuk, Petya Osenova
- 13:10–13:25 How to standardize the Parliamentary Data and Metadata in a Multilingual Context
Tomaž Erjavec, Andrej Pančur
- 13:25–13:40 How to make the Parliamentary Data even better discoverable: ahead with the Linguistic Processing
Nikola Ljubešić
- 13:40–13:55 How to extract useful parliamentary knowledge: Concordancing the Parliament
Tomaž Erjavec
- 13:55–14:10 Join Us as a Contributor and/or as a User: Possibilities, Potential and Perspectives
Maciej Ogrodniczuk, Petya Osenova
- 14:10–14:30 QA and Discussion

ParlaMint in a Nutshell:

New Comparable Parliamentary Corpora in the Pandemic Era

Maciej Ogrodniczuk and Petya Osenova

What is ParlaMint?



A mini-project supported by CLARIN-ERIC

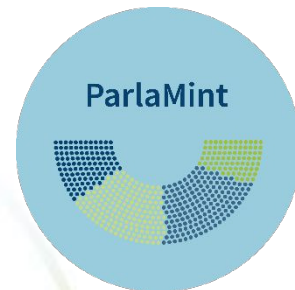
Budget: 98,000 €

Duration: Jul 1 2020 – May 30 2021

Motivation: Parliamentary data directly corresponds to the most recent events with global impact on *human health*, *social life* and *economics* such as the current **COVID-19 pandemic**.

Goal: Provide resources and tools for focused observations on trends, opinions, decisions on *lockdowns* and *restrictive measures* as well as on *the consequences* with respect to health, medical care systems, employment, etc. during pandemic times.

How is ParlaMint implemented?



Phase 1 (*July 2020 – Sep 2020*):

The corpus of *Bulgarian, Croatian, Polish* and *Slovene* parliamentary speeches was created with two parts marked:

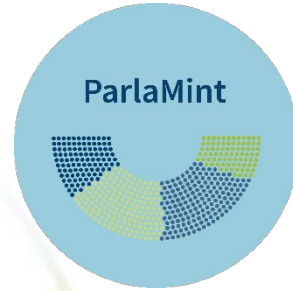
- COVID-19 subcorpus (Nov 2019 – 2020)
- reference subcorpus (2015 – Nov 2019).

Phase 2 (*Dec 2020 – May 2020*):

Parliaments for 6 more countries will be created according to the methodology established in Phase 1.

(Stay for the last part for more information how to participate!)

ParlaMint workflow



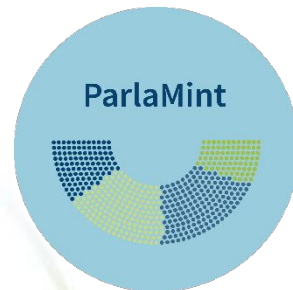
1. Getting the parliamentary data and metadata
2. Converting them into the Parla-CLARIN schema
3. Validation (formal and qualitative)
4. Linguistic annotation with syntactic structures of Universal Dependencies and Named Entities.
5. Making the corpora available through concordancers and Parlameter.
6. **Next:** Adding more parliaments
7. **Next:** Building use cases in Political Sciences and Digital Humanities based on the corpus data.

Meet the participants :)



- [Maciej Ogrodniczuk](#), Institute of Computer Science, Polish Academy of Sciences (also: Michał Rudolf)
- [Petya Osenova](#), Institute for Information and Communication Technologies, Bulgarian Academy of Sciences (also: [Kiril Simov](#))
- [Tomaž Erjavec](#), Jožef Stefan Institute, Ljubljana (also: [Darja Fišer](#) and [Kristina Pahor de Maiti](#))
- [Andrej Pančur](#), Institute of Contemporary History, Ljubljana
- [Nikola Ljubešić](#), Jožef Stefan Institute, Ljubljana
- [Filip Muki Dobranić](#), Parlameter.org (also: [Tomaž Kunst](#))
- [Ruben Ros](#), Luxembourg University

What is available: First phase results

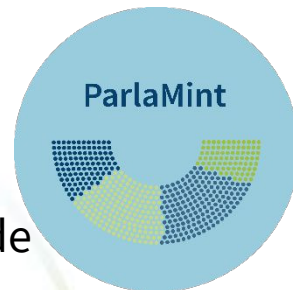


- **Parla-CLARIN schema**
(<https://github.com/clarin-eric/parla-clarin>)
- **Corpora to download from CLARIN.SI repository**
(<http://hdl.handle.net/11356/1345>)
- **Corpora in noSketch Engine**
(<https://www.clarin.si/noske/parlamint.cgi>)
- **Corpora in KonText**
(<https://www.clarin.si/kontext/>)
- *Ongoing Now:* Corpora in ParlaMeter
(<https://parlamer.org/>)
- Know-how on dealing with parliamentary data!

How to standardize the Parliamentary Data and Metadata in a Multilingual Context

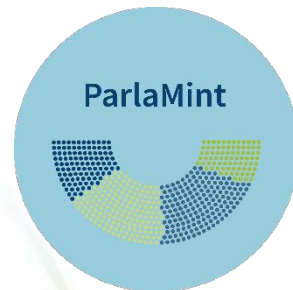
Tomaž Erjavec and Andrej Pančur

Background



- CLARIN organised the [ParlaCLARIN workshop](#) at LREC 2018 and made parliamentary corpora as one of its [Key resource families](#)
 - many corpora exist, but are encoded in many different ways, limiting interchange
- CLARIN Type B workshop: [ParlaFormat](#), May 23-24, 2019:
Propose a recommendation for encoding parliamentary corpora and get community feedback
- Parla-CLARIN: a TEI based encoding for parliamentary corpora
- Maintained on GitHub: <https://github.com/clarin-eric/parla-clarin>
- So far a simple customisation of TEI, using the base module for spoken language corpora
- The most important part is the documentation:
<https://clarin-eric.github.io/parla-clarin/>

Parla-CLARIN



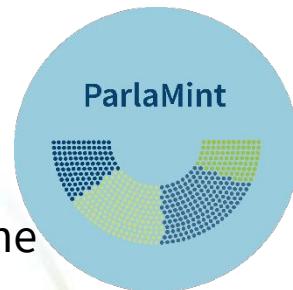
The recommendations attempt to take into account:

- Structure: legislative periods, sessions, topics, speeches, transcription variants
- Metadata: mandates, titles, parliamentary bodies, locations, dates and times
- Speakers: date of birth, sex, education, party membership, links to external resources
- Political parties: name(s), history, relations

Significant work remains to be done:

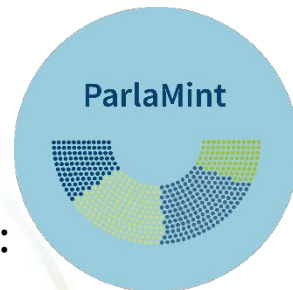
- Stricter schema
- Better examples
- Scripts for down-conversion
- Community development

ParlaMint schema



- Bottom-up procedure: started with Parla-CLARIN and then unified the encoding
- The result is the 4-language ParlaMint 1.0 corpus, with a quite uniform encoding: <http://hdl.handle.net/11356/1345>
- We also made a bespoke XML schema, which significantly constrains the Parla-CLARIN encoding, and is available at the repository entry
- The easiest way to encode new ParlaMint corpora:
 - Take one of the existing ParlaMint corpora as an example
 - Validate with the ParlaMint schema
 - Get in touch with Tomaž Erjavec in case things are unclear

Further work



There are still things that could be done better in the ParlaMint encoding:

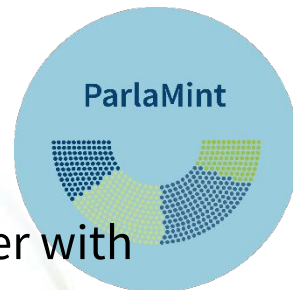
- Better encoding of transcriber comments
- Further harmonisation of the legislation and other taxonomies
- Integration with Parla-CLARIN

Hopefully, we will do this in the second phase of the project.

How to make the Parliamentary Data even better discoverable: ahead with the Linguistic Processing

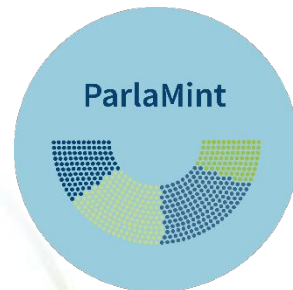
Nikola Ljubešić

Automatic linguistic processing



- Unified! linguistic processing performed in an automated manner with tools based on machine learning
- Levels of linguistic processing:
 - Tokenization and sentence splitting
 - Lemmatization
 - Morphosyntactic annotation
 - Dependency parsing
 - Named entity recognition

Example of linguistic processing result



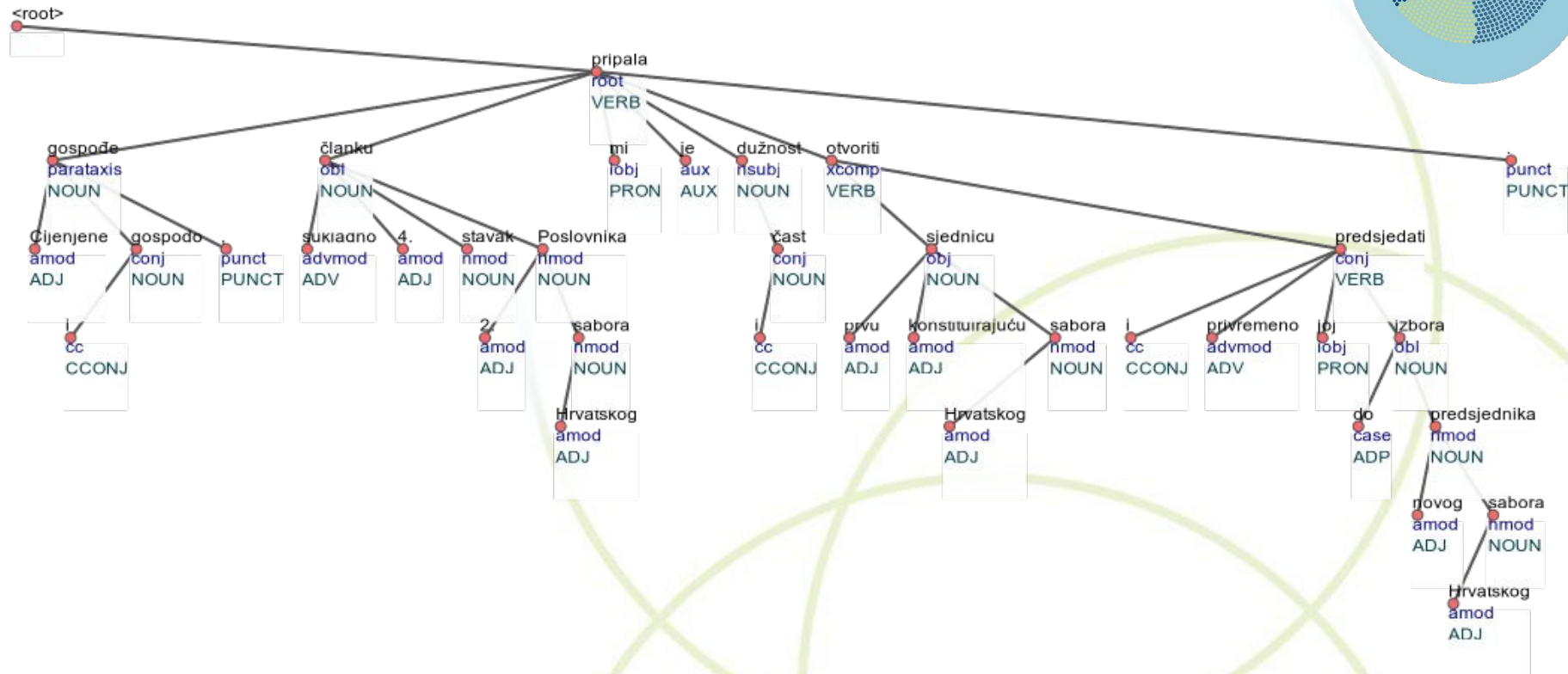
First sentence of the Croatian corpus

1	Cijenjene	cijeniti	ADJ	2	amod	NER=O
2	gospode	gospoda	NOUN	14	nsubj	NER=O
3	i	i	CCONJ	4	cc	NER=O
4	gospodo	gospod	NOUN	2	conj	NER=O
5	,	,	PUNCT	7	punct	NER=O
6	sukladno	sukladno	ADV	7	advmod	NER=O
7	članku	članak	NOUN	2	appos	NER=O
8	4.	4.	ADJ	9	amod	NER=O
9	stavak	stavak	NOUN	7	appos	NER=O
10	2.	2.	ADJ	11	amod	NER=O
11	Poslovnika	poslovník	NOUN	9	nmod	NER=O
12	Hrvatskog	hrvatski	ADJ	13	amod	NER=B-ORG
13	sabora	sabor	NOUN	11	nmod	NER=I-ORG

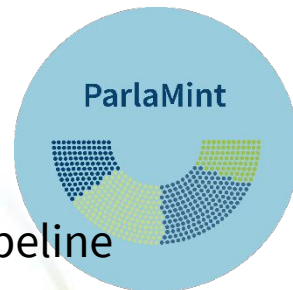
Cijenjene gospođe i gospodo,
sukladno članku 4. stavak 2.
Poslovnika Hrvatskog
sabora...

Distinguished ladies and
gentlemen, in accordance with
article 4, paragraph 2 of the
Rules of Procedure of the
Croatian Parliament...

ParlaMint



For the technically savvy



- Bulgarian, Croatian, Slovenian were processed with the CLASSLA pipeline (<https://pypi.org/project/classla/>), spin-off of Stanford Stanza with larger training datasets (beyond treebanks), inflectional lexicons, added NER
 - state-of-the-art for all three languages, morphosyntax ~97(/100), lemmatization ~99, dependency syntax ~93, named entities ~98, (Bi)LSTM technology
- Polish was processed with inflectional analyser [Morfeusz](#), morphosyntactic tagger [Concraft](#), name entities detector [Liner](#) and dependency parser [COMBO](#), similar numbers as for the tools above

Limitations of automatic linguistic processing!



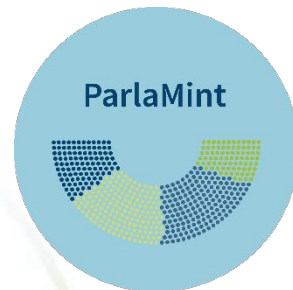
Automatic linguistic processing is as good as the data the tools were trained on

All of the presented annotation layers have mistakes. From the previous slides...

gospodo gospoda NOUN

sukladno [članku 4.] [stavak 2.] [Poslovnika [Hrvatskog
sabora]]

Possible ways forward



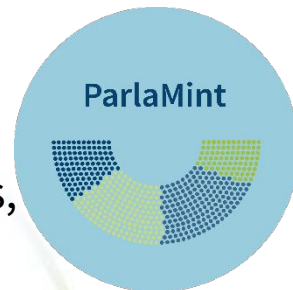
- Extending training data with domain-specific data
 - “Cijenjene gospođe i gospodo”
 - “sukladno članku 4. stavak 2. Poslovnika Hrvatskog sabora”
- Named entity recognition extended to named entity linking (“Hrvatskog sabora” being labeled with the ID of the “Croatian parliament” entity)
- Coreference resolution (“them” referring to the opposition)
- Sentiment / emotion analysis
- Extending with audio and video recordings (vocal features, gestures)

How to extract useful parliamentary knowledge:

Concordancing the Parliament

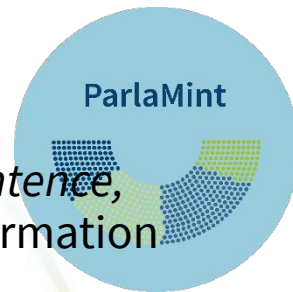
Tomaž Erjavec

Concordancers



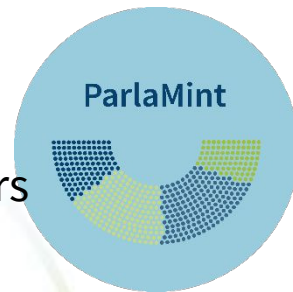
- Corpus analysis tools, where the basic functionality is concordances, i.e. showing words in context
- Best known commercial web-based concordancer is Sketch Engine
- Lexical computing also makes available an open source version (with somewhat reduced but still powerful functionality) **noSketch Engine:**
 - manatee back-end
 - bonito front-end (now no longer maintained)
 - new front-end: Crystal
- The Czech National Corpus group produced **KonText:**
 - uses manatee as the back-end but different front-end
 - [LINDAT/CLARIAH-CZ](http://lindat.clariah.cz) made a fork of KonText, which supports AAI
- **CLARIN.SI** has an installation of noSketch Engine / Bonito and CLARIAH-CZ KonText
 - <https://www.clarin.si/info/concordances/>
 - both offer the same ~50 corpora

noSketch Engine / KonText Functionality



- Support for large corpora annotated with structural (e.g. *speech, sentence, name*) and positional (*lemma, PoS, morphology, syntactic head*) information
- Powerful corpus query language CQL:
 - logical expressions for tokens, e.g. `[lemma="love" & pos="NOUN"]`
 - token sequences, e.g. `[lemma="love"][word="to"]?+[lemma="work"]`
 - regular expressions, e.g. `"l[aeiou]v.+"`
 - structural constraints, e.g. `".+ets" within <name>`
- Display of
 - concordances
 - frequency lists
 - keyword lists (noSketch Engine only)
 - collocations
- Saving and searching subcorpora, personalising the display
- Personal space (KonText only)
- REST interface

Analysing ParlaMint



- ParlaMint 1.0 converted from TEI to vertical format for concordancers
 - Flattening the structure and renaming of attributes
 - Vertical files and conversion XSLT included in corpus distribution
- Publicly available, also through the dedicated entry point
<https://www.clarin.si/noske/parlamint.cgi/>

COVID Period Key Lemmas in ParlaMint-SI 1.0

ParlaMint

NoSketch Engine

ParlaMint-SI 1.0 (parliament: COVID) / COVID

Home
Search
Word list
Corpus info
My jobs
User guide

Save
Change options

Word list

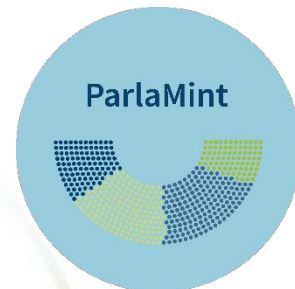
Corpus: ParlaMint-SI 1.0 (parliament: COVID)
Subcorpus: COVID

Reference corpus: ParlaMint-SI 1.0 (parliament: COVID)
Reference subcorpus: == the rest of the corpus ==
[Switch focus and reference \(sub\)corpus](#)

Page 1 Go [Next >](#)

lemma	ParlaMint-SI 1.0 (parliament: COVID) : COVID		ParlaMint-SI 1.0 (parliament: COVID) : == the rest of the corpus ==		Score
	frequency	frequency/mill	frequency	frequency/mill	
epidemija	1,772	639.0	15	0.7	371.5
covid-19	411	148.2	0	0.0	149.2
koronavirus	348	125.5	0	0.0	126.5
ventilator	408	147.1	4	0.2	124.2
karantena	240	86.5	1	0.0	83.5
korona	195	70.3	0	0.0	71.3
virus	423	152.5	24	1.2	71.2
maska	687	247.7	58	2.8	65.5
pandemija	142	51.2	0	0.0	52.2
protikoronski	128	46.2	0	0.0	47.2
varda	146	52.6	3	0.1	46.9
protikoron	108	38.9	0	0.0	39.9
Gale	103	37.1	4	0.2	32.0
okužba	296	106.7	50	2.4	31.6
respirator	81	29.2	0	0.0	30.2
covid	76	27.4	0	0.0	28.4
Trata	73	26.3	1	0.0	26.1

Male vs. Female Key Lemmas



ParlaMint-SI 1.0 (parliament: COVID) : Male

lemma	frequency	frequency/mill ?
levičar	364	21.3
navzoč	4,326	252.9
penez	167	9.8
esklopa	212	12.4
Iran	260	15.2
gorica	168	9.8
počenjati	182	10.6
islam	180	10.5
levičarski	163	9.5
Palestina	111	6.5

ParlaMint-SI 1.0 (parliament: COVID) : Female

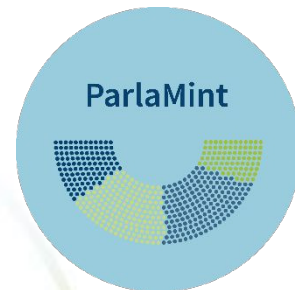
lemma	frequency	frequency/mill ?
Medical	107	16.7
KB	56	8.7
pacientov	210	32.7
enaročanje	75	11.7
ennapotnica	42	6.5
žilen	417	64.9
psihiatričen	69	10.7
roditeljski	80	12.5
kardiolog	80	12.5
zaznamba	100	15.6
rejništvo	206	32.1
opornica	422	65.7
posvojitev	328	51.1

Join Us as a Contributor and/or as a User:

Possibilities, Potential and Perspectives

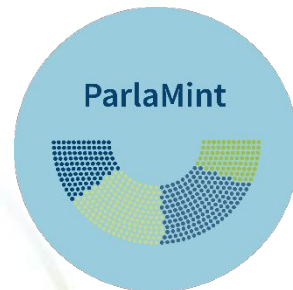
Maciej Ogrodniczuk and Petya Osenova

If you want to join us as a contributor



- We invite proposals to add parliamentary corpora for additional countries to the ParlaMint collection
- Call schedule:
 - 26 Oct 2020:** Call issued
 - 16 Nov 2020:** Submission deadline
 - 20 Nov 2020:** Results announced
 - 1 Dec 2020:** Projects start
 - 30 Mar 2021:** Delivery of the corpora

If you want to join us as a contributor



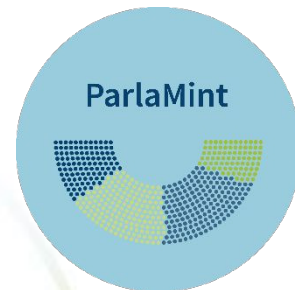
We expect:

- Obtaining data for the COVID-19 and reference parts of the corpus
- Conversion of the data into the ParlaMint format
- Linguistic processing of the corpus with Universal Dependencies, preferably including a suitable NER module
- Producing documentation on the provided corpus

We provide:

- Dedicated guidelines on how to prepare the data
- The already existing corpora as models and the ParlaMint Schema:
- Upload to the concordancers
- Upload to ParlaMeter

More details



Funding: 5,000 Euro per project

Duration: Dec 1, 2020 – Mar 31, 2021 (4 months)

Assessment criteria:

- Qualifications of the team involved
- Status of the available and/or accessible parliamentary corpora
- Diversity of parliaments and languages
- Potential with respect to the project goals

If you want to join as a User



Three showcases are envisaged:

1. **Parlamester showcase:** graphical exploration of the corpus suited for investigations by political scientists, journalists and active citizens
2. **Extending the CLARIN tutorial “Voices of the Parliament”:** how corpora can be used to investigate language use and communication practices in a specialised socio-cultural context of political discourse.
3. **A DH-related showcase** prepared by our digital historian.

But you do not have to wait for all this to come.



Start exploring the data **NOW** through the concordancers!!! :)

The utterances of women, MPs, from socialist opposition: *unemployment*

ParlaMint

Query **безработица, COVID, F, БСП, regular, MP** 34 > Sort **Left** 34 (1.45 per million) 

Page of 2 | [Last](#) Concordance is sorted. Jump to: 

2020-04-06,KlisurskaNadya	и те се отразяват пагубно на икономиката, безработицата /NOUN/Definite=Def Gender=Fem Number=Sing XPosTag=Ncfsd се вдига. Само пре
2020-04-06,KlisurskaNadya	в момента, ако погледнем разходите за фонд „ [MISC: Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi “], уважаеми госи
2020-04-06,KlisurskaNadya	показват, че трансферът към фонд „ [MISC: Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi “] няма да е доста
2020-05-12,ZhelevaVioleta	плащат чинно осигуровките си към [ORG: Фонд „ Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi “], а минималнот
2020-03-20,KlisurskaNadya	превеждани по реда на ал. 1, са за сметка на [MISC: Фонд „ Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi “] на държавното
2020-04-06,KlisurskaNadya	обществено осигуряване“, и по-скоро фонд „ [MISC: Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi “], по мярката 60
2020-06-05,IankovaDora	и в условията на криза, и с голямата безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi , биха могли покр
2020-05-12,ZhelevaVioleta	- минималното дневно обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi да бъде увеличенс
2019-11-12,ZhelevaVioleta	. Ще спомена минималното обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi , което остава 9 лв
2019-11-12,ZhelevaVioleta	и второ четене - минималното обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi да бъде 60% от ми
2020-05-12,KlisurskaNadya	и да получават минималното обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi .  Има едни общи
2020-05-12,KlisurskaNadya	се възползвали от правото си на обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi , в следващите три
2020-05-12,KlisurskaNadya	на получаване на парично обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi , регламентирано и
2019-11-12,KlisurskaNadya	максимално или по-високо обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi да получават само
2020-04-06,ZhelevaVioleta	пак тези хора ще могат да получат обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi .  Остава другата
2020-05-12,KlisurskaNadya	всеки, който има право да получи обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi , трябва да е работ
2020-05-12,KlisurskaNadya	в 18, да има право на цялото си обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi . Такова е и нашет

Collocation candidates





	<u>Cooccurrence</u> <u>count</u>	<u>Candidate</u> <u>count</u>	<u>T-score</u>	<u>MI</u>	<u>logDice</u>
<u>P</u> <u>N</u> обезщечение	16	2,416	3.999	12.155	7.741
<u>P</u> <u>N</u> минимален	7	4,381	2.643	10.104	5.699
<u>P</u> <u>N</u> девет	4	3,606	1.997	9.577	5.170
<u>P</u> <u>N</u> оставам	3	3,268	1.729	9.304	4.895
<u>P</u> <u>N</u> дневен	3	3,405	1.729	9.245	4.837
<u>P</u> <u>N</u> фонд	6	9,863	2.443	8.710	4.312
<u>P</u> <u>N</u> хора	3	25,862	1.710	6.320	1.924
<u>P</u> <u>N</u> свой	4	36,715	1.973	6.229	1.834

The utterances of women, MPs, from ruling party: *unemployment*

ParlaMint

Query **безработица, COVID, F, ГЕРБ, regular, MP** 35 > Sort **Left** 35 (1.49 per million) 

Page of 2 | Concordance is sorted. Jump to: 

2019-11-12,Dimovalrena	и майчинство” - дефицит от 49,9 млн. лв.;  фонд „ Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	” - недостиг от 94,
2020-04-06,StoyanovaMenda	, които не са внасяли по закон вноски във фонд „ [MISC: Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi	“ и които нямат п
2020-04-03,StoyanovaMenda	на държавното обществено осигуряване за фонд „ [MISC: Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi	“ в размер на 1 м
2020-04-06,StoyanovaMenda	обществено осигуряване, респективно за фонд „ [MISC: Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi	“ , е за обезпеча
2020-04-06,StoyanovaMenda	държавното обществено осигуряване и фонд „ [MISC: Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	“ по Програмата]
2020-03-20,AleksandrovaAnna	, превеждани по реда ал. 1, са за сметка на фонд „ [MISC: Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	“ на държавното
2020-04-03,StoyanovaMenda	се намаляват с 430 млн. лв., разходите на фонд „ [MISC: Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	“ за обезпечаван
2020-04-06,StoyanovaMenda	1 се изменя така:  „(1) Приема бюджета на фонд „ Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi	“ по приходите и т
2020-04-06,StoyanovaMenda	2 се изменя така:  „(2) Приема бюджета на фонд „ Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi	“ по разходите и т
2020-04-06,StoyanovaMenda	3) Приема дефицит (излишък) по бюджета на фонд „ Безработица /PROPN/Definite=Ind Gender=Fem Number=Sing XPosTag=Npfsi	“, както следва: (т
2020-04-06,AleksandrovaAnna	превеждани по реда на ал. 1, са за сметка на фонд „ [MISC: Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	“ на държавното
2020-06-10,AngelovaEvgeniya	§ 6а:  „§ 6а. През 2020 г. средства от фонд [MISC: „ Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	“] на държавното
2020-04-06,StoyanovaMenda	дейност да получат обезщетения от този фонд [MISC: „ Безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	“]. В този кръг тр
2019-11-13,AngelovaEvgeniya	дълг, спрени европейски програми, висока безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	, фалирала банка
2019-11-12,NaydenovaSvetlana	и да получават високо обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	. Не е ли по-добре
2020-05-12,AleksandrovaAnna	особени правила за паричното обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	по чл. 54а и следв
2020-05-12,AleksandrovaAnna	по изречение първо ще получават обезщетение за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	, се зачита за при
2019-11-12,Dimovalrena	минималният дневен размер на обезщетението за безработица /NOUN/Definite=Ind Gender=Fem Number=Sing XPosTag=Ncfsi	- 9,00 лв., и макс

Collocation candidates

	<u>Cooccurrence count</u>	<u>Candidate count</u>	<u>T-score</u>	<u>MI</u>	<u>logDice</u>
<u>P</u> <u>N</u> смекчаване	4	31	1.999	16.397	10.955
<u>P</u> <u>N</u> обезщетение	9	2,416	2.998	11.283	6.910
<u>P</u> <u>N</u> паричен	3	1,020	1.731	10.942	6.541
<u>P</u> <u>N</u> фонд	13	9,863	3.601	9.784	5.427
<u>P</u> <u>N</u> извънреден	3	2,752	1.729	9.510	5.140
<u>P</u> <u>N</u> обстоятелство	3	3,007	1.729	9.382	5.014
<u>P</u> <u>N</u> риск	4	4,192	1.996	9.318	4.954
<u>P</u> <u>N</u> намаляване	3	3,286	1.729	9.254	4.887
<u>P</u> <u>N</u> осигуряване	5	7,899	2.230	8.726	4.368
<u>P</u> <u>N</u> получавам	3	5,666	1.727	8.468	4.107
<u>P</u> <u>N</u> обществен	5	14,155	2.226	7.884	3.529
<u>P</u> <u>N</u> размер	3	9,965	1.723	7.654	3.297
<u>P</u> <u>N</u> цел	4	14,509	1.989	7.527	3.171
<u>P</u> <u>N</u> бюджет	3	22,086	1.712	6.506	2.151

QA and Discussion

Thank you and see you at:

<https://www.clarin.eu/content/parlamint>