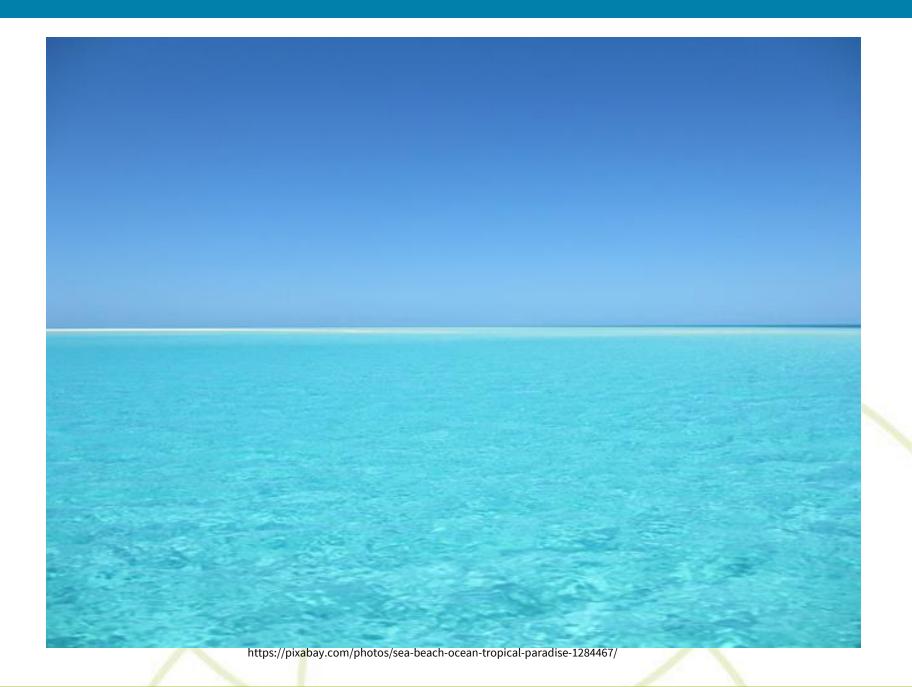
# Open Access Resources and Tools for Language Learning

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# Corpora and data driven learning

- Digitized naturally occurring texts, usually very large in size (millions of words).
- Processed automatically by a specific software.
- More reliable than personal intuitions about language (even if you are a native speaker).
- Can show trends invisible to the naked eye.
- Present real usage based evidence about language.
- Basic corpus search functions are not complicated and may easily be integrated in language teaching and learning.

# Discovery learning

- Asking a question
- Finding data
- Doing research to see how language is used
- Finding an answer
- Testing the answer with more data
- Sharing the findings
- Asking another question



# Old school

(Vocabulary Your Test. Book 1. 1991. Aura.)

| 33 Puzzle it out   |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Here are five words:   |  |  |  |  |  |  |  |
| CABBAGE BANANA CARROT STRAWBERRY EGG   |  |  |  |  |  |  |  |
| Read through the following dialogue and try to work out which words the above are used instead of (e.g. if you think the word "egg" is used instead of "the" you write "Egg means the" etc.) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| A: Excuse me, do you cabbage children?   |  |  |  |  |  |  |  |
| B: No, I'm afraid I banana. A: Oh, carrot's a pity.  |  |  |  |  |  |  |  |
| B: Why do you say carrot?  |  |  |  |  |  |  |  |
| A: Because everyone should cabbage children.   |  |  |  |  |  |  |  |
| B: Why?  |  |  |  |  |  |  |  |
| A: Well, strawberry's only natural.  |  |  |  |  |  |  |  |
| B: I disagree. I egg carrot there are far too many children in the world already   |  |  |  |  |  |  |  |
| and I certainly banana want to add to the numbers.   |  |  |  |  |  |  |  |
| A: Carrot's a strange way to egg.  |  |  |  |  |  |  |  |
| B: Is strawberry? I egg strawberry's the only sensible way to look at things.  A: Well, I certainly want to cabbage at least four children.  |  |  |  |  |  |  |  |
| B: I egg carrot's a very selfish attitude to take.   |  |  |  |  |  |  |  |
| A: I banana care! Carrot's what I'm going to do.   |  |  |  |  |  |  |  |
| B: Well - go ahead - cabbage all those children but banana try to tell me to   |  |  |  |  |  |  |  |
| cabbage any.   |  |  |  |  |  |  |  |
| A: Banana worry, carrot's the last thing I'd egg of coing.   |  |  |  |  |  |  |  |
| B: I'm glad to hear strawberry.  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| CABBAGE means BANANA means   |  |  |  |  |  |  |  |
| CARROT means STRAWBERRY means  |  |  |  |  |  |  |  |
| EGG means  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

# Language data

Collections of texts - corpora

Digitalized books, newspapers, parliamentary debates, historical letters, etc.

**Grammars** 

**Termbanks** 

**Translation memories** 

Digital dictionaries

Multimedia recordings

Tools used to analyse language

## Research Infrastructures

"<...> are facilities that provide resources and services for research communities to conduct research and foster innovation.

They can be used beyond research e.g. for education or public services and they may be single-sited, distributed, or virtual.

## They include

- major scientific equipment or sets of instruments
- collections, archives or scientific data
- computing systems and communication networks
- any other research and innovation infrastructure of a unique nature which is open to external users." (European Research Infrastructures)

# **CLARIN**: Infrastructure for Humanities and Social Sciences





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### CLARIN - European Research Infrastructure for Language Resources and Technology

CLARIN makes digital language resources available to scholars, researchers, students and citizen-scientists from all disciplines, especially in the humanities and social sciences, through single sign-on access. CLARIN offers long-term solutions and technology services for deploying, connecting, analyzing and sustaining digital language data and tools. CLARIN supports scholars who want to engage in cutting edge data-driven research, contributing to a truly multilingual European Research Area. Read more...





#### **Participating Organizations**

The operations, services and centres of the CLARIN infrastructure are provided and funded by the national consortia in the countries that have joined CLARIN ERIC or by associated centres.

Learn more



#### Services, Tools and Data

CLARIN provides a wide variety of Services and Data sets

Learn more



#### **CLARIN Newsflash January 2021 is Out!**



Read the most recent CLARIN Newsflash: January 2021 here



## How to access data at CLARIN?

- Go to the CLARIN centre of a particular country. For example:
  - CLARIN-LT
  - CLARINO
  - CLARIN-UK
- Search the <u>Virtual Language Observatory</u>
- Take a look at <u>Resource families</u>
- and other <u>services</u>

## How to work with the data?

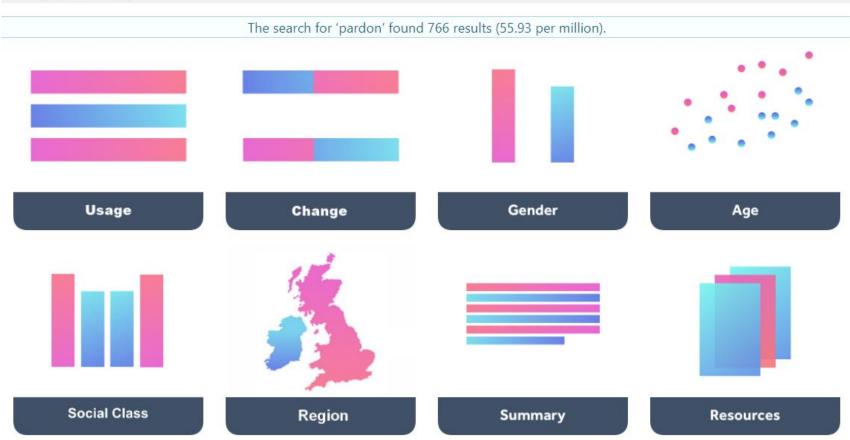
- Find a corpus in your language of interest.
- Search for the key words.
- Analyse the results.
- Generalize.
- Apply:
  - exercise development,
  - homework assignments (e.g., exemplify rule X; find out how <...>),
  - discussion questions,
  - examples illustrating theory,
  - **-** <...>

# Students as language researchers

- Which word is more frequent in spoken English: "excuse me" or "pardon"? (BNClab)
- Should I put comma before "but"? (BNC)
- Which preposition should be used ? (BNC)
- What are the synonyms for <...>? (<u>WordNet</u>)
- Should I say 'do' or 'make' homework? (<u>SketchEngine</u>)
- How does word meaning change in different contexts? Does the word 'wave/banga' have negative associations in certain context? (<u>DLKT</u>)
- How is Norway/Lithuania represented in UK newspapers? (WebCorp)



## Q pardon





## Centre for Translation Studies

IntelliText 2.6

Home Page

Choose Language

Choose Corpora

Choose Type of Search

View Results

Build Your Owr



#### Empty

Parallel Tabi

Collocatio Table

Affix Mair Table

Affix Form: Table

Frequency Comparisor Table

Frequency Comparison Chart

(evwordsCon

| Concordances for but |  |       |  |  |  |  |  |  |  |  |
|----------------------|--|-------|--|--|--|--|--|--|--|--|
| titleid              | left                                   | match | right                                  |  |  |  |  |  |  |  |
| <u>A01</u>           | the UK and we have had nothing         | but   | goodwill and people remembering        |  |  |  |  |  |  |  |
| <u>A01</u>           | solo career found mixed success,       | but   | his role as Billy Flynn in the         |  |  |  |  |  |  |  |
| <u>A01</u>           | after a golden couple of years,        | but   | the outfit still has a loyal following |  |  |  |  |  |  |  |
| <u>A01</u>           | might be extended to six months,       | but   | instead went back to hospital          |  |  |  |  |  |  |  |
| <u>A01</u>           | fiance, Simon Ruddy next year,         | but   | could not even hold her son on         |  |  |  |  |  |  |  |
| <u>A01</u>           | of chemotherapy on November 1          | but   | it was just too much for her.          |  |  |  |  |  |  |  |
| <u>A01</u>           | for her. " All was going fine          | but   | then she got an infection. "           |  |  |  |  |  |  |  |
| <u>A02</u>           | prohibits further illegal development, | but   | the amended legislation will also      |  |  |  |  |  |  |  |
| <u>A02</u>           | much more in favour of travellers      | but   | the only other thing that has          |  |  |  |  |  |  |  |





SEARCH FREQUENCY CONTEXT OVERVIEW

#### (SHUFFLE)

| CLICK FOR MORE CONTEXT |     |                        |   |   |   | □ [ʔ] SHOW DUPLICATES   |
|------------------------|-----|------------------------|---|---|---|---|
| 1                      | KDW | S_conv                 | Α | В | c | (SP:PS1JD) If you were going to do, if you decided you wanted to do research on gypsies (pause) and, you yourself, a lot of gypsies (pause) er,                           |
| 2                      | G03 | W_fict_prose           | Α | В | c | 've got a bag of change. Those features, do you have to do research for them?" Sometimes. Look, if you can tell me what   |
| 3                      | EBS | W_pop_lore             | Α | В | c | to hear that their counterparts in Britain have had to defend their right to do research. The arts world does not expect to resolve its funding problems by a change      |
| 4                      | A5Y | W_ac_polit_law_edu     | Α | В | c | , I can remember when the word went round that someone was coming to do research on the RUC. Like, you must think for yourself; look at the                               |
| 5                      | EC7 | W_ac_medicine          | Α | В | c | of the Child Poverty Action Group at the time when you were commissioned to do research and prepare a pamphlet on' Families with low income in London.' I                 |
| 6                      | CLP | W_ac_soc_science       | Α | В | c | successful conclusion for both sides depending on their level of skill. Attempting to do research on the interview per se is doomed to failure because the skills of the  |
| 7                      | CMF | W_ac_soc_science       | Α | В | c | Barker (1984) had the unusual experience of being approached and invited to do research into a very enclosed group in which she was already interested, the Unific        |
| 8                      | B7C | W_non_ac_nat_science   | Α | В | c | the 1930s. In law and in fact every academic has the right to do research, and the universities provide all faculty members with small-scale financial support for this.  |
| 9                      | FYX | W_non_ac_nat_science   | Α | В | c | But from the age of thirteen or fourteen, I knew I wanted to do research in physics because it was the most fundamental science. This was despite the fact                |
| 10                     | FYX | W_non_ac_nat_science   | Α | В | c | they asked me about my future plans. I replied that I wanted to do research. If they gave me a first, I would go to Cambridge. If   |
| 11                     | FYX | W_non_ac_nat_science   | Α | В | c | I therefore applied to do a Ph.D. with Hoyle. My application to do research at Cambridge was accepted, provided I got a first, but to my annoyance                        |
| 12                     | FYX | W_non_ac_nat_science   | Α | В | c | prepared to offer me a sequence of positions in which I only had to do research without having to lecture. We were also fortunate in housing. When we were                |
| 13                     | B2T | W_non_ac_polit_law_edu | Α | В | c | to governing body; employers use academics as consultants and engage academic departments to do research for them; there are sponsored research and collabor              |
| 14                     | HCC | W_non_ac_soc_science   | Α | В | c | . # Regional Policies on Conducting Research in Education # Do you want to do research in schools especially in schools other than your own? Due to the increasing        |
| 15                     | HCC | W_non_ac_soc_science   | Α | В | c | demands on schools some Regions have been developing procedures which those who want to do research in schools must follow. Whilst the procedures may in so               |
| 16                     | HCD | W_non_ac_soc_science   | Α | В | c | worthwhile endeavour! # Teacher Research and the Regions # Do you want to do research in schools especially in schools other than your own? Due to the increase           |
| 17                     | HCD | W_non_ac_soc_science   | Α | В | c | demands on schools some Regions have been developing procedures which those who want to do research in schools must follow. Whilst the procedures may in so               |
| 18                     | HJ1 | W_non_ac_soc_science   | Α | В | c | University of Minnesota spent a year in Europe. His original intention was to do research in Political Geography, but Central Europe was at that time too political for s |
| 19                     | HJ2 | W_non_ac_soc_science   | Α | В | C | or the role of the United Nations. Now they are more likely to do research on narrow topics like arms control. In total, much more is known but                           |
| 20                     | ADR | W_biography            | Α | В | c | goes through a number of changes which is very interesting. I tried to do research on the 1950s but it was quite hard to find general information about the day-to-day    |
| 21                     | GT8 | W hiography            | Α | В | С | for acting and theatrical design. After graduation he was awarded a scholarship to do research for a doctoral thesis on Thomas Gray q.v. apparently never complete        |

#### WordNet Search - 3.1

- WordNet home page - Glossary - Help

Word to search for: happy Search WordNet

Display Options: (Select option to change) Change

Key: "S:" = Show Synset (semantic) relations, "W:" = Show Word (lexical) relations

Display options for sense: (gloss) "an example sentence"

#### Adjective

- S: (adj) happy (enjoying or showing or marked by joy or pleasure) "a happy smile";
   "spent many happy days on the beach"; "a happy marriage"
  - see also
  - similar to
  - attribute
  - antonym
  - derivationally related form
- S: (adj) <u>felicitous</u>, **happy** (marked by good fortune) "a felicitous life"; "a happy outcome"
  - similar to
  - <u>derivationally related form</u>
  - antonym
- S: (adj) glad, happy (eagerly disposed to act or to be of service) "glad to help"
  - similar to
  - antonym
- S: (adj) happy, well-chosen (well expressed and to the point) "a happy turn of phrase"; "a few well-chosen words"
  - similar to
  - antonym



Saugoti rezultatus: Su šaltiniais Saugoti

Atverti šaltinių sąrašą naujame skirtuke

Rodyti šaltiniu saraša

Rasta: 832

#### Paieška su kontekstiniu žodžiu | Paslėpti paieškos parametrus

[1] [2] [3] [4] [5] [6] [7] [8] [10] [11] [12] [13] [14] [15] [16] [17]

[18] [19] [20]

[21] [22]

[23]

lt Dėl premijos panaikinimo Vengrijoje - protestų banga 2008-11-29 Rubrikose: Politika » Europos Sąjunga i Azija (pvz., H.Šlymano atrasta VI Troja)); kita banga - i Balkanu pusiasali. Balkanus pasieke indoeurop izika moko, jog šviesos kvantas yra ir dalelė, ir banga vienu metu. Mums tai atrodo beprotiška, paradoksa krusteli, ir per visą kūną iki paširdžių nusirita banga, tarytum jos viduje būtų apsivertusi šilta žuvis. kurias mes neseniai įėjome. Į kambarį su staigia banga įplaukė Kailas. Banga nubloškė mane prie sienos. pietus; įkandin sekė dar viena, galvijus genanti, banga. Arijai pasiekė Pandžabą, arba Penkupį (dabartini sibaigus arba darbuotojų prašymu. Šiauliuose UAB "Banga Electronics" gaminanti ir surenkanti televizorius arają parą vandens lygis nekilo. Kai kur potvynio banga nuslūgo keliais centimetrais. - Nemune ledas stov ario gėlynai dabar jau pavėsingi ir niūrūs. Žiedų banga atsirita į sausas pievas ir saulės apšviestas atš kme. Nauja daugiausia komercinio pobūdžio statybų banga, pirmiausiai veržiasi į vertingiausias kraštovaiz valdanti PET gamyba užsiimančią bendrovę "Nemuno Banga Group", yra vienintelė BH akcininkė. VŽ surinktai omentarai ir pokalbiai Kasdien mus užlieja nauja banga politinių pažadų. Žadami aukso kalnai, dosniai sk vau niekas, tik trumpai upės paviršiuje gyvenanti banga. Tiek, kiek pajėgiu dvasioje palikti upę, tiek "a iau. vildamasis, kad kokia nors netikėta srovė ar banga mus pagaus ir nuneš, dar nepriplaukus mūšos. - Me pastebėjo valti, - tariau aš. Šūstelėjusi didžiulė banga škunos prieki pasuko maždaug per koki rumbą, ir v etuvai. Tarp klausytojų nuvilnijo nepasitenkinimo banga. Jie replikavo, kad sklinda įvairios kalbos. Pasi gyvulių kūnais užliejo grėsminga vandenyne kilusi banga... Neištvėrusi Amalija užsikimšo ausis, tačiau Va ir pažanga dar ir ta prasme, kad kiekviena nauja "banga" ne tik atspindi dėl veiklos inovatyvumo bei jos askui lūpomis nulaižė nutiškusius lašus. Palaimos banga nusirito per mano kūną, įsiliejo į visas gyslas. viesos banga ritmiškai ristusi per miestą. Gerai, banga risis ir per miestą. Tačiau pirmiausia ji turi nu 2, G.Bulašas 1, R.Žalys 1, A.Budginas 1. GARGŽDŲ "BANGA" (35): P.Rauktys 13, S.Drasutis 6, J.Lubinas 5, E vėl atsiduso pelkė, vėl atsirito iki manęs vėsi banga... Po šio atodūsio išgirdau sunkius žingsnius. Ka 18.30 val. Tauragės "Tauras" (28 tšk.) - Gargždų "Banga" (38 tšk.; 0:3, 2:1 ir 1:2), 19 val. "Lokomotyvo"

#### Results for query "Norway"

case insensitive, using the Bing (Cognitive) API, from sites: mirror.co.uk thesun.co.uk dailystar.co.uk

1) https://www.thesun.co.uk/news/13758376/covid-norway-vaccine-deaths-pfizer-nursing-home/ Text, Wordlist, text/html, UTF8 (Content-type), date unknown

```
1:
     ALARMED' Covid Pfizer vaccine: What happened in Norway? Danielle Cinone 15 Jan 2021, 21:33 NEARLY two
           injected with the Pfizer Covid vaccine in Norway - and at least half of them were older than age
2:
     very little risk." 4 At least 23 people died in Norway just days after getting the Pfizer coronavirus
4: reports.Credit: AFP or licensors What happened in Norway? At least 23 people have died in Norway just
          in Norway? At least 23 people have died in Norway just days after getting the Pfizer coronavirus
6: coronavirus-related deaths have been reported in Norway. 4 'The Norwegian Medicine Agency confirms the
       The deaths come as more than 30,000 people in Norway have received the first jab of the Pfizer or
7:
         home population. A news release states: "In Norway we are now vaccinating the elderly and people in
8:
         well tolerated in all age groups." Spate of Norway Covid vaccine deaths 'expected' - health chief
9:
         Topics Coronavirus Explainers US Explainers Norway Comments are subject to our community guidelines,
10:
```

2) https://www.thesun.co.uk/news/13757257/norway-pfizer-covid-elderly-deaths/ Text, Wordlist, text/html, UTF8 (Content-type), 2021-01-16 (Body near 'Last Modified')

11: Politics Opinion Health News 'NOT ALARMED' Norway adjusts Covid vaccine advice on who gets jab
12: for the latest news & updates 2 Health chiefs in Norway have now adjusted their vaccine adviceCredit:
13: some frail patients." More than 30,000 people in Norway have received the first jab of the Pfizer or
14: coronavirus-related deaths have been reported in Norway. And health officials noted that around 400

# Create and visualize your data.

https://voyant-tools.org/



## Sources

European Research Infrastructures.
<a href="https://ec.europa.eu/info/research-and-">https://ec.europa.eu/info/research-and-</a>
<a href="mailto:innovation/strategy/european-research-infrastructures\_en">innovation/strategy/european-research-infrastructures\_en</a>

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