

UiO: Universitetet i Oslo

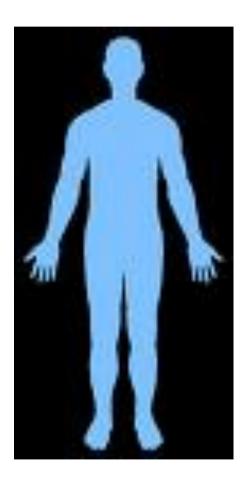
Written language corpora

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Corpus



plural cor·po·ra 📢

Full Definition of CORPUS







- 1: the body of a human or animal especially when dead
- 2 a: the main part or body of a bodily structure or organ <the corpus of the uterus>
 - **b**: the main body or corporeal substance of a thing; specifically: the principal of a fund or estate as distinct from income or interest
- 3 a: all the writings or works of a particular kind or on a particular subject; especially: the complete works of an author
 - **b**: a collection or body of knowledge or evidence; especially: a collection of recorded utterances used as a basis for the descriptive analysis of a language
 - See corpus defined for English-language learners »

Examples of CORPUS

- a computerized corpus of English
- <Jane Austen's corpus is modest in number but magnificent in achievement.>

What is a corpus?

- text
- size
- format
- representation
- use
- language
- medium
- annotation
- technology

Corpus history: text studies



 Verbal concordances of the Bible are the invention of the Dominican friars. The text which served as basis of their work was naturally that of the Vulgate, the Bible of the Middle Ages.

- The first concordance, completed in 1230, was undertaken under the guidance of Hugo de Sancto Charo, afterwards a cardinal, assisted, it is said, by 500 fellow-Dominicans. It contained no quotations, and was purely an index to passages where a word was found.
- The first concordance to be printed appeared in 1470

(CATHOLIC ENCYCLOPEDIA: Concordances of the Bible)

Bible concordance: http://bibletab.com/



Online Bible Concordance

abhor		
	Word Lookup	

Bible result

Romans 2:22 You who say a man shouldn't commit adultery. Do you commit adultery? You who abhor idols, do you rob temples? (WEB KJV ASV DBY WBS YLT NAS RSV NIV)

Romans 12:9 Let love be without hypocrisy. Abhor that which is evil. Cling to that which is good. (WEB KJV ASV DBY WBS YLT NAS)

Leviticus 26:11 I will set my tent among you: and my soul won't abhor you. (WEB KJV JPS ASV DBY WBS RSV NIV)

Leviticus 26:15 and if you shall reject my statutes, and if your soul abhors my ordinances, so that you will not do all my commandments, but break my covenant; (Root in WEB KJV JPS ASV DBY WBS NAS RSV NIV)

Corpus history: Shakespeare concordances

- Samuel Ayscough (1745-1804), Librarian and Index-maker, known as 'The Prince of Indexers'.
- Ayscough is also remembered as the writer of the first concordance to Shakespeare. Entitled An Index to the Remarkable Passages and Words Made Use of by Shakespeare; Calculated to Point out the Different Meanings to Which the Words are Applied, it was published by John Stockdale in 1790. (Wikipedia)

 In the year after her marriage, Mary Cowden Clarke began her valuable Shakespeare concordance, which was eventually issued in eighteen monthly parts (1844-1845), and in volume form in 1845 as The Complete Concordance to Shakespeare, being a Verbal Index to all the Passages in the Dramatic Works of the Poet.

 This work superseded the Copious Index to ... Shakespeare (1790) of Samuel Ayscough, and the Complete Verbal Index ... (1805-1807) of Francis Twiss. (Wikipedia)



http://demo.openshakespeare.org/concordance/

Word
а
abhor
abide
able
about
above
absence
absent
abundance



Shakespeare: søkeresultat

Word: abhor

Location	Snippet	Link
work: Sonnets, line: 2553	With others thou shouldst not abhor my state: If thy unworthiness	source in text
work: Sonnets, line: 2552	though I love what others do abhor, With others thou shouldst not a	source in text

Corpus history: lexicography

- Published on <u>15 April 1755</u> and written by <u>Samuel Johnson</u>, *A Dictionary of the* <u>English Language</u>
 - An archive of 150 000 illustrative citations on slips of paper for the 40 000 head words.
- Oxford English Dictionary
 - 71 years of building a corpus of the literary canon of English from 1000 AD to 1928 (the 12th and final volume)
 - The 2nd edition of 1984: 447 000 word forms, 2.4 mill. quotations

Corpus history: dialect studies

- Lexical variation
- The English Dialect Dictionary (1898-1905)
- The Existing Phonology of English Dialects (1889)

Corpus history: language teaching

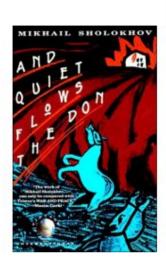
- Thorndike (1921) compiled a corpus of 4.5 mill. words from 41 different sources
- To make frequency lists
- To teach native Americans English

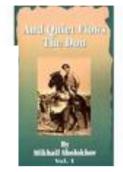
Corpus history: Grammar

- The very famous Danish linguist Otto Jespersen (1860-1943)
 - Used informal corpora for his linguistic descriptions
- Survey of English Usage (Randolph Quirk, 1959-) a pre-electronic systematic corpus to be used as a basis for grammar description (A Comprehensive Grammar of the English Language, Quirk et al 1985)



Corpus history: literature studies







Accusations of plagiarism: the Russian Nobel laureate Mikhail Aleksandrovich Sholokhov in 1974 was accused of having stolen large chunks of texts for his book *And Quiet Flows the Don* from the late author Fjodor Krjukov.

- An inter-Nordic research team was formed in 1975, captained by the late Geir Kjetsaa, a professor of Russian at the University of Oslo, for disentangling the **Don** mystery.
- Quantitative data were gathered and organised
 - relating to word lengths
 - frequencies of certain words and phrases
 - · sentence lengths
 - · Grammatical characteristics, etc.
 - These data were extracted from three corpora
 - » (Nils Lid Hjort)



Tamil-konkordans: Indeks over Kamparamayanam (Govindankutty 1973)

- 12500 stanzas
- Each stanza: 4 lines
- The complete index: 3500 typed pages
- Method: small cards, annotation for meaning and grammatical category
- Six years hard work for G. And his "longsuffering" colleagues (Kennedy 1998)

The Brown Corpus (Brown University Standard Corpus of Present-day American English)

- The first computer corpus compiled for linguistic research
- Synchronic American language printed in 1961
- Taken from a large number of text categories (informative and imaginative prose), reasonably "representative"
- 1 mill words
- LOB Corpus
 - (London-Oslo-Bergen Corpus)
 - British counterpart of the Brown Corpus

Brown Corpus



- <u>A. PRESS: REPORTAGE</u> (44 texts)
- <u>B. PRESS: EDITORIAL</u> (27 texts)
- <u>·C. PRESS: REVIEWS</u> (17 texts)
- <u>D. RELIGION</u> (17 texts)
- <u>·E. SKILL AND HOBBIES</u> (36 texts)
- <u>•F. POPULAR LORE</u> (48 texts)
- G. BELLES-LETTRES (75 texts)
- •
 - H. MISCELLANEOUS: GOVERNMENT & HOUSE ORGANS (30 texts)
- <u>J. LEARNED</u> (80 texts)
- <u>·K: FICTION: GENERAL</u> (29 texts)
- <u>L: FICTION: MYSTERY</u> (24 texts)
- <u>M: FICTION: SCIENCE</u> (6 texts)
- N: FICTION: ADVENTURE (29 texts)
- P.FICTION: ROMANCE (29 texts)
- <u>•R. HUMOR</u> (9 texts)

Modern corpus history

 The Brown Corpus has also spawned a number of similarly structured corpora: the LOB Corpus (1960s British English), Kolhapur (Indian English), Wellington (New Zealand English), Australian Corpus of English (Australian English), and the FLOB Corpus (1990s British English). Other corpora: include the International Corpus of English, and the British National Corpus, a 100 million word collection of a range of spoken and written texts, created in the 1990s by a consortium of publishers, universities (Oxford and Lancaster) and the British Library. For contemporary American English, work has stalled on the American National Corpus, but the 360 million word BYU Corpus of American English (1990nresent) is now available

Some written language corpora developed at the Text Laboratory (UiO)

- Bosnian Corpus
- KAL-korpuset
- The Corpus for Bokmål Lexicography LBK
- NoWaC
- Oslo-korpuset av taggede norske tekster
- The French Newspaper Corpus
- Macedonian Corpus
- Sidaama Corpus
- <u>Usenet-korpuset</u>
- SKRIV Corpus
- Two Corpora with music reviews

- Oslo Multilingual Corpus
- RuN-korpuset
- OPUS
- LOGONs norsk-engelske turistkorpus
- The Sofie Treebank
- + a big Oslo Parallel Corpus under arbeid

- Research using corpora:
 - Corpus-based
 - Corpus-driven
- Data collection for corpus:
 - Monitor corpora
 - Web as a corpus
 - sample corpora, balanced corpora

Types of corpora

- General corpora
 - Balanced
 - Biased
- Specialised corpora
 - Training+test
 - Dialect or region
 - Parallel
 - Music critiques
- Types of text
 - Whole texts or parts of texts
 - Dynamic (monitor) or static
- Time
 - Synchroic or diachronic
- Medium
 - Spoken or written

Annotating corpora

- POS-tagging
- Parsing
- Alignment
- Semantic tagging
- Metadata:
 - Author
 - work
 - date
 - place

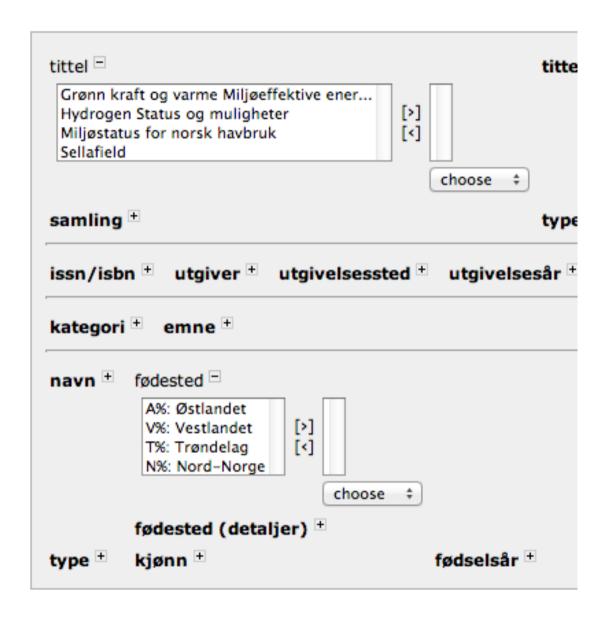


Bokmålskorpuset

Utviklet av Seksjon for leksikografi (avdeling for Bokmål) ved Insitutt f lingvistiske og nordiske studier, UiO sammen med Tekstlaboratoriet.

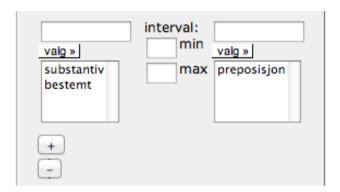






Search example

Find a definite noun followed by a preposition





CWB expression: "([((tid_bestemthet="be") & (ordkl="s"))][((ordkl="prep"))]);"

Action: ÷

Matches found: 4369

Results pages: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 13 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 19

AV01Af930001.2	det i år være mulig å levere	selvangivelsen i	bydelene . KARIN ERIKSEN Et samarbeidsprosjekt
AV01Af930001.6	Lambertseter , SageneTorshov og Bøler vil sette	kassene i	biblioteket . Røa vil ha to kasser
AV01Af930001.11	bydel . Du behøver ikke å levere	selvangivelsen i	den bydelen du bor Det
AV01Af930001.15	hente selvangivelseskjema og innhente all informasjon om	utfyllingen i	Oslo Rådhus, med inngang fra sjøsiden
AV01Af930002.8	et "gammelt" preg som ikke bryter med	stilen til	nabobygningene . Foruten innkjørsel til Dagbladet blir
AV01Af930005.4	, viser tall fra Statistisk sentralbyrå .	Indekstallet i	desember var 250,9 . Det er en
AV01Af930005.5	er en nedgang på 0,1 prosent fra	måneden før	. Fra desember i 1992 til desember
AV01Af930005.7	gikk ned 0,3 prosent som følge av	nedgangen i	bensinprisene . Gruppen andre varer og tjenester
AV01Af930005.10	. I 1993 var det nedgang i	prisene i	juli, august, november og desember
AV01Af930006.5	. BERIT SIMENSTAD NHOs kritikk av	bystyret for	handlingslammelse og ubesluttsomhet i behandlingen av byråd
AV01Af930006.5	av bystyret for handlingslammelse og ubesluttsomhet i	behandlingen av	byrådets næringsmelding , som Aftenposten skrev om
AV01Af930006.9	. Planen var at komiteen skulle ferdigbehandle	saken innen	i fjor sommer . Horntvedt overtok som nestleder
AV01Af930006.10	sommer . Horntvedt overtok som nestleder i	komiteen etter	Kristin Krohn Devold i oktober . Horntvedt
AV01Af930006.12	Den arbeidsgruppen som komiteen satte ned for	arbeidet med	næringsmeldingen , ledet av Bernt Bull ,
AV01Af930006.15	til Aftenposten at han tar på seg	ansvaret for	at saken ikke ble behandlet før sommeren
AV01Af930006.17	til seg Horntvedts kritikk når det gjelder	arbeidet med	næringsmeldingen i høst . SÅ snakke om
AV01Af930006.17	Horntvedts kritikk når det gjelder arbeidet med	næringsmeldingen i	høst . SÅ snakke om boikott og
AV01Af930006.23	Men hvorfor har ikke komiteen da ferdigbehandlet	saken med	en flertallsinnstilling fra Arbeiderpartiet og SV ?
AV01Af930006.27	har den politiske makten . Derfor har	målsetningen i	komiteen vært å utarbeide en felles politikk

Selvangi deg i din egen bydel |

For første gang vil det i år være mulig å levere selvangivelsen i bydelene.

KARIN ERIKSEN | Et samarbeidsprosjekt mellom 19 bydeler og Oslo likningskontor vil gjøre det lettere å levere inn selvangivelsen . Bydelene vil ha innleveringskasser fra og med 20. januar . tid: AV01Af930001

title: Aftenposten: Selvangi deg i din

egen bydel

category: AV01

publisher: Aftenposten

pubdate: 1993 pubplace: Oslo translation:

class:

name: Eriksen, Karin

type: author

sex: F born:

"Count" from the Action menu

✓ Case sensitive✓ Create headings
Include: ✓ Orthographic word form Lemma Part of speech Type
Max number of results:
Output format:
Submit Query

occurences match

- 94 løpet av
- 27 slutten av
- 20 siden av
- 20 året før
- 17 kampen mot
- 16 spørsmålet om
- 16 midten av
- 16 begynnelsen av
- 15 behovet for
- 15 arbeidet med
- 14 answaret for
- 14 resten av
- 11 delen av
- 11 bruken av
- 10 utgangen av
- 10 ledelsen i
- 10 kampen om
- 10 muligheten for
- 9 utviklingen av
- 9 grunnlaget for
- 9 økningen i
- 9 forholdet mellom
- 8 toppen av
- 8 muligheten til
- 7 grunnen til
- 7 evnen til
- 7 salget av
- 7 betydningen av
- 7 situasjonen i
- 7 prisen på

"Action menu: "Count", display as chart

- Case sensitive
- Create headings

Include:

- Orthographic word form
- Lemma
- Part of speech
- Type

Max number of results:

Output format:

Pie chart	‡
Submit Query	

Action menu: "Sort" results

Case sensitive
Sort by:
Match ‡
Position in context (counting from match)
Features used on tokens:
Orthographic word form
□ Lemma
 Part of speech
☐ Type
Sort by (secondary): Right context ‡
Position in context (counting from match)
Features used on tokens:
Orthographic word form
□ Lemma
 Part of speech
☐ Type
Reset Submit Query

CWB expression: "([((tid_bestemthet="be") & (ordkl="s"))][((ordkl="prep"))]);"

Action: ÷

Hits found: 4369

Results pages: 1 2 3 4 5 6 7 8 9 10 **11** 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 5 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 2

AV01Af9627.65	regnet ut fra vinkelen på skyggen at	avstanden mellom	punktene utgjorde en femtiendedel av 360 grader
AV01Af940205.54	din oppfatning ? - Vi vil oppfylle	avtalen for	fosfor . For nitrogen makter vi neppe
AV01Af940020.34	og skapte problemer for ratifiseringen av START1	avtalen i	november . Men spørsmålet er vel om
AV01Af940287.15	som hele tiden har vært uenig i	avtalen med	danskene fra 1991 . Frykter forsinkelser I
AV01Af940020.34	protesterer allerede, slik de protesterte mot	avtalen mellom	Kravtsjuk og Jeltsin i sommer om deling
AV01Af940020.9	for en kort samtale med Kravtsjuk.	Avtalen mellom	USA, Russland og Ukraina om kompensasjon
AV01Af940325.40	felles håndtrykk etter undertegnelsen av den historiske	avtalen om	fjerning av atomvåpen fra Ukraina i Moskva
AV01Af930123.14	å finne en måte å omgå denne	avtalen på	, sier Eggen . SAS ' informasjonssjef
AV01Af940020.12	statskasse - mange dollar . Clinton offentliggjorde	avtalen på	første dag av NATOtoppmøtet i Brussel mandag
AV01Af940243.34	. Men personverninteressene må ofte vike i	avveiningene mot	andre gode formål . Når dette skjer
AV01Af930296.14	inn i bykassen . året etter var	avviket på	332 millioner, mens i fjor traff politikerne
AV01Af940157.17	de nærmere 1200 frivillige Skiforeningsfunksjonærenes rolle i	avviklingen av	de sagnomsuste Holmenkollrennene , referer Kirsten Klafstad
AV01Af940113.5	har styret i Norsk Iskrem bestemt .	Avviklingen av	disse to fabrikkene skal føre til en
AV01Af940192.24	. For øvrig er det lurt å legge	badestellet til	sent på kvelden, og gi siste
AV01Af930255.2	Min klart største prestasjon på	badmintonbanen hittil	, sa en glad og fornøyd Tandberg-Johansen
AV01Af930255.20	(i midten) ønskes velkommen til	badminton-toppen av	Hans Sperre (t.v.) og Erik
AV01Af930038.5	opp . En mann grafset til seg	bagen med	ca. 20000 kroner i . Han forsvant
AV01Af940162.15	plutselig stopper den . Og så går	bakdørene opp	. Der står Kritt . Han er
AV01Af940085.8	betale for statskirkens virksomhet . Dette er	bakgrunnen for	at man i 1969 i lovs form
AV01Af940044.23	. Men Aftenposten er kjent med at	bakgrunnen for	den planlagte aksjonen er misnøye med Europabevegelsens

Options:		BNC	veb (CQP-Edition)
Standard queries			Standard Query
Standard query			
Written texts			
Spoken texts			
User-specific functions			
<u>User settings</u>			
Query history		Simple quant (ignore case)	Simple query language
Saved queries	Query mode:	Simple query (ignore case)	Simple query language
Categorized queries		F0	
Create/edit subcorpora	Number of hits per page:	50	
<u>Upload external data file</u>			
Additional functions	Restriction:	None (search whole corpus)	
Browse a file			
Word lookup		Start Query Reset Query	
Scan keywords/titles	BNCweb (CQP-edition) © 199	6-2007	
Explore genre labels			
Frequency lists			
<u>Keywords</u>			
About BNCweb			
The BNCweb team			

New features
Bug reports

The CLAWS-5 tagset
Oxford BNC homepage

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Restricted Range of Written Texts

Query mode: Simple query (in the start Query for the start Query	ignore case) 🔻	
Publication Date:	Medium of Text:	Text Sample:
☐ 1960-1974 ☐ 1975-1984 ☐ 1985-1993	☐ Book ☐ Periodical ☐ Miscellaneous: published ☐ Miscellaneous: unpublished ☐ To-be-spoken	 ☐ Whole text ☐ Beginning sample ☐ Middle sample ☐ End sample ☐ Composite
Domain:		Derived text type:
☐ Imaginative prose ☐ Informative: Natural and pure sciences ☐ Informative: Applied science ☐ Informative: Social science ☐ Informative: World affairs	☐ Informative: Commerce and finance ☐ Informative: Arts ☐ Informative: Belief and thought ☐ Informative: Leisure	☐ Academic prose ☐ Fiction and verse ☐ Non-academic prose and ☐ Newspapers ☐ Other published written m ☐ Unpublished written mate
Estimated Circulation Size:	Perceived Level of Difficulty:	Domicile of Author:
☐ Low ☐ Medium ☐ High	☐ Low ☐ Medium ☐ High	☐ UK and Ireland ☐ Commonwealth ☐ Continental Europe ☐ USA ☐ Elsewhere
Age of Author:	Sex of Author:	Type of Author:
□ 0-14 □ 15-24 □ 25-34 □ 35-44 □ 45-59	☐ Male ☐ Female ☐ Mixed	Corporate Multiple Sole

Your	query "pictu	re" in written texts returned	9646 matches in 1982 differ	rent texts (in 87,903,571 words;	frequency: 109.73 in	stances per million w	ords) [0.2
I <	<< <u>>> </u>	Show Page: 1	KWIC View	Random order	New Query	▼ Go!	
No	Filename		Solu	ation 1 to 50 Page 1 / 193			
1	A00 273	The <u>picture</u> then has changed volunteers, although volunteer		r increasing numbers of those with nportant role to play.	chronic illnesses nee	ding specialist commun	nity care
2	<u>A04 30</u>	Pater's measured prose goes o in progress.	n to connect the <u>picture</u> with	drawings by Verrocchio, specular	te on the artist and the	sitter, and wonder abo	out how
3	<u>A04 30</u>	Pater's measured prose goes o in progress.	n to connect the picture with	drawings by Verrocchio, speculate	e on the artist and the	sitter, and wonder abou	it how l
4	A04 44	Let us picture a girl entering	through the impressive doors	of the New York Public Library.			
5	<u>A04 124</u>	A teacher's list for analysing p and dark, colour, mass, space		e that of the American educational	ist Thomas Munro: fi	rst impressions of the p	<u>icture</u> a
6	A04 173	Pater's judgement is decisive,	that this <u>picture</u> is Leonardo'	s masterpiece.			
7	A04 217	But, seeing that a fine picture	is nature reflected by an artis	st, the criticism which I approve wi	ill be that picture refle	cted by an intelligent a	nd sensi
8	A04 217	But, seeing that a fine picture	is nature reflected by an artist	, the criticism which I approve wil	l be that <u>picture</u> refle	cted by an intelligent a	nd sensi
9	A04 218	Thus the best account of a pic	ture may well be a sonnet or	an elegy as for criticism proper	rly so-called		
10	A04 226	The whole surface of the sea is like the lifting of its bosom by		ded into two ridges of enormous s torture of the storm.	well, not high, not lo	cal, but a low broad hea	aving of
11	A04 231	almost perfect, not one false o	r morbid hue in any part or li bending, and full of motion; it	l, is based on the purest truth, and one, and so modulated that every square tones as true as they are wonders open, deep, illimitable sea.	uare inch of canvas is	s a perfect composition;	; its drav
12	A04 372	But, though independent, thes the wing, suspended or elusiv		esced, inevitably, in the act of pairing the picture on the easel.	nting when all the disc	crete, scattered moments	s, follow
13	A04 376	For him, critical writing has to	take up wider issues than en	joyment of a <u>picture</u> or a sculpture	e.		
14	A04 435	Excellence is not necessarily a	criterion for including a pict	ure or a sculpture in a chronologic	cal survey.		
1.5	A D 4 42D	A 11 1 1 1 1	£ T4-1:1	4 4 000 4 1	::-t::£t	1	

Corpus or web?

What kind of linguistic research?

- phonetics and phonology?
- morphology?
- syntax?
- semantics?
- pragmatics?
- contrastive linguistics?

Tasks