

Searching for Similarities in Text Datasets ¹

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Normalisation of Historical Texts (Motivation)

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3157

The barr of the doore, and hee this examinant sayth that hee did not see the stroke that the sayd Phelem Gaue to the said Dulin, but hee heard severall that were without the house sayinge that hee kild him with a smale skean Caled a medock, & this examinant heard the said felem Confess that hee kild him, & this examinant sawe the wownd in in the one of his brests (*but which breast hee knows not*) & sayth that the said Dulin spake (not that hee heard of) after the sayd wound was Giuen him, & further hee sayth that as hee thinks the wound was in *or vnder* the left breast & that *it* was not aboue an Inch brode but hee thinks it was too his hart in depth, & further sayth not Morough [mark] mc Gill Patrick his marke

This examination was taken before vs

DI Huchinson

Mayor Dublin

Jo: Bysse

Morrish mc Cahir Birne acknowledged *t o owe vnto the keepers of the liberty of England the sume of C li.* to appeere prosecution & prosecute

Figure : Instance of the 1641 Depositions' Repository of Trinity College Dublin: <http://1641.tcd.ie/>

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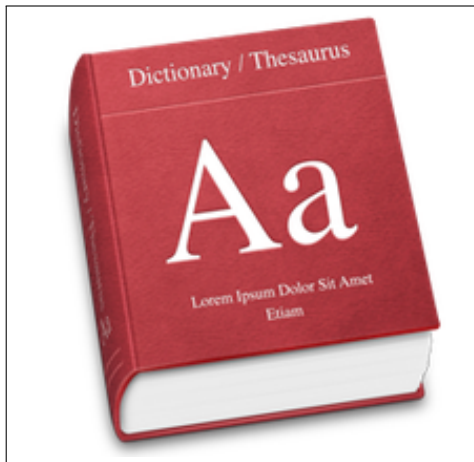
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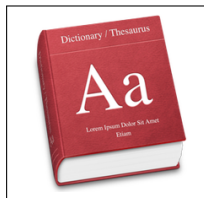
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Conclusion: Historical patterns provide an implicit way to represent word variability.

Available/Required Resources

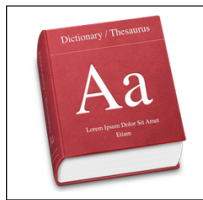


Available/Required Resources



List of modern words.

Available/Required Resources



fol. 89r

217

The **Examynacion** of Donnogh mcGillrowe of BallymaGillrowe in the Com of ffermanagh Husbandman, taken before me the 4th of 9ber 1641

<W> Whoe saith that he Came to the Cittie of Dublin friday the 22th of 8ber last, And that he Came from home the saturday before, and that Night he Lodged at a friends house of his Called Pattrick Coggie, on the North side of Newtowne, in the foresaid Com, and there, rested vntill Munday morninge, And then he Came with some drovers of Cattle the said Munday Night to a towne within 12 miles of Kells, where he lodged that Night & on <X> tuesday Night he lodged at Liscartan, and on Wednesday he went to the Navan Markett where he soulede Night he Lodged at towne within twoe miles of Navan, eight Cowes, which he had driven thither for that purpose, and on thursday night he they lodged at Killeene, and on friday Night he lodged at a house in fishamble Cookestreete, And further this Examynant saith that his Occation of Cominge to the towne was to rec. money from one, Donogh mcBryan and Owin O Brislane of Ballynacarrie in the said Com, drovers for the said 8 Cowes, which he this Examynant soulede vnto them the said drovers, And the sune which he was soe to rec. was 10 li. 5 s. but saith that he did not rec: the said money. And the Next Morninge he rose vpe betymes to goe oute of the

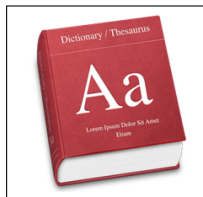
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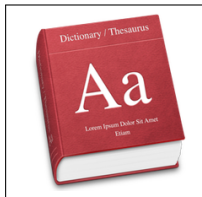


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List of modern words.

Examples of historical texts and their modern equivalents.

Available/Required Resources



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I hope with all my heart , and I must say this quite emphatically , that an opportunity will arise when this document can be incorporated into the Treaties at some point in the future . Should this fail to materialise , we should not be surprised if public opinion proves sceptical about Europe , or even rejects it .

The Intergovernmental Conference – to address a third subject – on the reform of the European institutions is also of decisive significance for us in Parliament .

At present I feel there is a danger that if the proposal by the Belgian Government on these sanction mechanisms were to be implemented , we would be hitting first and examining only afterwards .

The Charter therefore guarantees a greater level of protection than the European Convention on Human Rights – this needs to be said to all those who are asserting the opposite here in the plenary – and it formulates political and social rights in a balanced way .

We must bear in mind the Community as a whole .

But we must reach agreement on what to put in this Constitution .

I am not a Christian Democrat , so I do not believe in miracles , but I do want to salute the European Parliament as such , because it has made a major contribution to this project .

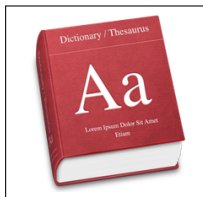
In today 's debate , I associate myself with the words of all those who have spoken – Mr Moscovici , Mr Napolitano and the heads of groups – on the importance of the Charter of Fundamental Rights : this is something innovative and , moreover , unhoped-for .

This does not mean that everything has to happen at once .

VOTE

Report (A5-0231 / 2000) by Mr Hatzidakis , on behalf of the Committee on Regional Policy , Transport and Tourism , on the proposal for a European Parliament and Council directive

Available/Required Resources



fol. 68r
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But we must reach agreement on what to put in the Constitution.
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In today's debate, I associate myself with the words of all those who have spoken: Mr
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This does not mean that everything has to happen at once.
NOTE
Report (A5-0221) (2006) by Mr Nitzschke, on behalf of the Committee on Regional Policy,
Transport and Tourism, as the argument for a European Parliament and Council directive
amending Council Directive 96 / 53 / EC laying down for certain road vehicles circulating
within the Community the maximum authorized dimensions in national and international traffic
and the maximum authorized weights in international traffic (COM / 2006 / 135-CE-0044 /
2006-2006 - 0004 COM)
Technical cooperation with Russia while the Chechen people are suffering a full-scale
genocide is a waste of money for the European Union at a time when this House has granted the
final version of the Charter of Fundamental Rights.
The Commission also proposes to apply a coefficient to the 'non collectable' percentage in
order to avoid understating the true level of deficit, compared with the Maastricht
requirements.
Even in countries where 15-metre buses are not allowed officially, in practice they are not
refused or sent back to the border.
Sulzer report (A5-0216) (2006)
Opting for direct government aid when acquiring risk-bearing starting capital for innovative
companies means that this aid must mostly be funded by these paying taxes and pension
contributors.
We did not want this resolution because we did not want our votes to be confused with
those of the contrary right, which objects to a number of fundamental rights even being
affirmed as possible in the interpretation of States.
The achievement of the dialogue when it is signed just now and others has been outstanding.
The content of this document, they say, represents a fundamental step forward for the
protection of citizens' rights in Europe.
The Intergovernmental Conference and the Nice Council should decide to embrace it in the
Treaty.
The Charter aims to provide comprehensive protection of people's fundamental rights and
the jurisdiction of the Court of Justice beyond the jurisdiction of the EU.
Because social rights are fundamental rights for a Europe that respects democratic and social
rights and freedom, we champion the protection of another set of another set of
citizens, those excluded from society, national institutions.
It cannot serve as a basis for the establishment of a human constitution.
A5-0247 (2006) 3 by Bernard Nicholson of Kiustebac, in Romania (CM / 1999 / 518-

List of modern words.

Examples of historical texts and their modern equivalents.

Modern texts.

Approach Overview, [SNG⁺14]

fol. 89r

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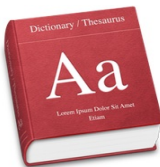
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Learn Spelling variations
and how to apply them

Approach (Overview), [SNG⁺14]

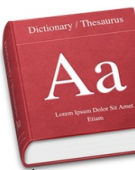
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The Examination of Donagh mcgillrow of Ballymagillrowe in the County of fermanagh Husbandman, taken before me the 4th of November 1641

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I hope with all my heart, and I must say this quite emphatically, that an opportunity will arise when this document can be incorporated into the Treaties at some point in the future. Should this fail to materialise, we should not be surprised if public opinion proves sceptical about Europe, or even rejects it.

The Intergovernmental conference - to address a third subject - on the reform of the European institutions is also of decisive significance for us in Parliament .
At present I feel there is a danger that if the proposal by the Belgian Government on these sanction mechanisms were to be implemented , we would be hitting first and examining only afterwards .

The Charter therefore guarantees a greater level of protection than the European Convention on Human Rights - this needs to be said to all those who are asserting the opposite here in the plenary - and it formulates political and social rights in a balanced way. We must bear in mind the Community as a whole.

I am not a Christian Democrat, so I do not believe in miracles, but I do want to salute the European Parliament as such, because it has made a major contribution to this project. In today's debate, I associate myself with the words of all those who have spoken - Mr Monnet, Mr De Gasperi, Mr Monnet again, and the heads of groups - on the importance of the Chairman of the Commission.

This does not mean that everything has to happen at once.

Report (A5-0231 / 2000) by Mr Hatzidakis , on behalf of the Committee on Regional Policy , Transport and Tourism , on the proposal for a European Parliament and Council directive amending Council Directive 96 / 53 / EC laying down for certain road vehicles circulating

within the Community maximum authorised dimensions in national and international traffic and the maximum authorised weights in international traffic [COM (2000) 137-CE-0164 / 2000-2000 / 0060 (CDD)]
 , Technical cooperation with Russia while the Chechen people are suffering a full-scale

The Commission also proposes to apply a coefficient to the 'non collectable' percentage in order to avoid understating the true level of deficit, compared with the Maastricht

Even in countries where 15-metre buses are not allowed officially, in practice they are not refused or sent back at the border.

We did not vote against this resolution because we did not want our votes to be confused with those of the extreme right - which objects to a number of fundamental rights even being

The achievement of the colleagues whom I named just now and others has been outstanding here.

protection of citizens' rights in Europe, to the extent that the matter should be referred to the Intergovernmental Conference and the Nice Council should decide to enshrine it in the Treaty.

different sections go completely or partly beyond the jurisdiction of the EU .
Because social rights are fundamental rights for a Europe that respects democratic and social
rights and freedoms , we champion the idea of another charter to protect workers , women ,
foreigners , those excluded from society , national minorities .

It cannot serve as a basis for the establishment of a European constitution.
[A5-0247 / 2000] by Baroness Nicholson of Winterbourne on Romania (COM (1999) 516-

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Approach (Overview), [SNG+14]

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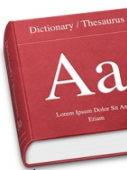
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I have with all my heart, and I must say this quite emphatically, that an opportunity will arise when this document can be incorporated into the Treaties at some point in the future. I should thus feel to externalize, we should not be surprised if public opinion grows sceptical about Europe, or even rejects it.

The Intergovernmental Conference - to address a third subject - on the reform of the European institutions is also of decisive significance for us in Parliament.

An aspect I feel there is a danger that of the proposal by the Belgian Government on these two subjects - I should like to see the Commission and the Council working first on the remaining subject afterwards.

The Charter therefore guarantees a greater level of protection than the European Convention on Human Rights - this needs to be said to all those who are asserting the opposite here in the assembly - and it formulates political and social rights, balanced ones.

We must bear in mind the Community as a whole.

But we must reach agreement on what to put in this Constitution.

As we do not have a common document, as I do not believe in unanimity, but I do want to salute the European Parliament as such - because it has made a major contribution to this project.

In today's debate - I should like to work with the world of all those who have spoken - in the Maastricht, Mr. Neelissen and the heads of groups - on the importance of the Charter of Fundamental Rights - this is something innovative and, moreover, unique.

This does not mean that everything has to happen at once.

NOTE

Report (A5-0231) / 2004 by Mr. G. Delors, in the name of the Committee on Regional Policy, Transport and Tourism - on the proposal for a European Parliament and Council directive amending Council Directive 90 / 269 / EEC laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic (COM (2004) 337-03-0364 / 2004-2004 / 0066 (C2))

Technical cooperation with Russia while the Chechen people are suffering a full-scale genocide as a consequence of what the European Union at a time when this House has granted the legal status of the Charter of Fundamental Rights.

The Commission also proposes to apply a coefficient to the "net collective" percentage in order to avoid undertaking the true level of deficit - compared with the Maastricht requirements.

Even in countries where 15-metre buses are not allowed officially, in practice they are not refused or sent back at the border.

Guinea report (A5-0235 / 2004)

During far direct government aid when acquiring risk-bearing starting capital for innovative companies means that this aid must mainly be funded by these paying taxes and pension premiums.

We did not vote against this resolution because we did not want our votes to be confused with those of the extreme right - which objects to a number of fundamental rights even being affirmed or applicable to the minorities in States.

The achievement of the challenges we I named just now and others has been outstanding here.

The content of this document, they say, represents a fundamental step forward for the protection of citizens - rights in Europe - in the extent that the matter should be referred to the Intergovernmental Conference and the Council should decide on the content in the Treaties.

The Charter aims to provide comprehensive protection of people's fundamental rights and the different sections go consecutively or partly beyond the jurisdiction of the EC.

Because social rights are fundamental rights for a better and more respectful democratic and social rights and freedoms, we champion the idea of another Charter to protect workers', women, foreigners, those excluded from society, national minorities.

It cannot serve as a basis for the establishment of a European constitution.

A5-0242 / 2004 by Sir Robert Nicholson of BARNES, BARON, in the name of the Committee on Regional Policy, Transport and Tourism - on the proposal for a European Parliament and Council directive amending Council Directive 90 / 269 / EEC laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic (COM (2004) 337-03-0364 / 2004-2004 / 0066 (C2))

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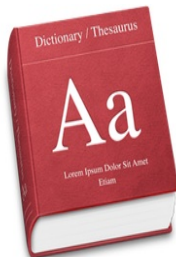
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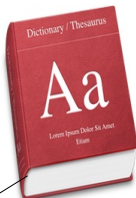
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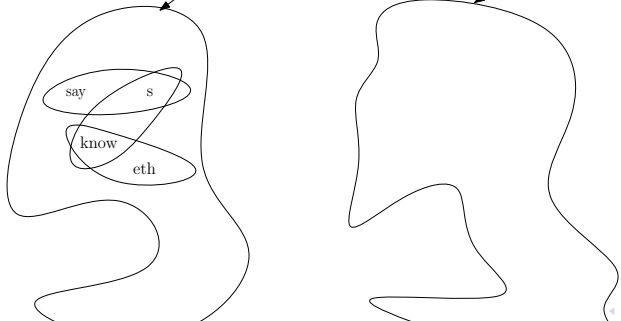
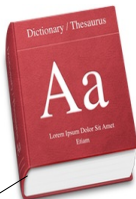
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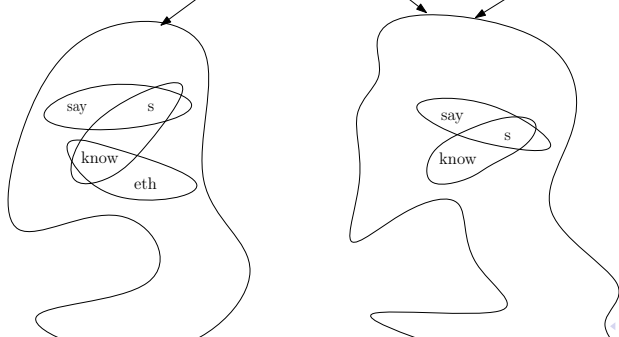
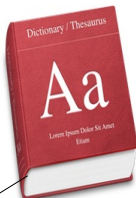
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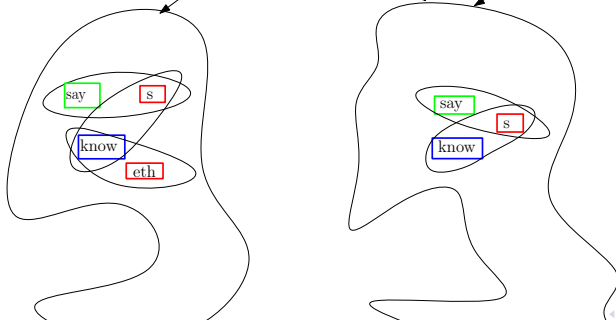
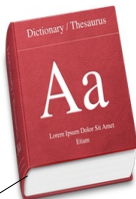
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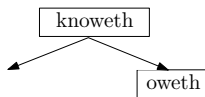
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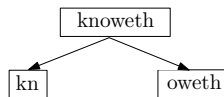
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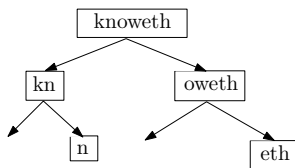
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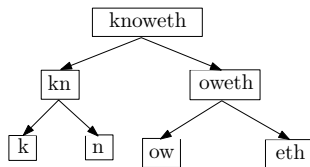
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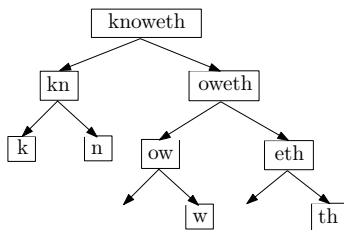
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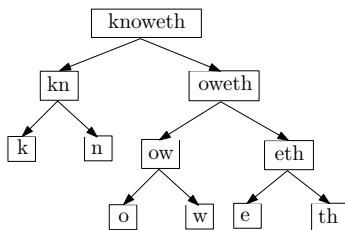
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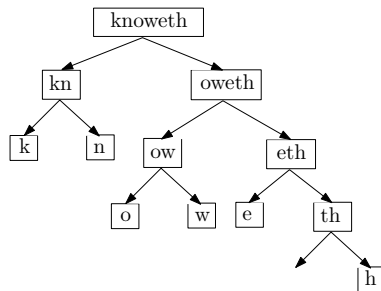
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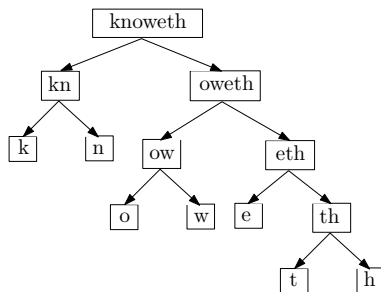
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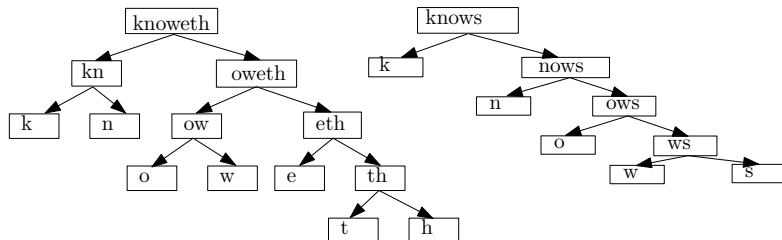
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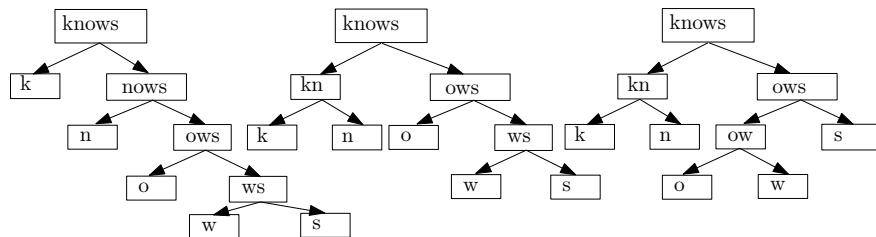
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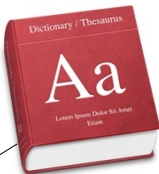
Extraction of Spelling Variations

fol. 89r
217

The **Examinant** of Donogh mcGillow of Ballymagillow in the County of Fermanagh Husbandman, taken before me the 4th of fiber 1641
<W> Who saith that he Came to the Citty of Dublin Friday the 22th of Bar-lul, And that he Came from home the saturday before, and that Night he Lodged at a friends house of his Called Patrick Cogglin, on the North side of Newtowne, in the Innesaid Cor, and there, rested vntill Monday morning, And then he Came with some drovers of Cattle the said Monday Night to a towne within 12 miles of Kells, where he lodged that Night & on <O> Tuesday Night he lodged at Lisacartan, and on Wednesday he went to the Navan Market where he could Night he Lodged at towne within two miles of Navan, eight Cowes, which he had driven thither for that purpose, and on Thursday night he lodged at Killeane, and on Friday Night he lodged at a house in Ballinble Cookebriewe, And further the Examinant saith that he Occasion of Coming to the towne was to rec. money from one, Donogh mcBryan and Owen O Breslane of Ballynacanie in the said Cor, drovers for the said 8 Cowes, which he the Examinant recoules unto them the said droves, And the sum which he was to rec. was 10 l. 5 s. but saith that he did not rec. the said money. And the Next Morning he rose vpe betimes to goe out of the towne, but the gates being shut, he Could not, And some after was apprehended, And the Examinant further saith that he did not know any thing of the Conspiracie discovered

fol. 89r
217

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<W> Who saith that he Came to the Citty of Dublin Friday the 22th of October last, And that he Came from home the saturday before, and that Night he Lodged at a friends house of his Called Patrick Cogglin, on the North side of Newtowne, in the Innesaid County, and there, rested vntill Monday morning, And then he Came with some drovers of Cattle the said Monday Night to a towne within 12 miles of Kells, where he lodged that Night & on <O> Tuesday Night he lodged at Lisacartan, and on Wednesday he went to the Navan Market where he sold Night he Lodged at towne within two miles of Navan, eight Cowes, which he had driven thither for that purpose, and on Thursday night he they lodged at Killeane, and on Friday Night he lodged at a house in Ballinble Cookebriewe, And further this Examinant saith that he Occasion of Coming to the towne was to rec. money from one, Donogh mcBryan and Owen O Breslan of Ballynacanie in the said County, drovers for the said 8 Cowes, which he this Examinant sold unto them the said droves, And the sum which he was so to rec. was 10 l. 5 s. but saith that he did not rec. the said money. And the Next Morning he rose up betimes to goe out of the towne, but the gates being shut, he Could not, And soon after was apprehended, And this Examinant further saith that he does not know any thing of the Conspiracie discovered



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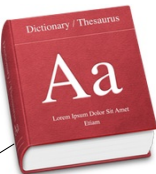
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The Examinant of Donogh mcGillow of Ballymagillow in the County of Fermanagh Husbandman, taken before me the 4th of November 1641
<W> Who says that he Came to the City of Dublin Friday the 22th of October last, And that he Came from home the saturday before, and that Night he Lodged at a friends house of his Called Patrick Cogglin, on the North side of Newtowne, in the Innesad County, and there, rested until Monday morning, And then he Came with some drovers of Cattle the said Monday Night to a town within 12 miles of Kells, where he lodged that Night & on <O> Tuesday Night he lodged at Lisacartan, and on Wednesday he went to the Navan Market where he said Night he Lodged at town within two miles of Navan, eight Cowes, which he had driven thither for that purpose, and on Thursday night he they lodged at Killeane, and on Friday Night he lodged at a house in Ballymagillow. And further this Examinant says that the Occasion of Coming to the town was to rec. money from one, Donogh mcBryan and Owen O Breslin of Ballymagillow in the said County, drovers for the said 8 Cowes, which he this Examinant sold unto them the said droves, And the sum which he was to rec. was 10 l. 5 s. but says that he did not rec. the said money. And the Next Morning he rose up betimes to go out of the town, but the gates being shut, he Could not, And soon after was apprehended, And this Examinant further says that he does not know any thing of the Conspiracy discovered



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Table of Contents

1 Normalisation of Historical Texts

2 Extraction of Phrases

Extraction of Phrases (Motivation)

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Idea: Use the orthographic similarities among these texts to induce structure and facilitate search queries.

Required Resources

In the presence of cycloheximide two types of RNA accumulate in the cell: soluble RNA and a high-molecular-weight RNA. The latter has a base composition intermediate between those of yeast DNA and yeast ribosomal RNA, and sediments in a sucrose gradient at a rate faster than that of the 23s ribosomal RNA component.

4. Yeast ribosomal RNA contains methylated bases.

Judged from the incorporation of [Me-(14)C]methionine, the extent of methylation of ribosomal RNA is about 20% of that of the 'soluble' RNA fraction.

The high-molecular-weight RNA formed in the presence of cycloheximide is less methylated than normal RNA.

In this case the sucrose-density-gradient sedimentation patterns of newly methylated and newly synthesized RNA do not coincide.

In the presence of cycloheximide, polysomal material accumulates, indicating that messenger RNA is formed.

The effect of the antibiotic on protein and RNA synthesis can be abolished by washing of the cells.

The RNA that has accumulated during incubation of the cells with the antibiotic is not stable on removal of cycloheximide.

The results presented in this study are discussed in relation to the regulation of RNA formation in yeast.

1. Methods are described for measuring tidal volume and frequency, end-tidal CO(2), blood pressure and heart rate, and arterial tensions in the unanaesthetized new-born lamb.

The resting values of minute ventilation (V)/kg body wt. and arterial oxygen and carbon dioxide tension, (P(a, O₂)) and (P(a, CO₂)) were similar to those which have been reported in the new-born baby.

There was a direct and significant relation between P(a, O₂) and P(a, CO₂) and the age of the lamb.

Thirty-five unanaesthetized lambs aged 40 min to 10 days breathed 100% oxygen; minute ventilation fell by an average of 15% in control, end-tidal CO(2) increased and the ratio of change in tidal volume (DeltaV(T)) to change in pressure (DeltaP) (DeltaV(T)/DeltaP) remained constant.

The effect of breathing 100% O(2) on lung compliance was variable.

These changes in ventilation were virtually abolished after both sinus nerves had been cut.

The results therefore suggest that a significant hypoxic drive to ventilation exists in the new-born lamb and that this drive is mediated by functioning and mature peripheral chemoreceptors.

Preliminary evidence suggested that, on 100% O(2), the sensitivity of new-born lambs to inhaled CO(2) was reduced.

The molecular weight and amino acid composition of triose phosphate isomerase have been determined.

The molecular weight (43000) is lower and the molecular activity (500000) higher than those of most other glycolytic enzymes.

Reaction with iodoacetate (studied with radioactive reagent) takes place in two phases: in the first phase, at pH6.3, cysteine and methionine groups react and enzymic activity is unimpaired; in the second phase, histidine reacts and enzymic activity is lost.

Photo-oxidation leads to inactivation, with loss of cysteine, of histidine and of tryptophan, but little loss of tyrosine. The mechanism postulated for the action of the enzyme demands the intervention of a group functioning as a base, and the results obtained are consistent with histidine's being the basic group in the active centre.

1. L-Mandelate dehydrogenase and mandelate racemase were partially purified from extracts of Pseudomonas fluorescens A-311 grown in media containing D-mandelate.

The activity of mandelate racemase, but not that of L-mandelate dehydrogenase, is greatly stimulated by Mg(2+), Mn(2+), Co(2+), though less effectively, by Ni(2+).

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Set of sentences or paragraphs or other meaningful units of texts.

Approach to Phrase Extraction [GS16]

Young children recognise function words but do not use them in the beginning. [HW03, SWC06, Tra07]

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- (P2) A particular sentence should exhibit these regularities as good as its structure w.r.t. the corpus allows.

Approach (2)

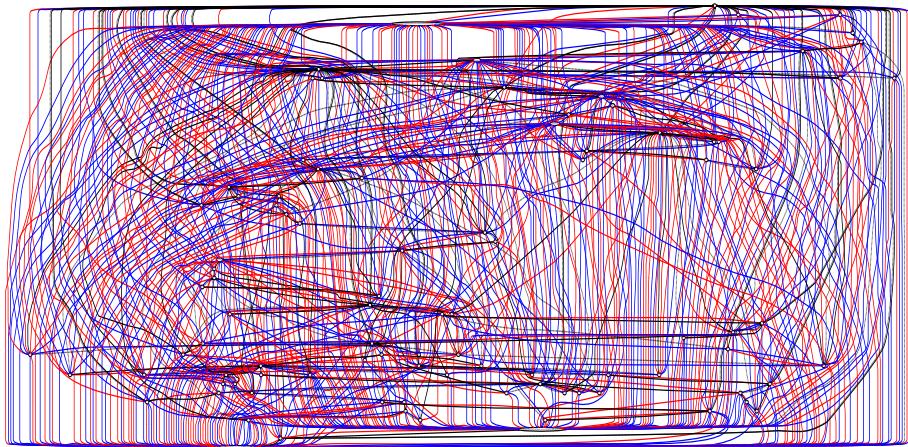
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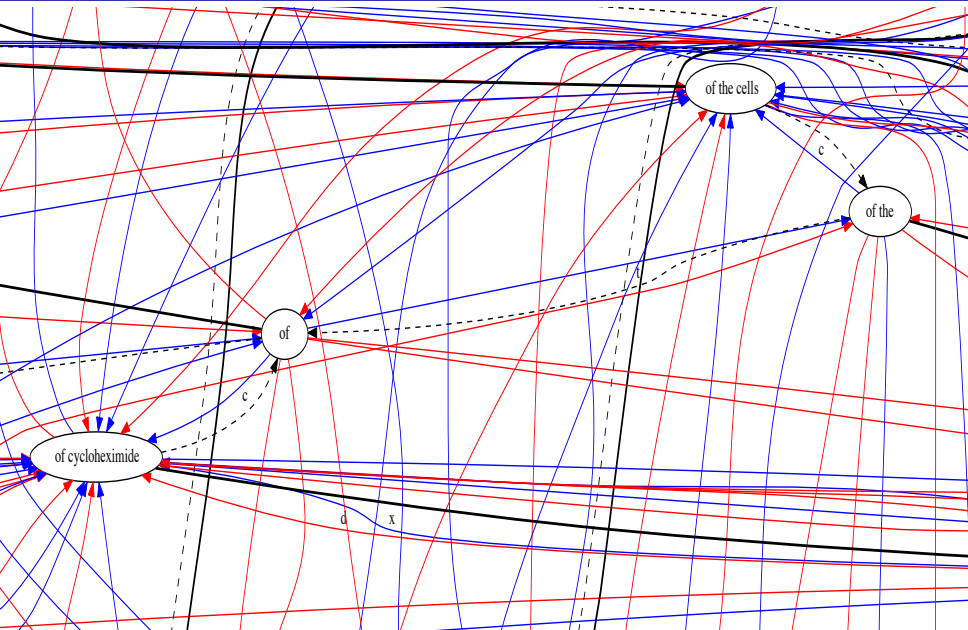
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Excerpt from the Medline Corpus: <http://mbr.nlm.nih.gov/>

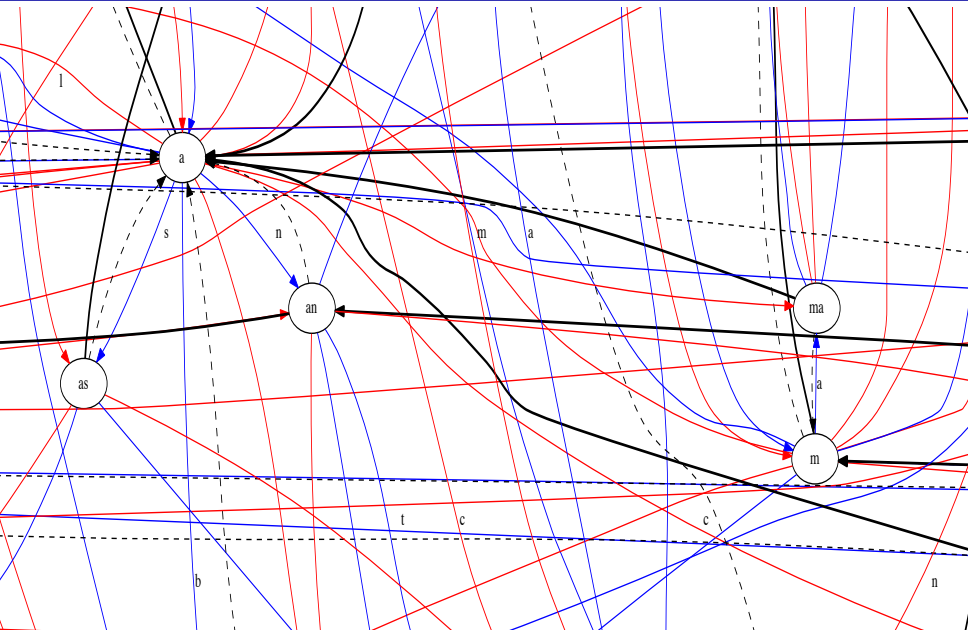
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$$\begin{aligned} \text{pref}(F|\mathcal{P}) &= |\{F \circ S \in \mathcal{P} \mid S \in \Sigma^+\}| \\ \text{suff}(F|\mathcal{P}) &= |\{S \circ F \in \mathcal{P} \mid S \in \Sigma^+\}| \\ \text{inf}(F|\mathcal{P}) &= |\{S_1 F S_2 \in \mathcal{P} \setminus \{F\} \mid (S_1, S_2) \in (\Sigma^*)^2\}| \\ p_{\text{pref}}(F|\mathcal{P}) &= \frac{\text{pref}(F|\mathcal{P})}{\text{inf}(F|\mathcal{P})}, p_{\text{suf}}(F|\mathcal{P}) = \frac{\text{suff}(F|\mathcal{P})}{\text{inf}(F|\mathcal{P})} \end{aligned}$$

$$\text{reflect (P1):} \quad p_{fw}(F|\mathcal{P}) = p_{\text{pref}}(F|\mathcal{P}) \cdot p_{\text{suf}}(F|\mathcal{P})$$

$$\text{reflect (P2):} \quad \ell(\bar{F}|S_n, \mathcal{P}, \mathcal{C}) = \prod_{i=1}^{k_n-1} p_{fw}(F_i|\mathcal{P})$$

$$\text{refine phrases:} \quad \mathcal{P}_0 = \mathcal{G}(\mathcal{C}) \quad \mathcal{P}_{i+1} = \mathcal{P}'_i \text{ until } \mathcal{P}_i \sim \mathcal{P}_{i+1}$$

$$\mathcal{P}' := \{S_n[j_1..j_2] \mid S_n[j_1..j_2] \text{ optimal phrase candidate for a sentence } S_n\}$$

Results

Corpus	# of funct. words	most frequently used function words
WikiEN	305	.; the ; , ; and ; of ; in ; to ; a ; of the ; is ; " ; was ; . The ; in the ; for ; that ; by ; as ; with ; are ; - ;) ; on ; were ; (; to the ; from ; at ; . In ;
EU-Parl (EN) 1%	200	.; the ; , ; to ; of ; a ; and ; in ; that ; be ; for ; this ; which ; in the ; are ; we ; will ; have ; on ; has ; an ; not ; to the ; with ; , the ; that the ; it ; as ; by ; to be ; , and ; more ;
Medline (10%)	146	.; of ; and ; the ; in ; of the ; to ; was ; with ; for ; a ; were ; is ; in the ; by ; that ; are ;) , ; from ; on ; at ; or ; after ; as ; +/- ; and the ; between ; during ; to the ; ; patients with ;
Medline (0.5%)	143	.; of ; the ; and ; in ; to ; of the ; was ; a ; were ; with ; for ; is ; in the ; by ; that ; are ; from ;) , ; at ; on ; as ; after ; to the ; or ; an ; patients ; +/- ; cells ; ; and the ;
WikiDE	305	.; . ; der ; die ; und ; des ; in ; von ; " ; - ; im ; das ; , ;) ; eine ; den ; als ; . Die ; zu ; mit ; ein ; ist ; in der ; wurde ; für ; auf ; zur ; einer ; nach ; sind ; . Der ; nicht ; , der ;
EU-Parl 1% (DE)	159	.; , ; die ; der ; und ; zu ; in ; den ; eine ; , daß ; des ; , die ; das ; nicht ; von ; werden ; im ; ist ; ein ; für ; wir ; auf ; es ; einer ; auch ; zur ; mit ; dem ; sich ;
Wittgenstein (DE+EN)	200	.; . ; [; die ; der ; das ; [1] ; ? ; the ; & ; daß ; in ; nicht ; eine ; ein ; ist ; den ; to ; es ; , ; zu ; ; ; a ; so ; von ; of ; that ; wenn ; was ; I ; er ; als ; einen ; wie ; aber ; sie ;
Accountant (NL)	379	.; de ; een ; en ; . ; en ; in ; dat ; is ; , ; die ; . De ; (; niet ; op ; ; ; in de ; van het ; zijn ; voor ;) ; ^ ; met ; als ; dat de ; . Het ; wordt ;
EU-Parl (NL) 1%	151	.; , ; van ; een ; het ; in ; en ; van de ; dat ; te ; op ; die ; is ; niet ; voor ; zijn ; de ; worden ; met ; om ; dat de ; deze ; heeft ; van het ; aan ; voor de ; ook ; er ; wij ;
EU-Parl (FR) 100%	203	.; , ; de ; des ; et ; les ; la ; à ; que ; en ; pour ; une ; du ; qui ; dans ; un ; au ; est ; aux ; a ; á la ; sont ; que les ; que la ; , et ; , mais ; par ; ont ; sur ; d'une ; , les ; plus ; d'un ;
EU-Parl (ES) 100%	173	- ; , ; que ; la ; en ; y ; los ; el ; a ; para ; del ; una ; se ; un ; las ; con ; no ; al ; a la ; es ; por ; en la ; de las ; a los ; , que ; , y ; ha ; más ; su ;

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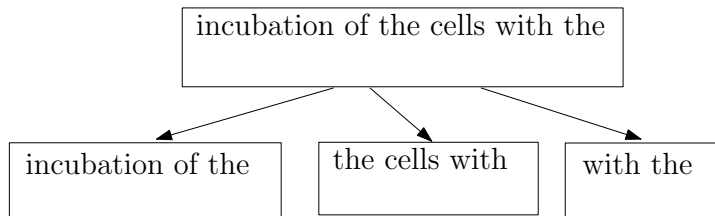
Corpus Profile (Example on Medline Corpus)

Hierarchical decomposition of phrases.

incubation of the cells with the

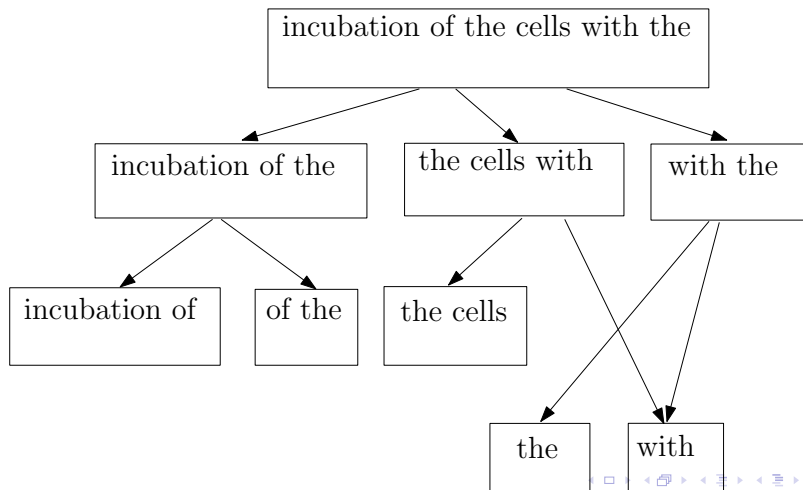
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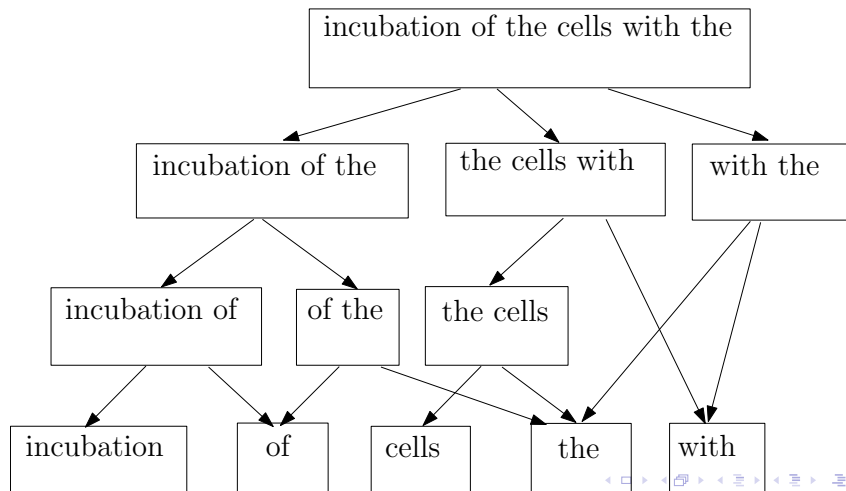
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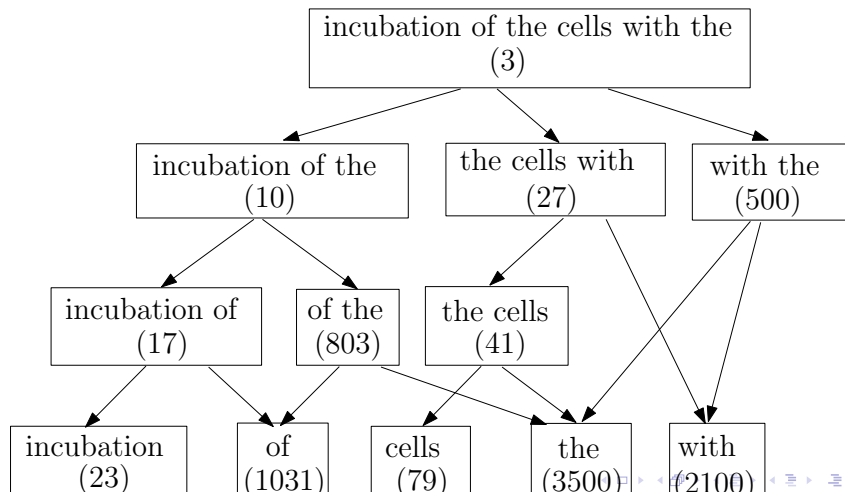
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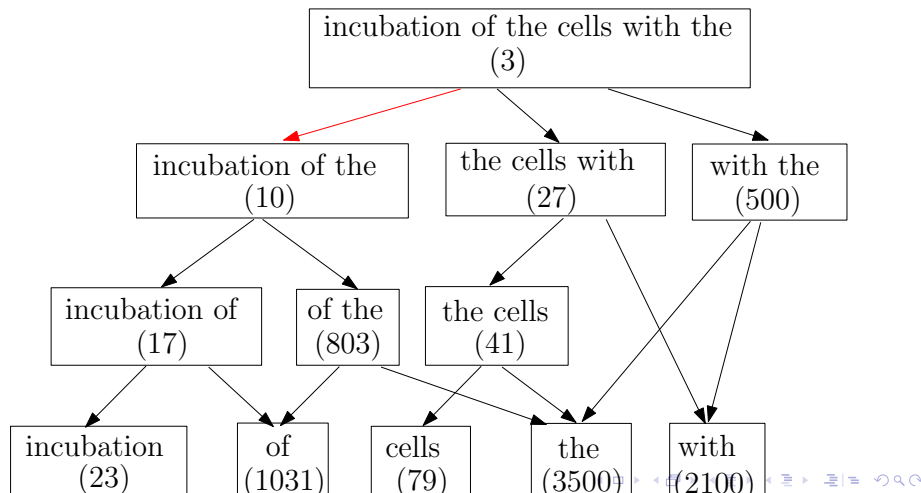
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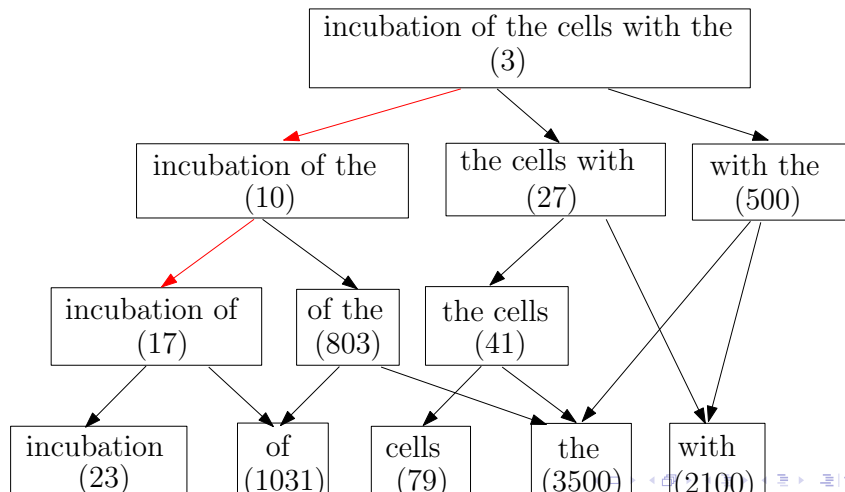
Extraction and ranking of specific atomic phrases.



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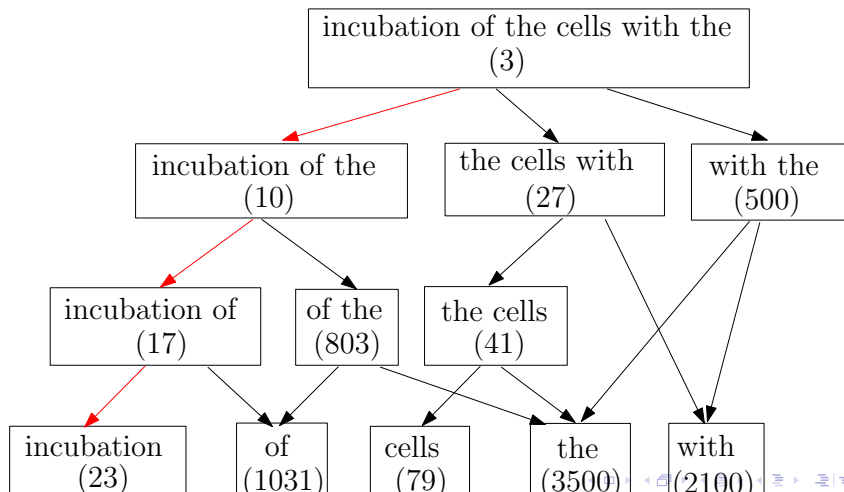
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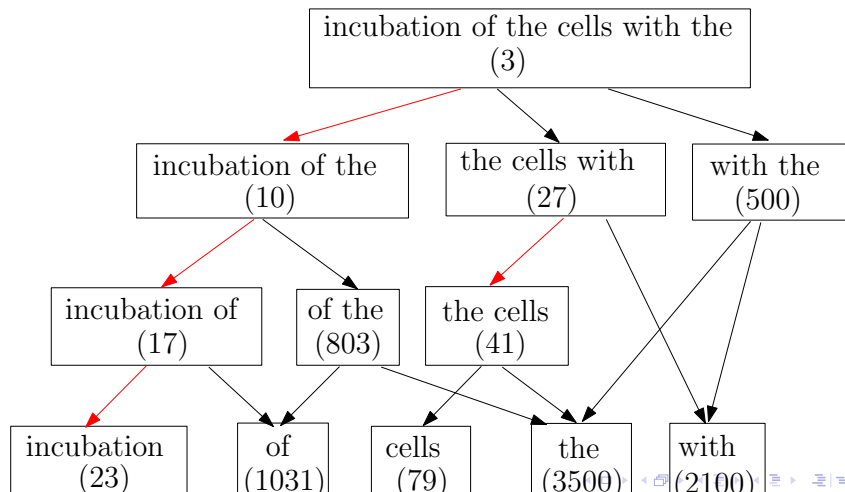
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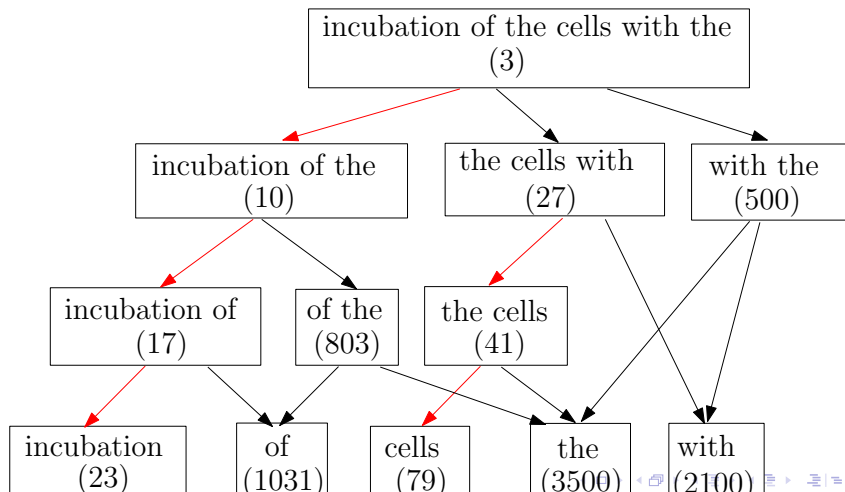
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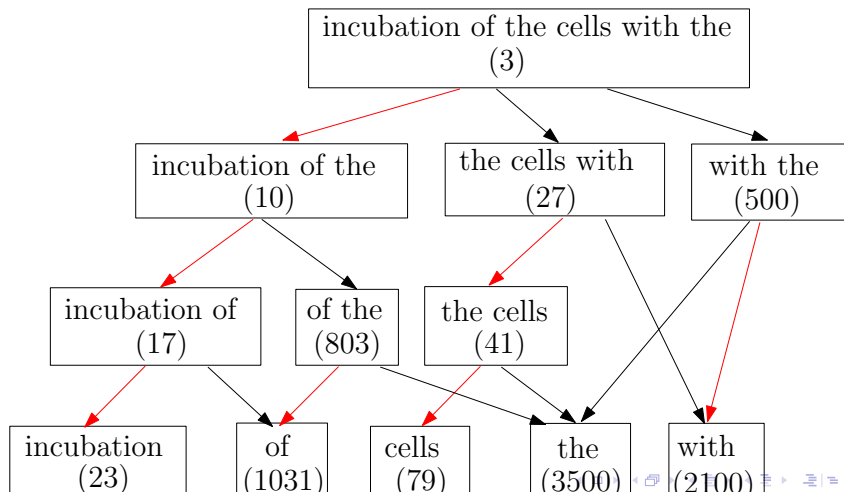
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1. observed	21. one	41. tumor
2. those	22. similar	42. children
3. used	23. performed	43. identified
4. only	24. control	44. use
5. treatment	25. lower	45. different
6. groups	26. demonstrated	46. examined
7. present	27. disease	47. normal
8. obtained	28. age	48. time
9. increase	29. cells	49. blood
10. increased	30. data	50. cases
11. reported	31. reduced	51. studied
12. found	32. decreased	52. specific
13. results	33. risk	53. subjects
14. higher	34. changes	54. decrease
15. patients	35. group	55. protein
16. significantly	36. previously	56. 3
17. patient	37. developed	57. compared
18. cancer	38. high	58. women
19. study	39. effective	59. investigated
20. expression	40. factors	60. evaluated

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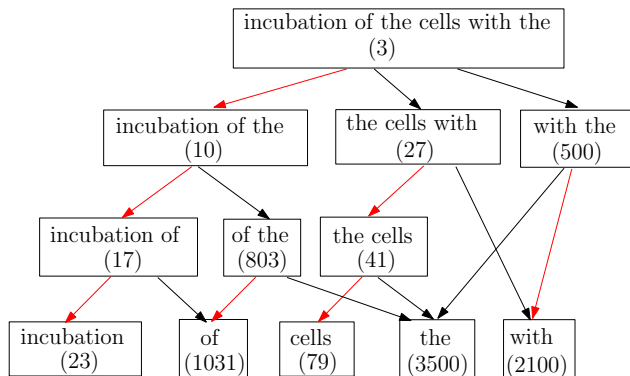
1. observed (2310/602)	21. one (17/3)	41. tumor (-/10737)
2. those (121/30)	22. similar (1341/213)	42. children (1001/177)
3. used (220/1)	23. performed (5841/192)	43. identified (1864/608)
4. only (9/5)	24. control (362/150)	44. use (151/6)
5. treatment (2223/1106)	25. lower (3088/550)	45. different (231/194)
6. groups (361/142)	26. demonstrated (1167/1900)	46. examined (4705/5826)
7. present (127/114)	27. disease (3185/1674)	47. normal (3079/1211)
8. obtained (3743/1141)	28. age (1224/896)	48. time (41/2)
9. increase (534/358)	29. cells (-/1123)	49. blood (-/1376)
10. increased (991/386)	30. data (1947/277)	50. cases (561/316)
11. reported (4701/340)	31. reduced (1340/773)	51. studied (4507/846)
12. found (719/8)	32. decreased (5109/3881)	52. specific (284/462)
13. results (723/432)	33. risk (556/1182)	53. subjects (1068/2110)
14. higher (1253/505)	34. changes (728/270)	54. decrease (3735/2992)
15. patients (4104/1897)	35. group (198/66)	55. protein (7516/1941)
16. significantly (6063/958)	36. previously (3324/676)	56. 3 (720/779)
17. patient (-/3414)	37. developed (633/26)	57. compared (2692/1199)
18. cancer (-/2935)	38. high (532/226)	58. women (276/199)
19. study (1271/134)	39. effective (416/522)	59. investigated (3658/5008)
20. expression (1333/1666)	40. factors (1920/1089)	60. evaluated (8548/7615)

Word Fields (1)

The hierarchical decomposition of phrases allows us to relate cooccurring atomic phrases.

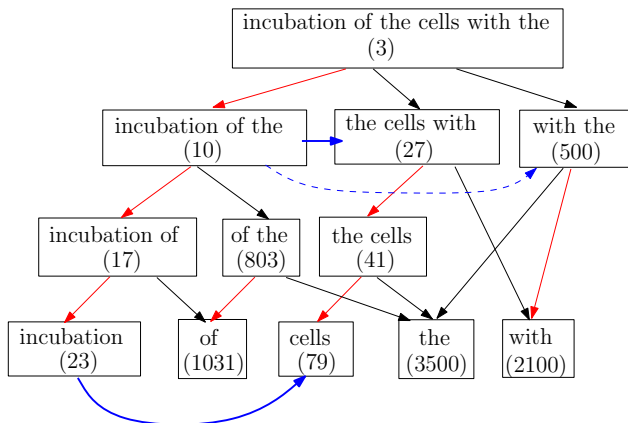
Word Fields (1)

The hierarchical decomposition of phrases allows us to relate cooccurring atomic phrases.



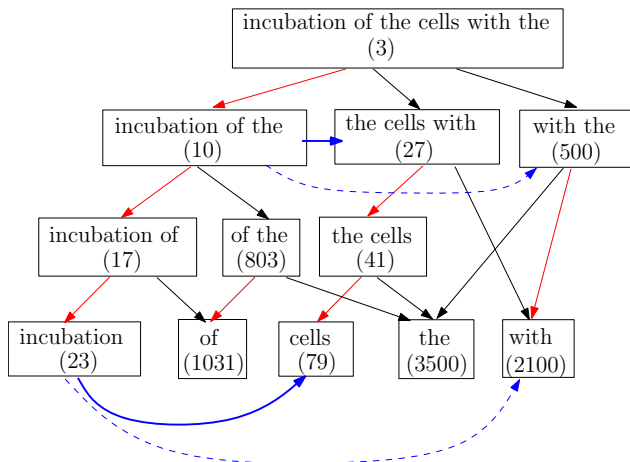
Word Fields (1)

The hierarchical decomposition of phrases allows us to relate cooccurring atomic phrases.



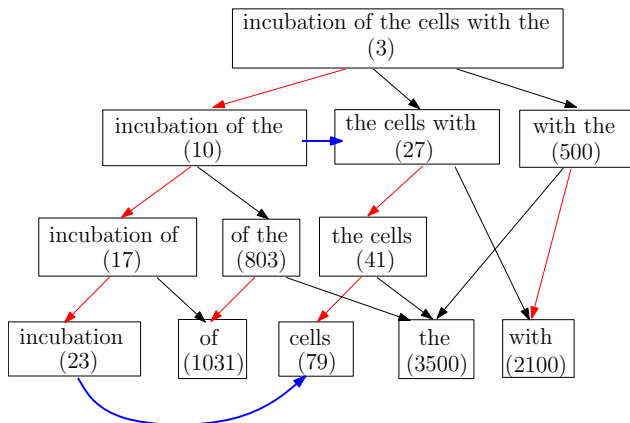
Word Fields (1)

The hierarchical decomposition of phrases allows us to relate cooccurring atomic phrases.

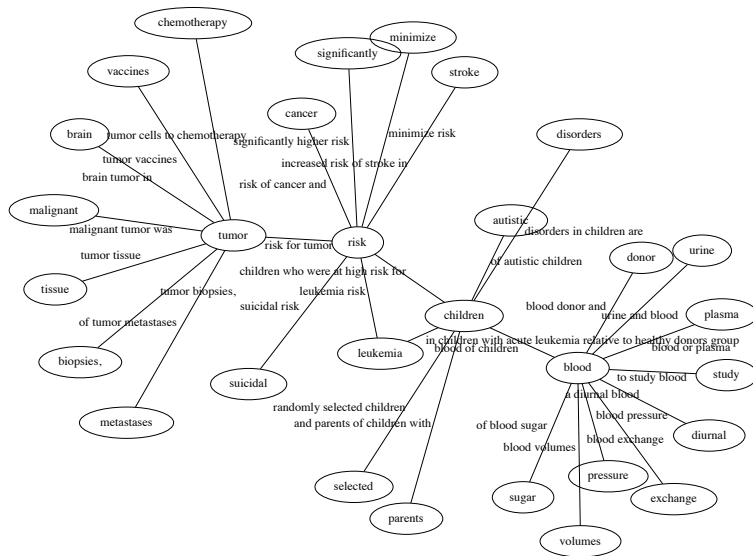


Word Fields (1)

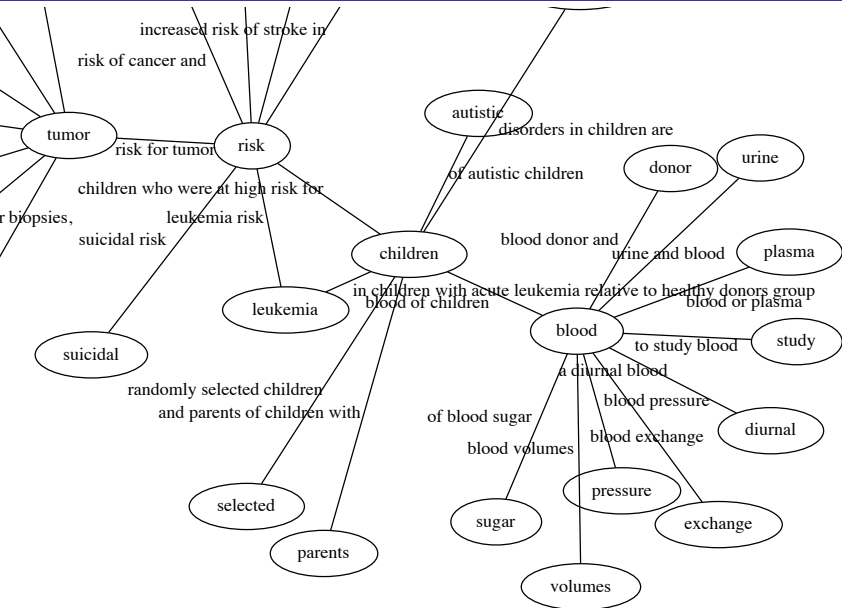
The hierarchical decomposition of phrases allows us to relate cooccurring atomic phrases.



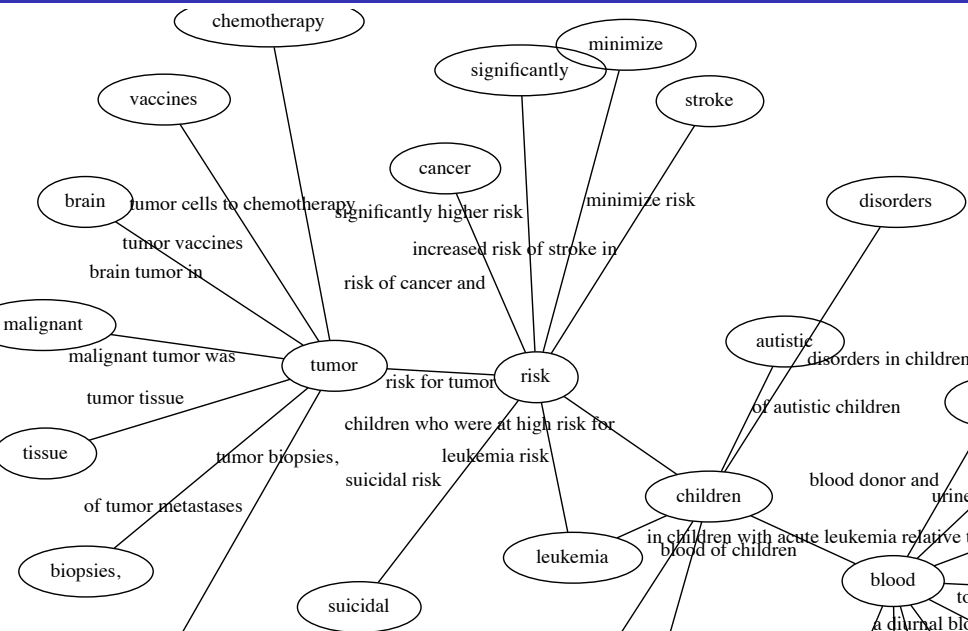
Word Fields (Medline Corpus)



Word Fields (Medline Corpus)



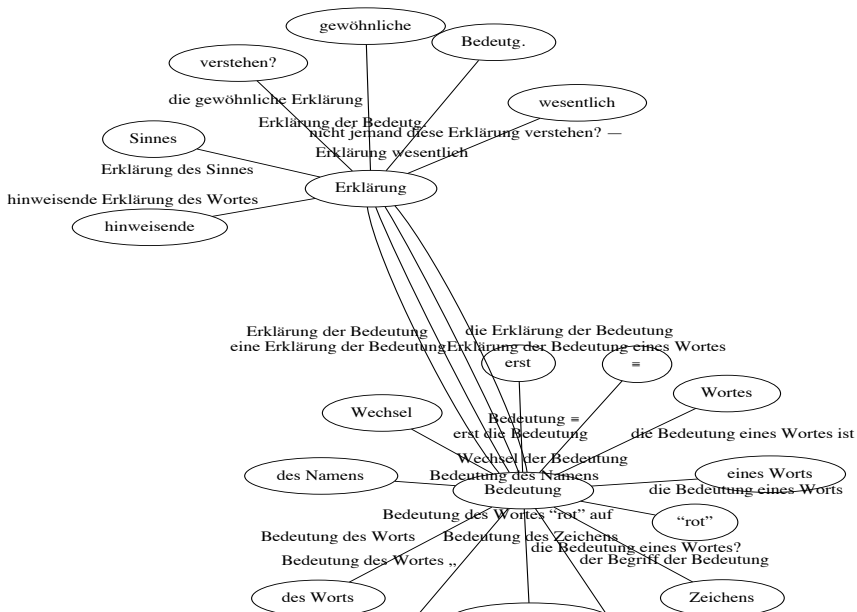
Word Fields (Medline Corpus)



Word Fields (Wittgenstein Corpus)



Word Fields (Wittgenstein Corpus)





S. Gerdjikov, S. Mihov, and V. Nenchev.

Extraction of spelling variations from language structure for noisy text correction.

In *ICDAR'13*, pages 324–328, 2013.



S. Gerdjikov and K. U. Schulz.

Corpus analysis without prior linguistic knowledge - unsupervised mining of phrases and subphrase structure.

CoRR, abs/1602.05772, 2016.



Barbara Höhle and Jürgen Weissenborn.

German-learning infants' ability to detect unstressed closed-class elements in continuous speech.

Developmental Science, pages 122–127, 2003.



A. Sariev, V. Nenchev, S. Gerdjikov, P. Mitankin, H. Ganchev, S. Mihov, and T. Tinchev.

Flexible noisy text correction.

In *DAS'14*, pages 31–35. IEEE, 2014.



Rushen Shi, Janet Werker, and Anne Cutler.

Recognition and representation of function words in english learning infants.

Infancy, 10(2):187–198, 2006.



Rosemarie Tracy.

Wie Kinder Sprachen Lernen: Und wie wir sie dabei unterstützen können.

Nar Francke Attempto Verlag, 2007.

Additional

Corpus	$ \mathcal{F}(\mathcal{C}) $	most frequently used function words
保镖天下 Chinese Fiction	293	; , ; 的 (of); 了 (over); 是 (is/are); 你 (you); 我 (I/me); 这 (this); 人 (people/human); 着 (·); 在 (at/in); 就 (·); "" ; 黎箫 (Li Xiao – a person's name in this fiction); 他 (he); 也 (also/too); 到 (arrive); ? (?); 都 (both/all); 去 (go); ! (!); 来 (come); 还 (still/again); 看着 (look/stare); 那 (that); 一个 (one); 出 (go/get out); 上 (up/above); 要 (need); 和 (and); 自己 (myself); 将 (will/shall); 没有 (no/didn't);

Additional

Corpus	$ \mathcal{F}(\mathcal{C}) $	most frequently used function words
保镖天下 Chinese Fiction	293	; , ; 的 (of); 了 (over); 是 (is/are); 你 (you); 我 (I/me); 这 (this); 人 (people/human); 着 (·); 在 (at/in); 就 (·); "" ; 黎箫 (Li Xiao – a person's name in this fiction); 他 (he); 也 (also/too); 到 (arrive); ? (?); 都 (both/all); 去 (go); ! (!); 来 (come); 还 (still/again); 看着 (look/stare); 那 (that); 一个 (one); 出 (go/get out); 上 (up/above); 要 (need); 和 (and); 自己 (myself); 将 (will/shall); 没有 (no/didn't);

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