

Corpus Interface Guide

This document is an introduction to using the corpus interface.

1 Overview page

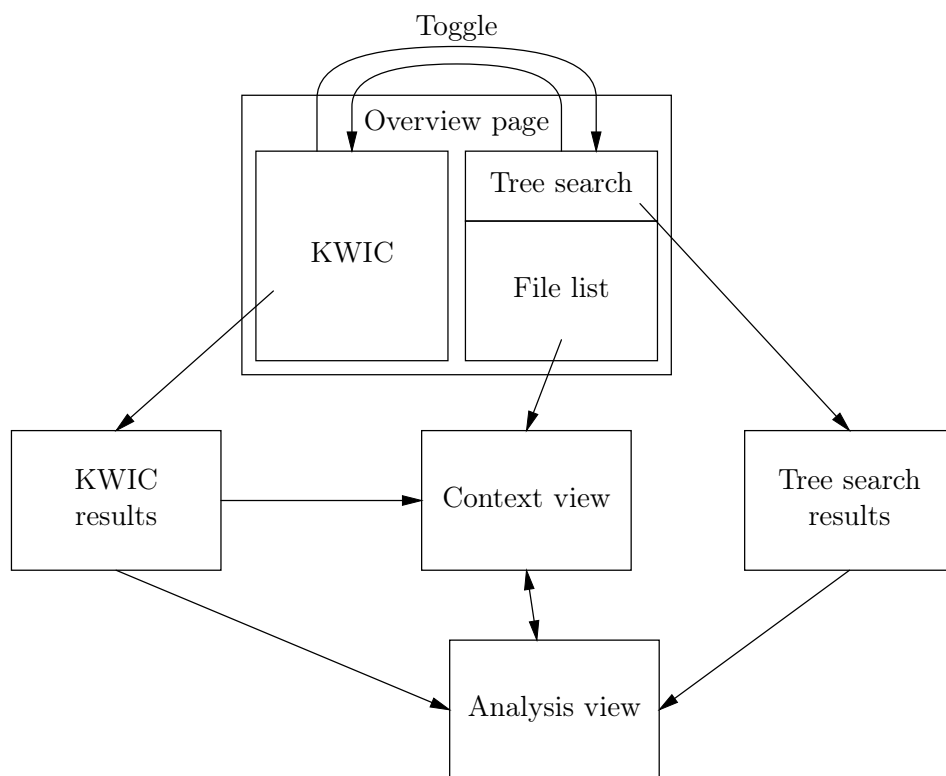
The overview page has two different states:

- a tree search/file list state, which is the default, and
- a KWIC state.

It is possible to toggle between these two states by clicking the Toggle overview link (see Figure 2 below).

It is always possible to return to the overview page by clicking the ‘Corpus overview’ link of any of the other pages. The state returned to will correspond to how the overview page was last seen. Other possible navigations through the interface are illustrated in Figure 1. Notably, all pages lead towards reaching analysis and context views of the corpus data.

Figure 1: Navigation



2 Tree search/file list overview page

Figure 2 shows the tree search/file list state of the overview page.

Figure 2: Tree search/file list overview page

[Toggle overview](#) [tree](#) | [source](#) | ... [Main page](#) [Help](#)

Tree search interface
Files:
TGrep2 search expression:

 ▾ [Toggle tag set](#) [TGrep2 search guide](#)

40 files; 20,083 trees; 80,772 words

	Filename	tree count	word count	content description
1	christine_T01	458	1794	Face-to-face conversations
2	christine_T02	520	1767	Face-to-face conversations
3	christine_T03	705	1594	Face-to-face conversations
4	christine_T04	466	1966	Face-to-face conversations
5	christine_T05	565	1687	Face-to-face conversations

...

This includes information about the overall numbers of files, trees and words for all the listed data.

Here is information about the various available links:

- The instances of [1](#), [2](#), etc. are links to go to a context view page for the referenced file.
- Clicking [Toggle overview](#) starts a cycle through the different states of the overview page.
- Clicking on [tree](#), or [source](#), or any of the other options that follow separated by ‘|’ changes how analysis is shown when an analysis page is reached. The currently selected analysis option is indicated with a grey text background. (Note: The analysis view option can also be changed from an analysis view page.)
- Clicking [Main page](#) navigates to the main page for entering the overview page.
- Clicking [Help](#) changes the page to show the available documentation.

2.1 Selecting files

Files can be selected with line addressing entered into the Files input text box: `3p` selects the third file, while `6,12p` selects the range of files from the sixth to the twelfth file (inclusively), and `3p;6,12p` selects both the third file and the range of files from the sixth to the twelfth file. The final `p` of a selection made with line addressing can be dropped, while other `p` instances are required. For example, `3p;6,12p` can be entered as `3p;6,12`.

Files can also be selected with regular expressions indicated by surrounding slashes (/) and used to match the names of corpus files, as Figure 3 demonstrates. Note: The ‘\|’ character combination signals disjunction within the regular expression.

Figure 3: Tree search/file list overview page with file selection

[Toggle overview](#) [tree](#) | [source](#) | ... [Main page](#) [Help](#)

Tree search interface
Files:
Tregex search expression:

 ▾ [Toggle tag set](#) [Tregex search guide](#)

2 files; 986 trees; 3,182 words

	Filename	tree count	word count	content description
<u>18</u>	christine_T18	687	1742	Face-to-face conversations
<u>20</u>	christine_T20	299	1440	Face-to-face conversations

Notably, in Figure 3, the listing of files is restricted to the files selected by the contents of the Files input text box. Also, the shown tree and word counts are for the selected files. Furthermore, should a search be made, the search applies only to the selected files. The information about selected files persists until the content of the Files field is either changed or deleted.

2.2 Making TGrep2 or Tregex search queries

Search queries over trees are made with two different but closely related search tools: TGrep2 (Rohde 2005) and Tregex (Levy, and Andrew 2006). The search tool that is used for a given search depends on what is being searched:

- If there has been no selection of files (that is, the Files field of the overview page is empty, like in Figure 2), then TGrep2 is used to search **all** of the corpus.
- If files have been selected (that is, the Files field of the overview page has content, like in Figure 3), then Tregex is used to search only the **selected files**.

The query languages of TGrep2 and Tregex closely resemble the query language TGrep (Pito 1994), which was the original tree-matching program distributed with the Penn Treebank.

TGrep2 and Tregex queries are expressed as patterns that mainly consist of expressions to match nodes and relationships defining links or negated links to other nodes. Nodes of searched trees are matched either with simple character strings, or OR'd character strings, or regular expressions. A complex node expression consists of a node expression (the **master node**) which is followed by relationships.

For a full explanation of these query languages, click [TGrep2/Tregex search guide](#) link seen in Figures 2 and 3. Note that Figures 2 and 3 also have a [Toggle tag set](#) link, which reveals/hides the tag set for the annotation when clicked.

Because what is searched with TGrep2 (that is, a certain state of the full corpus) has to first be compiled from the source data, if the source data of the corpus is being altered, then it is possible for the compiled data to fall behind the state of the source data. There is then a chance that this might lead to a mismatch between what is seen from a TGrep2 search result and what is subsequently seen from following the Tree page links of the search, since all other parts of the interface work by directly accessing the (possibly changing) source data. By contrast, Tregex searches are made over the source data of selected files and so there will be no mismatch with what is subsequently seen from following the Tree page links of a Tregex search.

2.3 Pressing the ‘Search’ button

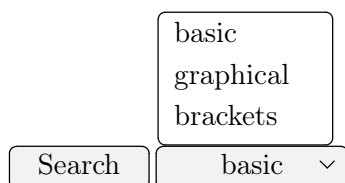
Once a search expression is entered, clicking the ‘Search’ button triggers the search. If the ‘Search’ button is pressed without there being a search expression, there is either (a) no change to the displayed page, or (b) if the file selection information of the Files input text box has changed then the page will show the new selection of files and also update the counts for trees and words.

2.4 Tree search type selection

A tree yield is the extraction of the terminal nodes of trees into single lines (character strings) of data. Tree search results by default are displayed as tree yields with highlighted spans. The highlighted spans correspond to what is matched by the master node of the query.

A click on the ‘basic’ button seen in Figures 2 and 3 brings up the selection menu seen in Figure 4. With the selection of ‘graphical’, search results are displayed as graphical trees. With the selection of ‘brackets’, search results are shown as bracketed trees.

Figure 4: Search type selection



3 Tree search results page

Tree search results are displayed in either of three ways:

- as a listing of the yield from **all** matched trees in corpus order with highlighted spans corresponding to what is matched by the master node of the query,
- as a listing of **up to 50** graphical trees in random order, or
- as a listing of **all** the bracketed trees for the search in corpus order.

The method of showing results depends on the state of the menu selection described in section 2.4.

At the top of the page, the search reports the number of hits and the number of files to which those hits belong. Moreover, if the search is made with a limited range of selected files, then you will also see word frequency information.

3.1 Tree search results as graphical trees

When tree search results are shown as graphical trees, the search results page will show up to 50 graphical trees. Trees are shown in a random order, so if there are more than 50 trees then you will likely see different results by re-running the search. Also, the order in which examples occur will change with each search re-run. Of course, IDs shown with examples are constant, and serve as clickable links for reaching an analysis view for the example. Nodes that corresponds to what is matched as the master node of the query are highlighted with a yellow mark in the graphical tree representation.

To see more than 50 results, you need to either: (a) make a search with ‘basic’ or ‘brackets’ selected, or (b) download all the results. There is a button at the top of the page for making the download. With a download, results are listed in corpus order, so a re-run of a download will give you the same download (assuming the corpus hasn’t changed inbetween).

3.2 Tree search results as bracketed trees

Supposing the contents of the Files input text box is `1p` restricting the searched files to only the first file of the corpus, `christine_T01`, and supposing the contents of the search expression entry box is `/REL/` to match all trees with a node that contains the `REL` substring, then the returned bracketed tree search results page will look like Figure 5.

Figure 5: Brackets tree search results page

[Corpus overview](#)

Search pattern: `/REL/`

The search returned 2 hits. 1 text was searched (2110 words [1 text]; frequency: 9.48 instances per ten thousand words).

Download all results

See analysis
 tree

☐ 1

you were n't like that last time I saw you

```
( (IP-MAT (NP-SBJ (PRO you)) (BED were) (NEG n't) (PP-PRD2 (P-ROLE like) (NP (D that))) (NP-TMP (ADJP (ADJ last)) (N time) (__IP-REL (NP-TMP *T*) (NP-SBJ (PRO I)) (VBD saw) (NP-OB1 (PRO you))))) (ID 170_christine_T01;061403m;speaker=Joan002;02713;EN))
```

☐ 2

we have some curtains to do

```
( (IP-MAT (NP-SBJ (PRO we)) (HVP have) (NP-OB1 (D some) (NS curtains) (__IP-INF-REL (NP-OB1 *T*) (TO to) (DO do)))) (ID 291_christine_T01;061403m;speaker=Jean003;02780;EN))
```

Returned search results are given as both a **tree yield** in bold text, that is, an extraction of the terminal nodes of the tree, as well as the full tree annotation in teletype font. Moreover, nodes corresponding to what is matched by the master node of the query are preceded by two underscore characters and highlighted in red.

Note that each returned entry is given a check box and a hit number. The hit number doubles as a link to the analysis view page for the given example (see section 7), with the ‘mode’ of the analysis view page entered being the same as how the analysis view was last seen. (If not changed, this will be the ‘tree’ mode).

3.3 Downloading all tree search results

If you download all results by clicking the ‘Download all results’ button, you will see as many trees returned as there are results of hits reported. It is possible for a results download to contain multiple instances of the same tree, with each match of the search expression leading to a return of one instance of a full tree found by a particular match of the search pattern. There is no indication in the download as to how the returned trees were matched.

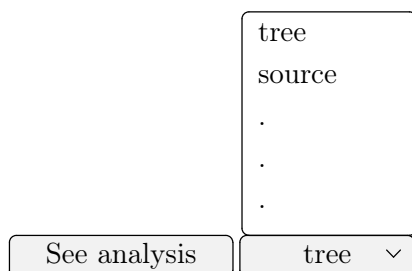
By contrast, the display of bracketed tree results includes red highlighting to indicate nodes that match the search expression as the master node, with the possibility of seeing multiple matches per tree. This behaviour was chosen for the display of results because the highlighting is overlaid as a secondary operation; it is not generated by the actual TGrep2/Tregex search. For this reason, matched trees with highlighting are shown in the display only once.

Note that it is possible for the same master node to be matched by the same search pattern in different ways. Each separate match of a master node will trigger an increase in the overall count of the number of matches returned by the search expression, and yet a node can only ever be highlighted once no matter how many times it may have been found. It is therefore possible for a hand count of highlighted nodes to be different from the number of matches reported to have been found by the search. Such an outcome indicates a search expression that is matching a master node (or master nodes) in multiple ways.

3.4 Analysis mode selection

A click on the ‘tree’ button seen in Figure 5 brings up the selection menu seen in Figure 6.

Figure 6: Analysis mode selection



Moving the mouse to highlight ‘source’ and left clicking selects ‘source’ mode, resulting in Figure 7:

Figure 7: Source analysis selection

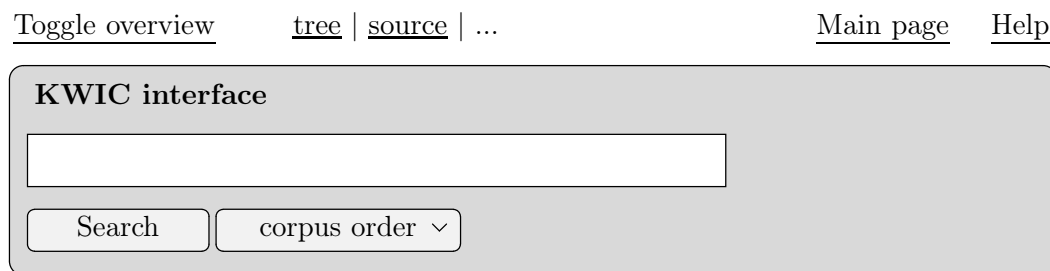


The choice of ‘source’ has consequences for how the analysis page will be shown. Pressing the ‘See analysis’ button will open the analysis view page with displayed analysis for all the selected search results. Search results are selected as a consequence of having their check box marked. Thus, with ‘tree’ selected, the analysis page reached will show the tree analysis for the selected search results.

4 KWIC page

Figure 8 shows the KWIC state of the overview page. This gives a text entry box into which string search expressions can be entered. Clicking the ‘Search’ button performs the search over the entire corpus. With string search it is not possible to place restrictions on the files that are searched. There is also a [Toggle overview](#) link, which will continue a cycle through the available states of the overview page.

Figure 8: Figure 8: The KWIC page



4.1 String search expressions

Expressions entered into the text box of Figure 8 need to be simple word/character based searches, including the space character for separating words to be matched. String searches are case-insensitive. The underlying searched data consists of **tree yields**, that is, extractions of the terminal nodes of trees into single lines (character strings) of data. A tree typically corresponds to the content of a single sentence. Furthermore, all words are in lower case. Also, all punctuation is removed from the searched data.

4.2 Ordering of search results

Clicking ‘corpus order’ of Figure 8 brings up the selection menu in Figure 9 to change the ordering in which search results will be shown. Consequences of the differing orderings will be seen in section 5.

Figure 9: Ordering of search results selection

Search

corpus order

left order

right order

random

corpus order ▾

5 KWIC results page

This section describes the KWIC results page. This page is reached after a search string is entered into the KWIC page, and the ‘Search’ button is clicked. For example, Figure 10 shows a KWIC results page returned from a search expression that comprises the word ‘view’ with the default ‘corpus order’ unchanged.

Figure 10: The KWIC results page with corpus order

Corpus overview

Search pattern: view

See analysis

tree ▾

christine_T03 <u>300</u>	<input type="checkbox"/> <u>1</u>	we had a pre	-view	of it at home
christine_T05 <u>317</u>	<input type="checkbox"/> <u>2</u>	what was your	view-	s on the fire station
christine_T17 <u>342</u>	<input type="checkbox"/> <u>3</u>	we were doing an inter	-view	
christine_T19 <u>196</u>	<input type="checkbox"/> <u>4</u>	and i mean in	view	of the fact i ’ve written to the
christine_T22 <u>26</u>	<input type="checkbox"/> <u>5</u>	i mean what ’s your	view-	s what ’s your views on what
christine_T22 <u>26</u>	<input type="checkbox"/> <u>6</u>	your views what ’s your	view-	s on what you ’re doing
christine_T22 <u>30</u>	<input type="checkbox"/> <u>7</u>	look at it at a point of	view	of {unclear}
christine_T37 <u>153</u>	<input type="checkbox"/> <u>8</u>	i got inter	-view-	ed on radio once on on televis

Figure 10 presents a traditional KWIC (Key Word In Context) concordance result. This lines up matches for the search expression in the middle of the display. The words that occur to the left and right of the matched content are also displayed to provide the context for the match.

Having ‘view’ as the search expression places no constraints on how and where the character string ‘view’ occurs, allowing the search to pick up occurrences throughout the matched yields of trees/sentences, including when ‘view’ is a part of larger words. When the matched expression is part of a larger word, this is indicated by hyphen placements (‘-’). Thus, with the first result of Figure 10, ‘view’ is part of the larger ‘preview’, indicated by the left hyphen. With the second result, ‘view’ is a part of ‘views’, indicated by the right hyphen. With the eighth result, ‘view’ is a part of ‘interviewed’, indicated by the placements of both right and left hyphens.

The results of Figure 10 are said to be in ‘corpus order’ because results are shown following the order in which they occur within the corpus. This is reflected in the rising numbers seen in the names of corpus files, e.g., starting with `christine_T03` and ending with `christine_T37`. There is also the rising of numbers for examples that are matched from

the same corpus file, e.g., three examples are sourced from `christine_T22` with numbers 26, 26 (again, from a second matched occurrence), and 30.

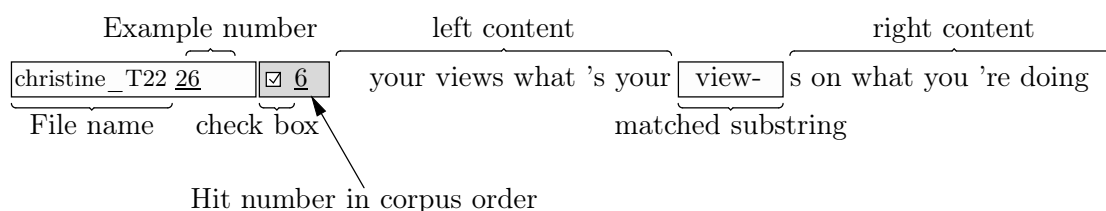
5.1 Row content of the KWIC page

We noted the KWIC presentation of Figure 10, where each row is a returned search result with centered match and context to the left and right. Additionally, each row provides:

- the name of the corpus file that contains the given example,
- the number of the given example in the corpus file, which is also a link to the context view page centered on the given example that will be highlighted (see section 6),
- the hit number in corpus order, which is also a link to the analysis view page for the given example (see section 7), and
- a check box for selection of the given example, for when the ‘See analysis’ button is clicked.

Figure 11 indicates the location for the above functions within the row content.

Figure 11: Row content of the string results page



Note that Figure 11 also shows how row results are selected as a consequence of having their check box marked. Pressing the ‘See analysis’ button at the bottom of the page (possibly after selecting an analysis mode; see section 3.4) will open the analysis page with all the hit numbers of the selected input rows taken as the source for the analysis.

5.2 Left order

So far we have seen the string results page with corpus order, but the ordering depends on how the string search results page is accessed (see section 4.2). In this regard, your browser’s back page functionality allows going back to the string search state of the overview page to then select an alternative ordering **while keeping the search expression**.

One alternative ordering is ‘left order’. This sorts results alphabetically by the words that occur immediately to the left of the match, as demonstrated by Figure 12. Note that in a Japanese Kanji/Kana based corpus this option sorts results in character code order by the characters that occur immediately to the left of the match.

Figure 12: The string search results page with left order

[Corpus overview](#)

Search pattern: view

See analysis	tree <input type="button" value="v"/>
------------------------------	---

christine_ T19 196	4	and i mean in	view	of the fact i 've written to the
christine_ T17 342	3	we were doing an inter	-view	
christine_ T37 153	8	i got inter	-view-	ed on radio once on on televis
christine_ T22 30	7	look at it at a point of	view	of {unclear}
christine_ T03 300	1	we had a pre	-view	of it at home
christine_ T22 26	5	i mean what 's your	view-	s what 's your views on what
christine_ T22 26	6	your views what 's your	view-	s on what you 're doing
christine_ T05 317	2	what was your	view-	s on the fire station

This ordering of results is useful for identifying larger collocations that involve the match and prior words.

5.3 Right order

Another alternative ordering is 'right order'. This sorts alphabetically by words that occur immediately to the right of the match, as demonstrated by Figure 13. Note that in a Japense Kanji/Kana based corpus this option sorts results in character code order by the characters that occur immediately to the right of the match.

Figure 13: The string search results page with right order

[Corpus overview](#)

Search pattern: view

See analysis	tree <input type="button" value="v"/>
------------------------------	---

christine_ T17 342	3	we were doing an inter	-view	
christine_ T03 300	1	we had a pre	-view	of it at home
christine_ T19 196	4	and i mean in	view	of the fact i 've written to the
christine_ T22 30	7	look at it at a point of	view	of {unclear}
christine_ T37 153	8	i got inter	-view-	ed on radio once on on televis
christine_ T05 317	2	what was your	view-	s on the fire station
christine_ T22 26	6	your views what 's your	view-	s on what you 're doing
christine_ T22 26	5	i mean what 's your	view-	s what 's your views on what

This ordering of results is useful for identifying larger collocations that involve the match and following words.

5.4 Random order

Yet another alternative ordering is ‘random order’. This ordering creates random permutations of the search results. This can be useful in cases where there are lots of results and you would like an impression from the overall dataset.

6 Context view page

The context view page can be entered in three different ways:

1. from clicking on the number for a file of the tree search/file list overview page (see Figure 2 above),
2. from clicking on an example number of the string search results page (see Figure 11 above), and
3. from the Context link of an analysis page (see Figures 16 and 17 below).

With the second and third methods, the context view page is entered from links that originate from particular examples in the overall file of examples shown by the context view page. These particular examples are highlighted, and their associated check box is marked (but this can be unmarked with a selection click). Information about the highlighted items is also entered into the ‘Lines:’ text box as line addressing information. Furthermore, the context view page is entered from a position that can be other than the top of the page, so that the highlighted examples are visible.

The context view page seen in Figure 14 consists of a page that first gives metadata with entries to a table (title, date, source, etc.) for the file in question, and then lists---in file order---the yield for all the trees/sentences of the file, with each sentence preceded by a number and a check box. Clicking the number of a sentence takes you to an analysis view for the sentence. The ‘mode’ of the analysis view entered will be the same as how the analysis view was last seen. (If not changed, this will be the ‘tree’ mode).

Figure 14: Context view page

Toggle context view
Corpus overview

title:	Subtitle data from Ken Robinson at TED2006: Do schools kill creativity?
date:	2006/02
source:	TED talk subtitles
link:	Available from https://www.ted.com/talks/ken_robinson_says_schools_kill_creativity .
terms of use:	Creative Commons Share-Alike Attribution Non-Commercial License.

Lines:

☐

1

Good morning .

☐

2

How are you ?

☐

3

It 's been great , has n't it ?

☐

4

I 've been blown away by the whole thing .

☐

5

In fact , I 'm leaving .

You can also select with the check boxes multiple sentences. Sentences can be freely selected (and de-selected), and need not be adjacent. Then, you can go to the analysis page for the selected sentences by clicking the ‘See analysis’ button. There is also a pull down menu (the same menu as shown in Figure 6 above) to select the ‘mode’ of analysis for the selected items.

You can also change the selection of sentences by editing the line addressing information of the ‘Lines:’ input text box and pressing the ‘Refresh selected items’ button, which will reload the page with the selected items of the line addressing freshly highlighted.

Line addressing for the selection of sentences/trees works like the line addressing used for selecting files described in section 2.1. Thus, **3p** selects the third sentence, while **6,12p** selects the range of sentences from the sixth to the twelfth sentence (inclusively), and **3p;6,12p** selects both the third sentence and the range of sentences from the sixth to the twelfth sentence. All instances of **p** can be dropped.

Note that Figure 14 also shows a Corpus overview link for returning to the overview page as it was last left. There is also a Toggle context view link, which when clicked will change the presentation of the context view page, for example, to reveal or hide word class information. Thus, Figure 15 shows the result of clicking Toggle context view in Figure 14, while Figure 14 is returned to with a click of Toggle context view in Figure 15.

Figure 15: Context view page with word class toggled

Toggle context view
Corpus overview

title:	Subtitle data from Ken Robinson at TED2006: Do schools kill creativity?
date:	2006/02
source:	TED talk subtitles
link:	Available from https://www.ted.com/talks/ken_robinson_says_schools_kill_creativity .
terms of use:	Creative Commons Share-Alike Attribution Non-Commercial License.

Lines:

Refresh selected lines

See analysis
tree ▼

☐ 1

Good_morning .

FRM PU

☐ 2

How are you ?

WADV BEP PRO PU

☐ 3

It 's been great , has n't it ?

PRO HVP BEN ADJ PU HVP NEG PRO PU

☐ 4

I 've been blown away by the whole thing .

PRO HVP BEN VVN ADV P-ROLE D ADJ N PU

☐ 5

In_fact , I 'm leaving .

ADV PU PRO BEP VAG PU

7 Analysis view page

The analysis view page can be entered in a number of different ways, notably:

1. from clicking on an ID link of the graphical tree search results page,
2. from clicking on a hit number of the brackets tree search results page (see Figure 5 above),
3. from the check box selection of examples of the brackets tree search results page and subsequent clicking of the ‘See analysis’ button (see Figure 5 above),
4. from clicking on a hit number of the string search results page (see Figure 11 above),
5. from the check box selection of examples of the string search results page and subsequent clicking of the ‘See analysis’ button (see Figures 10, 12, and 13 above),
6. from clicking on an example number of the context view page (see Figures 14 and 15 above), and
7. from the check box selection of examples of the context view page and subsequent clicking of the ‘See analysis’ button (see Figures 14 and 15 above).

Methods 1, 2, 4, and 6 open an analysis view for a single example, with the ‘mode’ being the same as how the analysis view was last seen. (If not changed, this will be the ‘tree’ mode). By contrast, with methods 3, 5, and 7, it is possible to open a view for multiple examples and to choose the ‘mode’ via the selection menu in Figure 6 above.

Once you have reached a particular analysis view, you can change to an alternative ‘mode’ by clicking one of the available links at the page bottom, for example, [tree](#) or [source](#) of Figure 16 below.

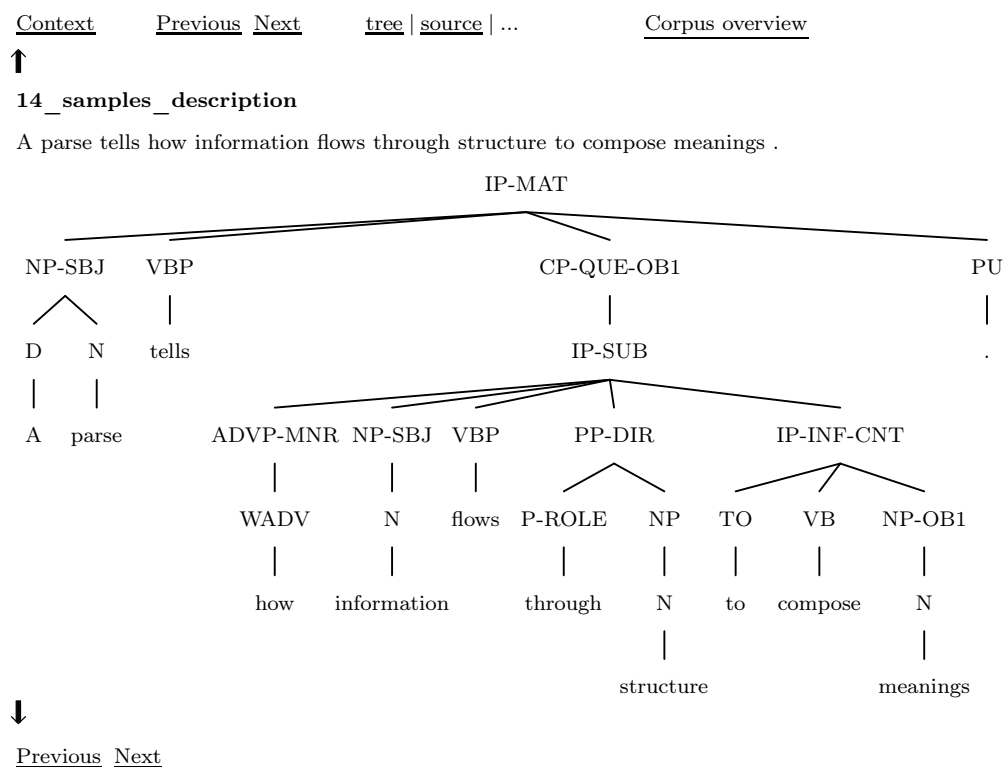
7.1 Tree mode, single tree case

The default of the analysis view page is to present the parse information as a graphical tree. As an example, let’s consider analysis for the sentence in (1), which we will suppose occurs as the 14th example in a file named `samples_description`.

- (1) A parse tells how information flows through structure to compose meanings.

Figure 16 illustrates the tree mode with its graphical presentation of the parse tree for (1).

Figure 16: Tree mode analysis view with single tree



As with the overview page, in the centre at the page top, there is the means to change the analysis ‘mode’. (Specifically, [source](#) is the other available option in Figure 16, but there may be further options depending on the corpus you are viewing.)

Above the graphical tree in Figure 16, there is a basic yield for the tree. There is identification information immediately above the yield that tells us we are seeing analysis for the 14th example of the corpus file named `samples_description`.

Immediately above the identification information on the left edge of the page, there is a large up arrow. Clicking this up arrow brings the immediately prior example (so, example 13 of `samples_description`) into the analysis view, to thereby have a view with the analysis of multiple trees (see section 7.2). Related to this ability to widen the analysis,

there is a large down arrow immediately under the graphical tree on the left edge of the page. Clicking this down arrow brings the immediately following example (so, example 15 of `samples_description`) into the analysis view.

Above the large leftside up arrow, there is a series of links. The [Context](#) link opens the context view page for the corpus file (here `samples_description`) with the display moved to show the highlighted yield for the current tree (the 14th tree) and its surrounding context.

A [Previous](#) link appears when there is a previous tree, which when clicked changes the page content to an analysis view of the immediately preceding tree. Similarly, a [Next](#) link appears when there is a following tree, which when clicked changes the page content to an analysis view of the immediately following tree. When present, these [Previous](#) and [Next](#) links are also repeated at the very top or bottom of the page. Use of these links differs from the use of the large up and down arrows, since for the [Previous](#) and [Next](#) links the current tree is removed from the resulting analysis view.

Finally, there is a [Corpus overview](#) link for going to or returning to the overview page.

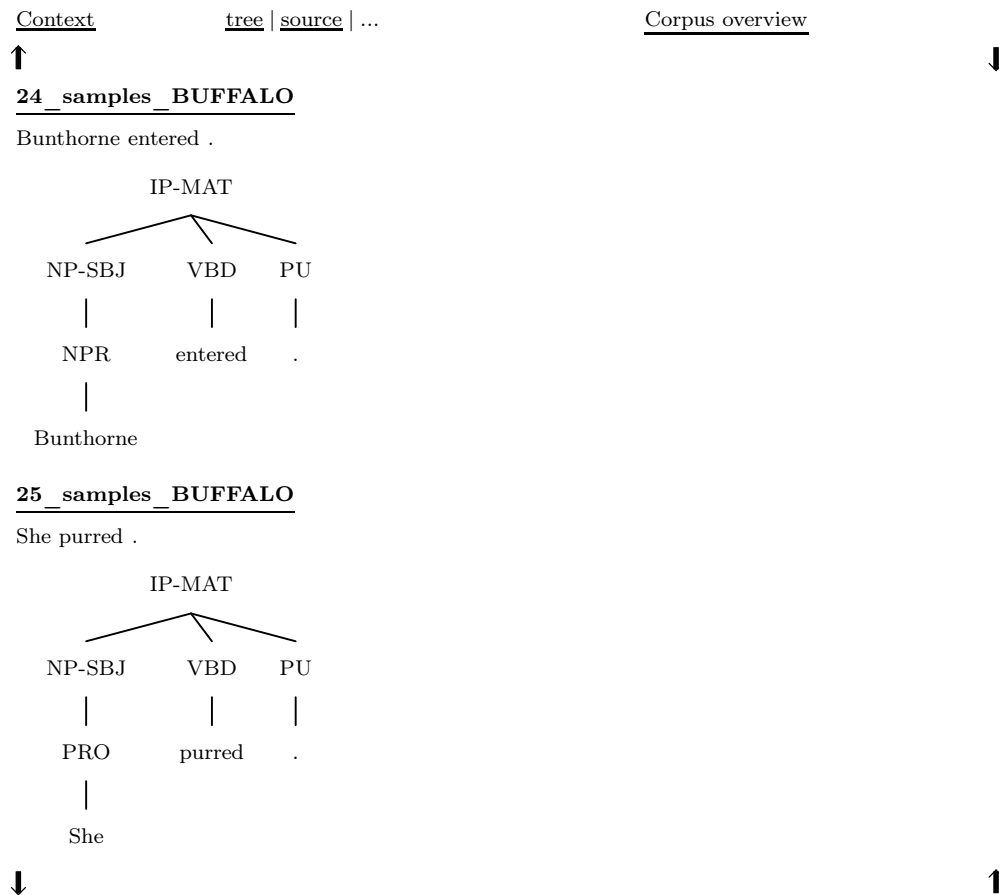
7.2 Tree mode, multiple tree case

So far we have seen the tree mode with a single tree. Let's now consider the sentences of (2), which we will suppose occur as the 24th and 25th examples in `samples_BUFFALO`.

(2) Bunthorne entered. She purred.

Figure 17 illustrates the tree mode with its graphical presentation of parse trees for both sentences of (2).

Figure 17: Tree mode analysis view with multiple trees



As with the single tree case in Figure 16, the multiple tree case in Figure 17 allows for the extension of the analysis presentation to include immediately preceding or immediately following trees by clicking respectively (when available) the leftside up arrow, or the leftside down arrow. For the case of Figure 17, where more than one tree is shown, it is possible to remove the first tree from view with a rightside down arrow, or remove the last tree from view with a rightside up arrow.

Above the large leftside up arrow and the large rightside down arrow, there is a Corpus overview link for returning to the overview page, and a Context link for opening the context view page with the display moved to show the highlighted yield for the current trees and their surrounding context(s).

Finally, above each tree yield there is identification information for the shown tree. Here, the identification information tells us that we are seeing analysis for the 24th and 25th examples of the corpus file named `samples_BUFFALO`. Furthermore this identification information comes underlined, with each underlined ID serving as a link for changing the analysis view to that isolated example.