

# WordSmith Tools step by step

**Version 5.0**

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version 5.0

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*by Mike Scott*

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Step-by-step guide to WordSmith

# Introduction

**Section**

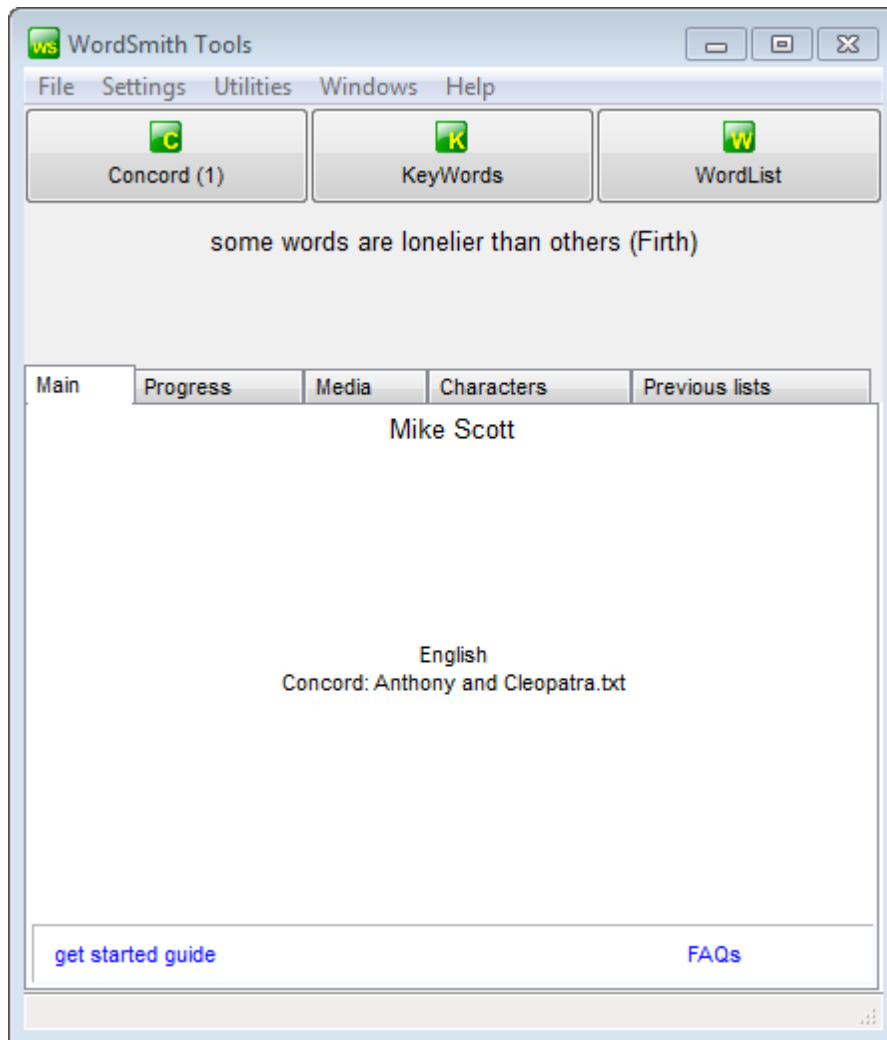


**1**

# 1 Introduction

These pages are to help get you started. Screenshots take you through each stage.

This is the main screen of the WordSmith Tools Controller.



It has a saying (which keeps on changing and which you can edit), three buttons for the main Tools (Concord is shown as in use), and a series of tabs. At the moment we see the main one showing that `anthony & cleopatra.txt` has been chosen for Concord.

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# Choosing your texts

**Section**

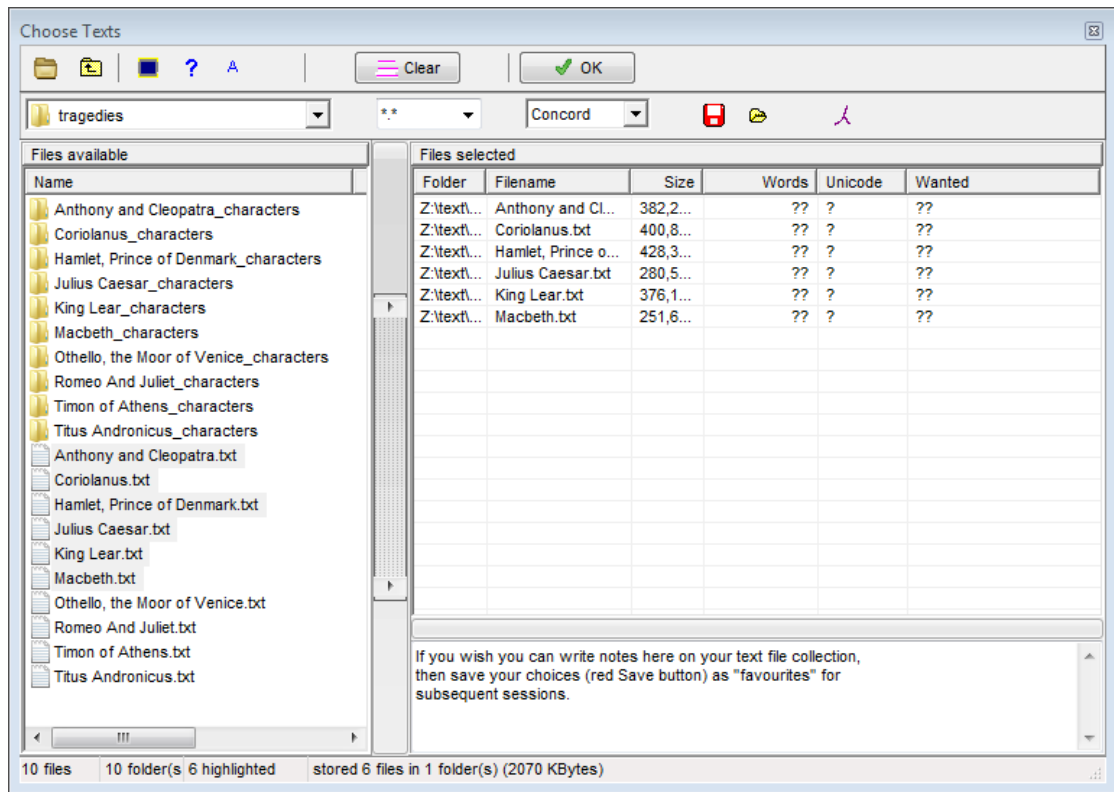
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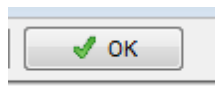








At the moment WordSmith shows (in the status bar just above) that 6 have been stored. You can see the file sizes but WordSmith doesn't (yet) know how many words there are in each text file. We have chosen 6 texts for Concord (see *Concord* just above *Files selected*).



Press the green button

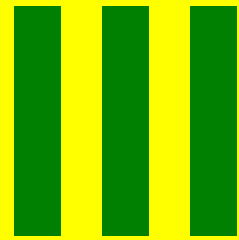
or just close the window.

Step-by-step guide to WordSmith

# Select the right language

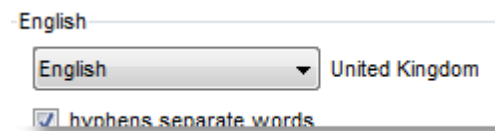
**Section**


---

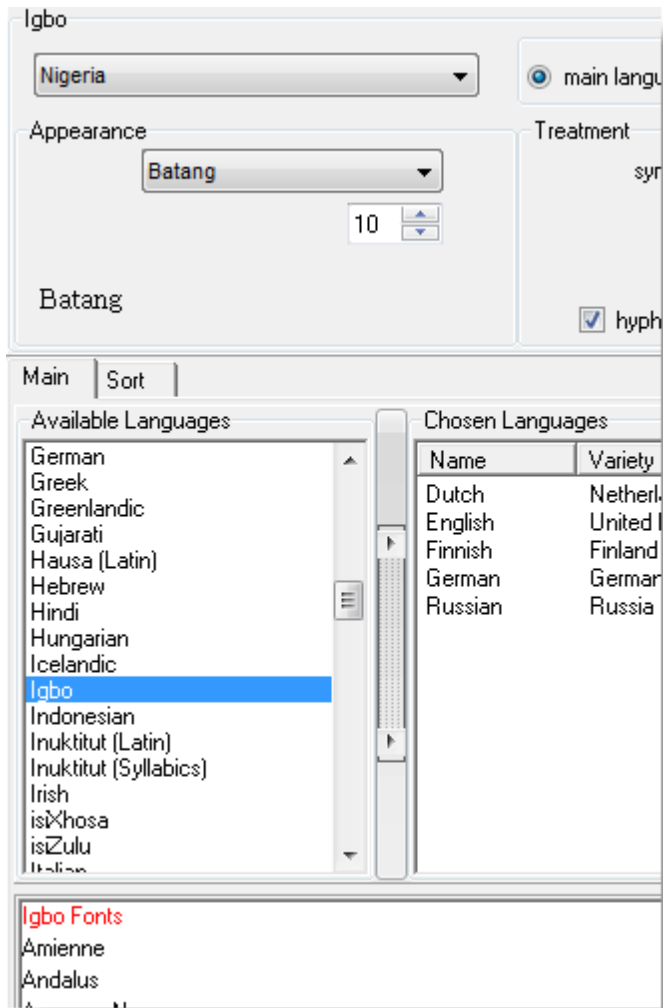


### 3 Select the right language

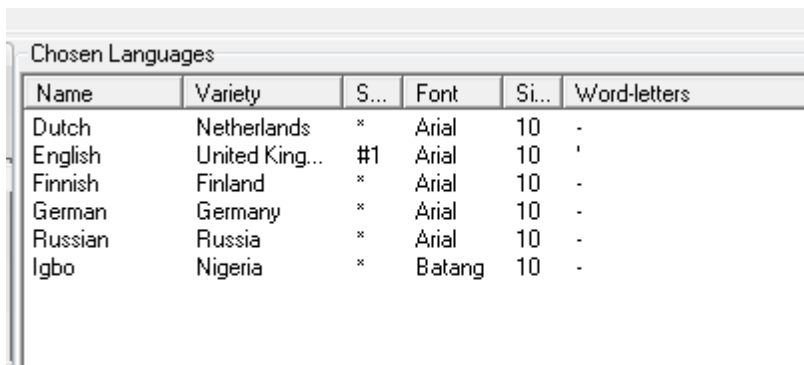
Most examples in this guide deal with texts in English. If you want to handle texts in Chinese or some other language, you need to choose the language in the main Controller.



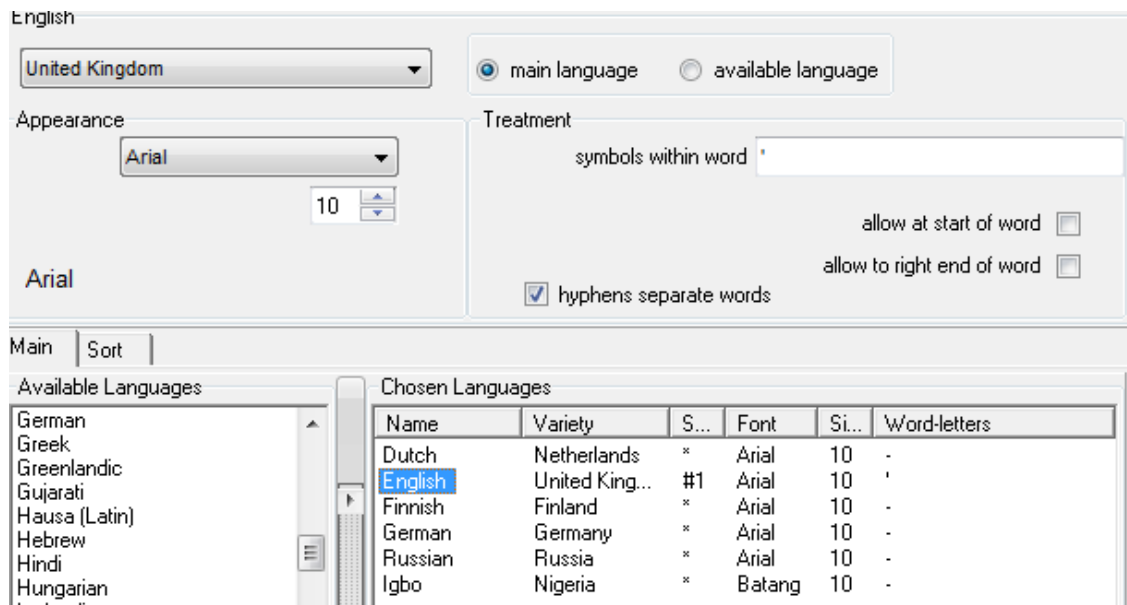
If in the drop-down list (showing ) the language you need isn't available, click *Edit Languages* and choose the language you want:



and drag it to the right or click the button in the middle.

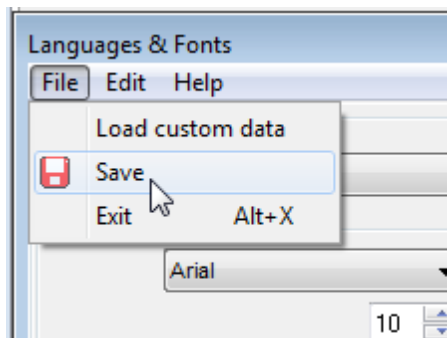


You'll see an option to select that language as your "main language" (with which WordSmith will start up by default), or else just as an available language.



In this screenshot, English has been selected and some suitable choices for English have been made such as apostrophes allowed within a word, hyphens separating forms like *self-conscious* into two words and showing that Arial 10 is the default font, etc.

Finally, save your settings.



Step-by-step guide to WordSmith

# Concordancing

**Section**

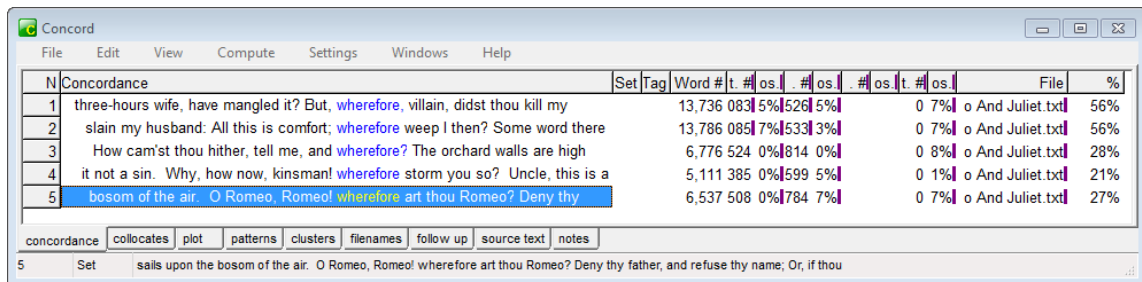
---

**IV**

## 4 Concordancing

### 4.1 overview

A concordance looks something like this:



The screenshot shows the Concord software window with a menu bar (File, Edit, View, Compute, Settings, Windows, Help) and a toolbar. The main window displays a concordance table with the following data:

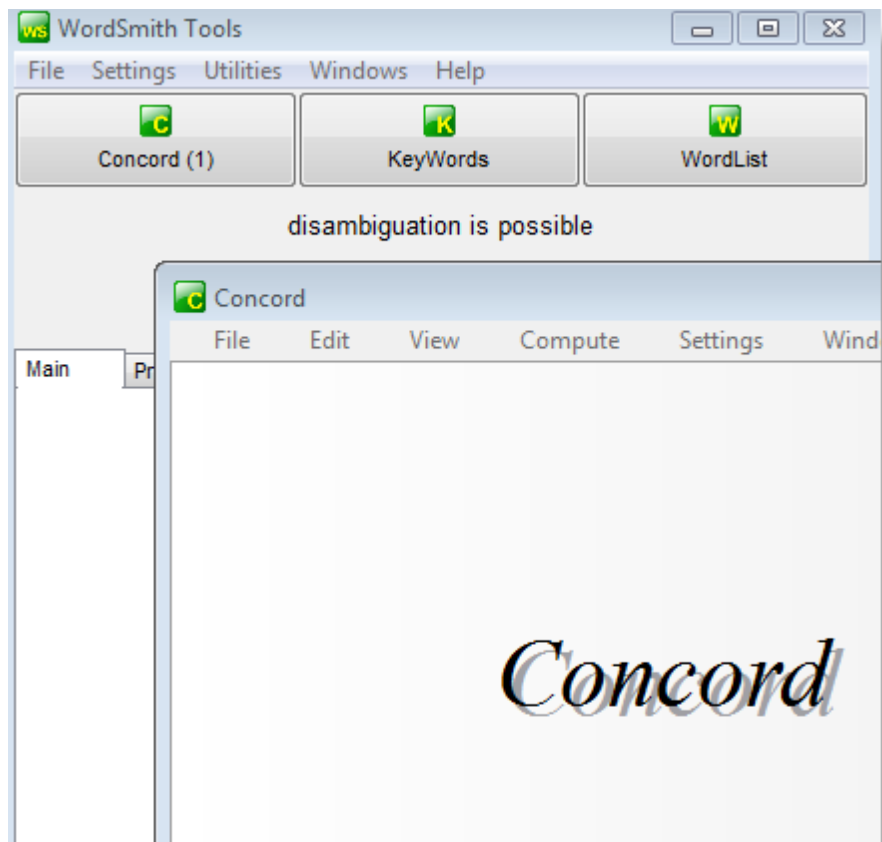
| N | Concordance  | Set | Tag | Word # | t. # | os. | . # | os. | . # | os. | t. # | os. | File             | %   |
|---|--|-----|-----|--------|------|-----|-----|-----|-----|-----|------|-----|------------------|-----|
| 1 | three-hours wife, have mangled it? But, <b>wherefore</b> , villain, didst thou kill my |     |     | 13,736 | 083  | 5%  | 526 | 5%  |     |     | 0    | 7%  | o And Juliet.txt | 56% |
| 2 | slain my husband: All this is comfort; <b>wherefore</b> weep I then? Some word there   |     |     | 13,786 | 085  | 7%  | 533 | 3%  |     |     | 0    | 7%  | o And Juliet.txt | 56% |
| 3 | How cam'st thou hither, tell me, and <b>wherefore</b> ? The orchard walls are high     |     |     | 6,776  | 524  | 0%  | 814 | 0%  |     |     | 0    | 8%  | o And Juliet.txt | 28% |
| 4 | it not a sin. Why, how now, kinsman! <b>wherefore</b> storm you so? Uncle, this is a   |     |     | 5,111  | 385  | 0%  | 599 | 5%  |     |     | 0    | 1%  | o And Juliet.txt | 21% |
| 5 | bosom of the air. O Romeo, Romeo! <b>wherefore</b> art thou Romeo? Deny thy            |     |     | 6,537  | 508  | 0%  | 784 | 7%  |     |     | 0    | 7%  | o And Juliet.txt | 27% |

Below the table, there are tabs for 'concordance', 'collocates', 'plot', 'patterns', 'clusters', 'filenames', 'follow up', 'source text', and 'notes'. The 'concordance' tab is selected. At the bottom, a preview of the selected entry (5) is shown: 'Set sails upon the bosom of the air. O Romeo, Romeo! wherefore art thou Romeo? Deny thy father, and refuse thy name; Or, if thou

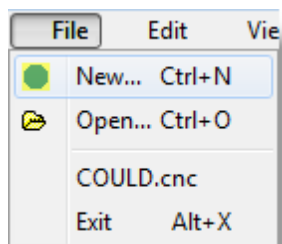
It's a concordance of all the occurrences of **wherefore** in Romeo and Juliet. There are only 5 entries. The famous one comes 6,537 words (27%) into the play.

## 4.2 making a concordance

When you press the Concord button in the main Controller, a new Concord Tool opens up and will be visible in the Windows Taskbar.

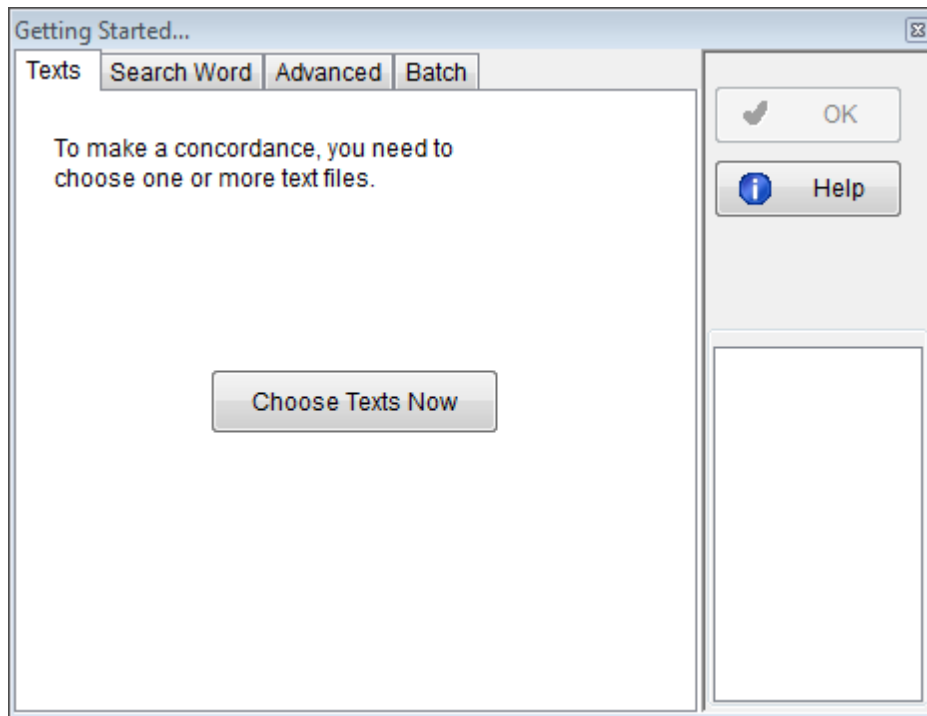


Now in Concord itself, choose *File | New*.

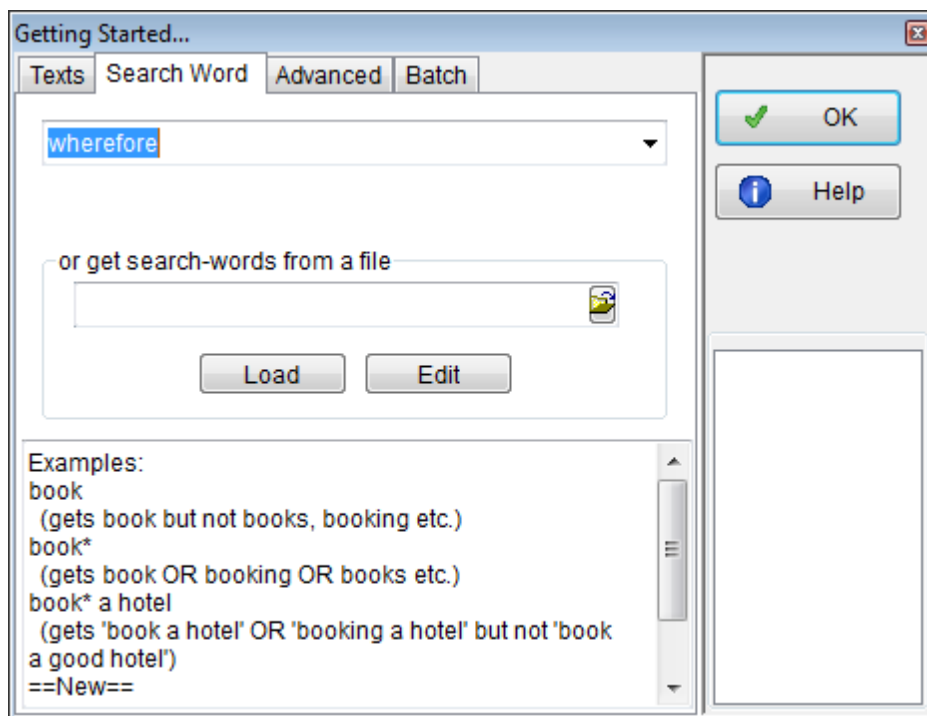


If no text files have been chosen, you are asked to choose some. Press the *Choose Texts Now* button.





Once the texts have been chosen, enter a suitable *Search Word*:



Here I have chosen **wherefore** as my search-word. Then press OK.

| N | Concordance  | Set | Tag | Word # | t. # | os. | #   | os. | # | os. | t. # | os. | File             | %   |
|---|--|-----|-----|--------|------|-----|-----|-----|---|-----|------|-----|------------------|-----|
| 1 | three-hours wife, have mangled it? But, <b>wherefore</b> , villain, didst thou kill my |     |     | 13,736 | 083  | 5%  | 526 | 5%  |   |     | 0    | 7%  | o And Juliet.txt | 56% |
| 2 | slain my husband: All this is comfort; <b>wherefore</b> weep I then? Some word there   |     |     | 13,786 | 085  | 7%  | 533 | 3%  |   |     | 0    | 7%  | o And Juliet.txt | 56% |
| 3 | How cam'st thou hither, tell me, and <b>wherefore</b> ? The orchard walls are high     |     |     | 6,776  | 524  | 0%  | 814 | 0%  |   |     | 0    | 8%  | o And Juliet.txt | 28% |
| 4 | it not a sin. Why, how now, kinsman! <b>wherefore</b> storm you so? Uncle, this is a   |     |     | 5,111  | 385  | 0%  | 599 | 5%  |   |     | 0    | 1%  | o And Juliet.txt | 21% |
| 5 | bosom of the air. O Romeo, Romeo! <b>wherefore</b> art thou Romeo? Deny thy            |     |     | 6,537  | 508  | 0%  | 784 | 7%  |   |     | 0    | 7%  | o And Juliet.txt | 27% |

concordance collocates plot patterns clusters filenames follow up source text notes

5 Set sails upon the bosom of the air. O Romeo, Romeo! wherefore art thou Romeo? Deny thy father, and refuse thy name; Or, if thou

The concordance lists all the examples of "wherefore" which had a word-separator such as punctuation, space etc. before and after it.

Since we have now done our concordance, WordSmith now knows how many words there are in each text file: `romeo and juliet.txt` has 24,275 altogether.

| Folder      | Filename          | Size     | Words  | Unicode | Wanted |
|-------------|-------------------|----------|--------|---------|--------|
| Z:\textf... | Romeo And Juli... | 341,8... | 24,275 | U       | OK     |

### 4.3 seeing the source text

To see the source text, double-click on the line in question. Here, I clicked on the highlighted line containing *wherefore art thou Romeo*.

| N | Concordance  | Set | Tag | Word # | t. # | os. | #   | os. | # | os. | t. # | os. | File             | %   |
|---|--|-----|-----|--------|------|-----|-----|-----|---|-----|------|-----|------------------|-----|
| 1 | three-hours wife, have mangled it? But, <b>wherefore</b> , villain, didst thou kill my |     |     | 13,736 | 083  | 5%  | 526 | 5%  |   |     | 0    | 7%  | o And Juliet.txt | 56% |
| 2 | slain my husband: All this is comfort; <b>wherefore</b> weep I then? Some word there   |     |     | 13,786 | 085  | 7%  | 533 | 3%  |   |     | 0    | 7%  | o And Juliet.txt | 56% |
| 3 | How cam'st thou hither, tell me, and <b>wherefore</b> ? The orchard walls are high     |     |     | 6,776  | 524  | 0%  | 814 | 0%  |   |     | 0    | 8%  | o And Juliet.txt | 28% |
| 4 | it not a sin. Why, how now, kinsman! <b>wherefore</b> storm you so? Uncle, this is a   |     |     | 5,111  | 385  | 0%  | 599 | 5%  |   |     | 0    | 1%  | o And Juliet.txt | 21% |
| 5 | bosom of the air. O Romeo, Romeo! <b>wherefore</b> art thou Romeo? Deny thy            |     |     | 6,537  | 508  | 0%  | 784 | 7%  |   |     | 0    | 7%  | o And Juliet.txt | 27% |

concordance collocates plot patterns clusters filenames follow up source text notes

5 Set sails upon the bosom of the air. O Romeo, Romeo! wherefore art thou Romeo? Deny thy father, and refuse thy name; Or, if thou

```

When he bestrides the lazy-pacing clouds,
And sails upon the bosom of the air.
</ROMEO>

<JULIET> <27%>
O Romeo, Romeo! wherefore art thou Romeo?
Deny thy father, and refuse thy name;
Or, if thou wilt not, be but sworn my love,
And I'll no longer be a Capulet.
</JULIET>


<ROMEO> <27%>

```

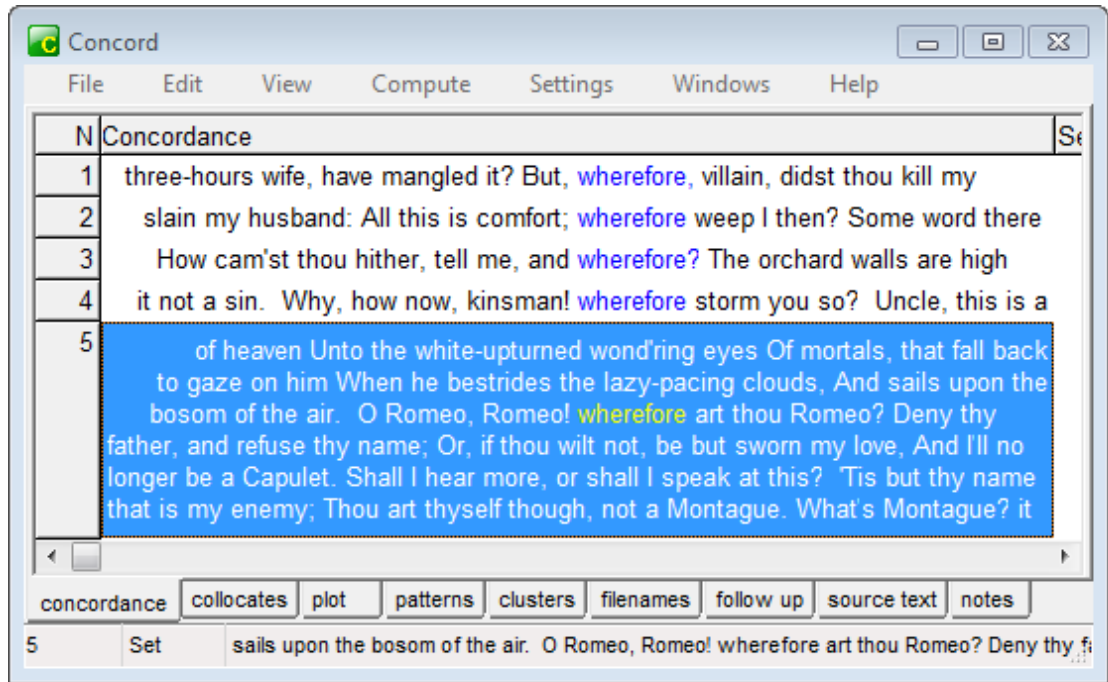
or press F8 and the lines grow fatter:

| N | Concordance  | Se |
|---|--|----|
| 1 | my husband? Ah! poor my lord, what tongue shall smooth thy name, When I, thy three-hours wife, have mangled it? But, <b>wherefore</b> , villain, didst thou kill my cousin? That villain cousin would have kill'd my husband: Back, foolish tears, back to your native spring; Your tributary drops belong to woe, Which you,                |    |
| 2 | husband lives, that Tybalt would have slain; And Tybalt's dead, that would have slain my husband: All this is comfort; <b>wherefore</b> weep I then? Some word there was, worsen than Tybalt's death, That murder'd me: I would forget it fain; But O! it presses to my memory, Like damned guilty deeds to sinners' minds. Tybalt is        |    |
| 3 | Art thou not Romeo, and a Montague? Neither, fair maid, if either thee dislike. How cam'st thou hither, tell me, and <b>wherefore</b> ? The orchard walls are high and hard to climb, And the place death, considering who thou art, If any of my kinsmen find thee here. With love's light wings did I o'erperch these walls; For           |    |
| 4 | our solemnity? Now, by the stock and honour of my kin, To strike him dead I hold it not a sin. Why, how now, kinsman! <b>wherefore</b> storm you so? Uncle, this is a Montague, our foe; A villain that is hither come in spite, To scorn at our solemnity this night. Young Romeo, is it? 'Tis he, that villain Romeo. Content thee, gentle |    |
| 5 | to gaze on him When he bestrides the lazy-pacing clouds, And sails upon the bosom of the air. O Romeo, Romeo! <b>wherefore</b> art thou Romeo? Deny thy father, and refuse thy name; Or, if thou wilt not, be but sworn my love, And I'll no longer be a Capulet. Shall I hear more, or shall I speak at this? 'Tis but thy name             |    |

or pull the line you're interested in wider or fatter: place your cursor at the bottom the number in the left column, and it changes shape:

|   |   |
|---|---|
| 5   | bosom of the air. O Romeo, Romeo! <b>wherefore</b> art thou Romeo? Deny thy |
|  |   |

and pull it down.



You can also pull it wider by putting your cursor at the right edge, just to the left of the word *Set*.

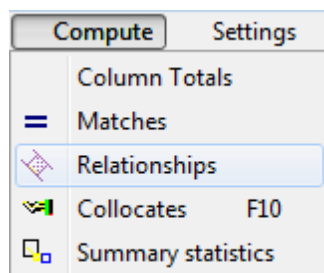
#### 4.4 collocates and mutual information

Here are the collocates of **ago** computed using the written section of the BNC, ordered by frequency.

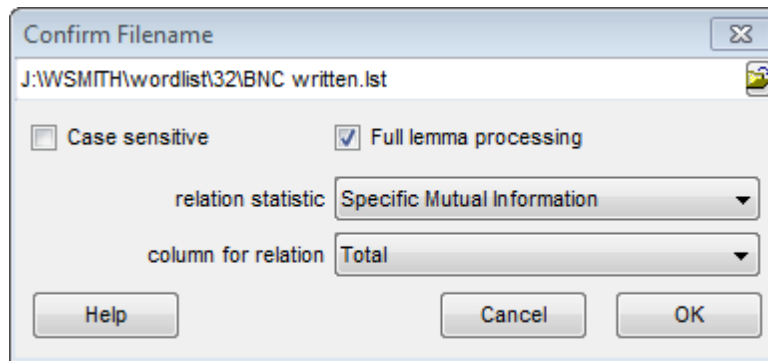
| N  | Word   | With | Relation | Texts | Total  | tal Left | al Right |
|----|--------|------|----------|-------|--------|----------|----------|
| 1  | AGO    | ago  | 0.000    | 2,296 | 16,770 | 29       | 24       |
| 2  | YEARS  | ago  | 0.000    | 1,926 | 8,987  | 8,932    | 55       |
| 3  | A      | ago  | 0.000    | 1,656 | 6,290  | 4,519    | 1,771    |
| 4  | THE    | ago  | 0.000    | 1,441 | 4,419  | 1,330    | 3,089    |
| 5  | WAS    | ago  | 0.000    | 1,133 | 2,445  | 1,148    | 1,297    |
| 6  | OF     | ago  | 0.000    | 1,074 | 2,320  | 1,186    | 1,134    |
| 7  | AND    | ago  | 0.000    | 1,077 | 2,243  | 518      | 1,725    |
| 8  | TWO    | ago  | 0.000    | 848   | 2,097  | 2,016    | 81       |
| 9  | TO     | ago  | 0.000    | 976   | 1,964  | 557      | 1,407    |
| 10 | IN     | ago  | 0.000    | 873   | 1,712  | 689      | 1,023    |
| 11 | LONG   | ago  | 0.000    | 819   | 1,555  | 1,522    | 33       |
| 12 | THAT   | ago  | 0.000    | 794   | 1,460  | 697      | 763      |
| 13 | MONTHS | ago  | 0.000    | 616   | 1,372  | 1,362    | 10       |
| 14 | I      | ago  | 0.000    | 590   | 1,262  | 405      | 857      |
| 15 | IT     | ago  | 0.000    | 725   | 1,177  | 602      | 575      |
| 16 | THREE  | ago  | 0.000    | 602   | 1,156  | 1,112    | 44       |
| 17 | HAD    | ago  | 0.000    | 606   | 1,119  | 431      | 688      |
| 18 | SOME   | ago  | 0.000    | 593   | 1,067  | 984      | 83       |
| 19 | FEW    | ago  | 0.000    | 638   | 1,066  | 1,038    | 28       |
| 20 | WEEKS  | ago  | 0.000    | 470   | 1,036  | 1,028    | 8        |
| 21 | YEAR   | ago  | 0.000    | 543   | 1,016  | 964      | 52       |

There are nearly 17,000 instances of **AGO**, and **YEARS** is the top collocate, found 9,000 times near **AGO**. The "Relation" column is blank. What's needed is a way of knowing how closely each of these collocates of **AGO** is related to it. Are **A**, **THE**, **WAS** etc. really closely linked to **AGO**?

If we now choose *Compute | Relationships* in the menu,



and select a suitable word-list to use for the comparison:



then we get the following list when sorted by clicking the *Relation* column:

| N  | Word      | With | Relation | Texts | Total  | tal Le |
|----|-----------|------|----------|-------|--------|--------|
| 1  | GROSS     | ago  | 14.687   | 4     | 5      |        |
| 2  | AGO       | ago  | 12.370   | 2,296 | 16,770 | 2      |
| 3  | HENSLEY   | ago  | 10.600   | 4     | 5      |        |
| 4  | AEONS     | ago  | 9.558    | 9     | 9      |        |
| 5  | FORTNIGHT | ago  | 9.304    | 77    | 121    | 12     |
| 6  | YEARS     | ago  | 9.180    | 1,926 | 8,987  | 8,93   |
| 7  | MOONS     | ago  | 8.808    | 13    | 13     | 1      |
| 8  | WEEKS     | ago  | 8.708    | 470   | 1,036  | 1,02   |
| 9  | SEASONS   | ago  | 8.517    | 41    | 81     | 8      |
| 10 | MILLENNIA | ago  | 8.480    | 8     | 9      |        |
| 11 | MONTHS    | ago  | 8.344    | 616   | 1,372  | 1,36   |
| 12 | MOMENTS   | ago  | 8.328    | 20    | 178    | 17     |

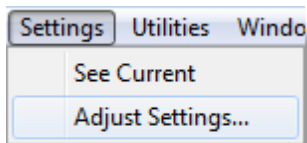
concordance collocates plot patterns clusters filenames follow up source text notes

16,718 Set than the expectations of two years <w AV0>ago. The first stage of th

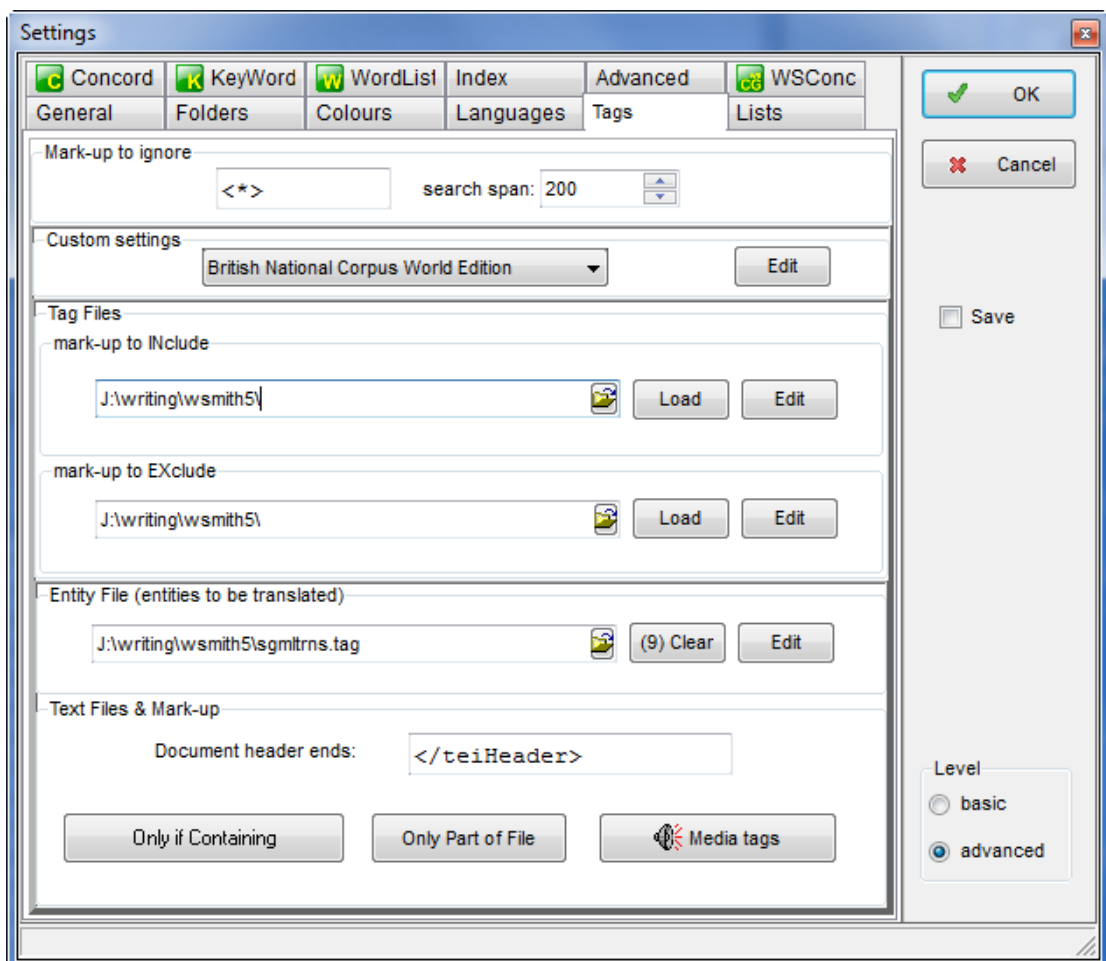
The top items in the list now reflect much better the tendency of **AGO** to accompany periods of time and numbers. [The top collocates **HENSLEY** and **GROSS** only occur 5 times each with **AGO** but out of small numbers altogether in the whole BNC Written.]

## 4.5 concordancing tagged text (1)

Probably the first thing to do if your source text is tagged, is to let WordSmith know. To do this, in the main Controller, choose *Settings | Adjust Settings*



then *Tags*.



If you're using the British National Corpus (world edition), choose it within *Custom settings* as shown above.

So far, we have told the Controller that it is to ignore all tags beginning and ending with angle brackets (< >), to translate a few entity references to symbols like % and ", and to cut out the header of each text (up to </teiHeader>). That'll do for a start.

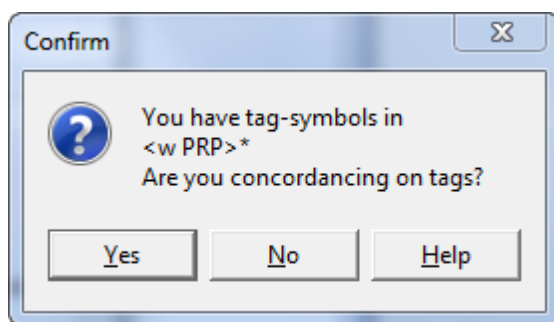
## 4.6 concordancing tagged text (2)

Now, we are going to do a concordance on a part of speech. The BNC uses mark-up like this:

```
<w PRP>at <w AT0>the <w AJ0>great <w NN2>houses
```

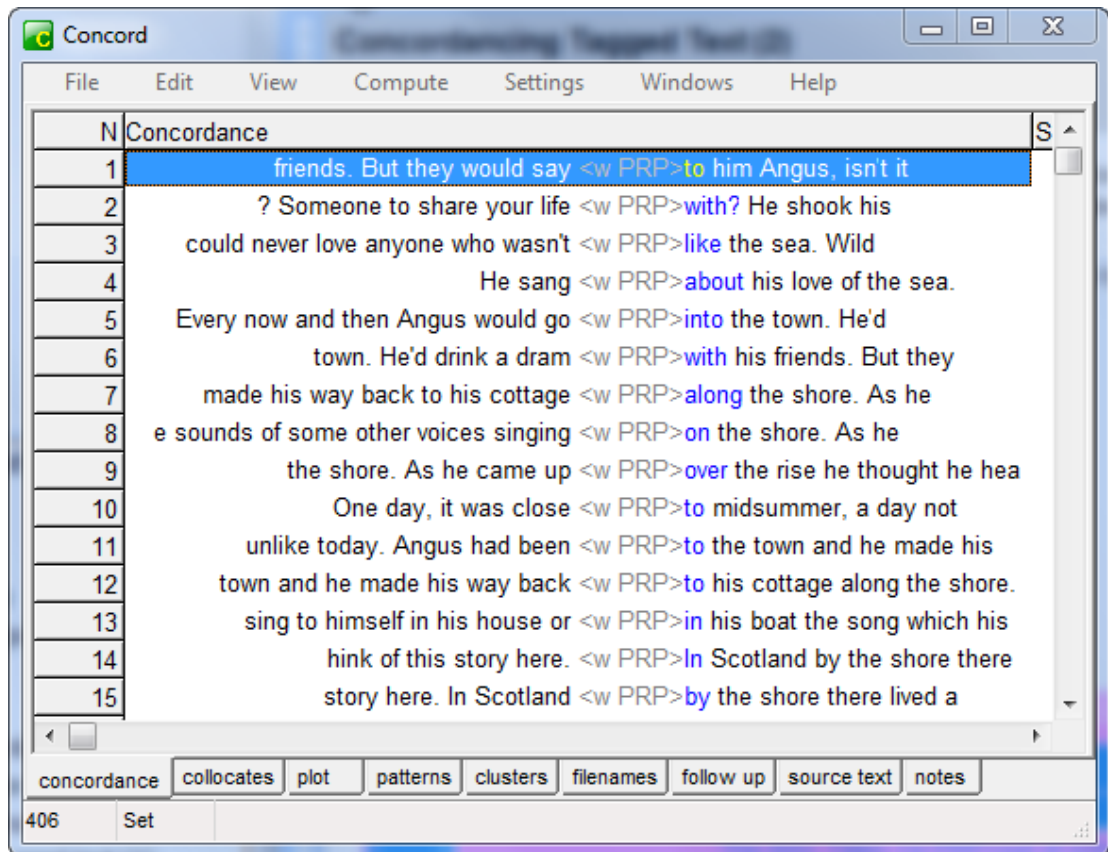
so each preposition is marked <w PRP> just before the preposition itself. The aim is to see all the prepositions in a selected text from the BNC. With a BNC text file chosen, type <w PRP>\* as the search-word (the asterisk is needed because a word follows directly after the part-of speech tag) and press OK.

WordSmith checks whether the angle-brackets are text characters or tag-openers and -closers:



Here we answer Yes.





You see the prepositions and their tags (but no other tags).

Step-by-step guide to WordSmith

# WordList

**Section**

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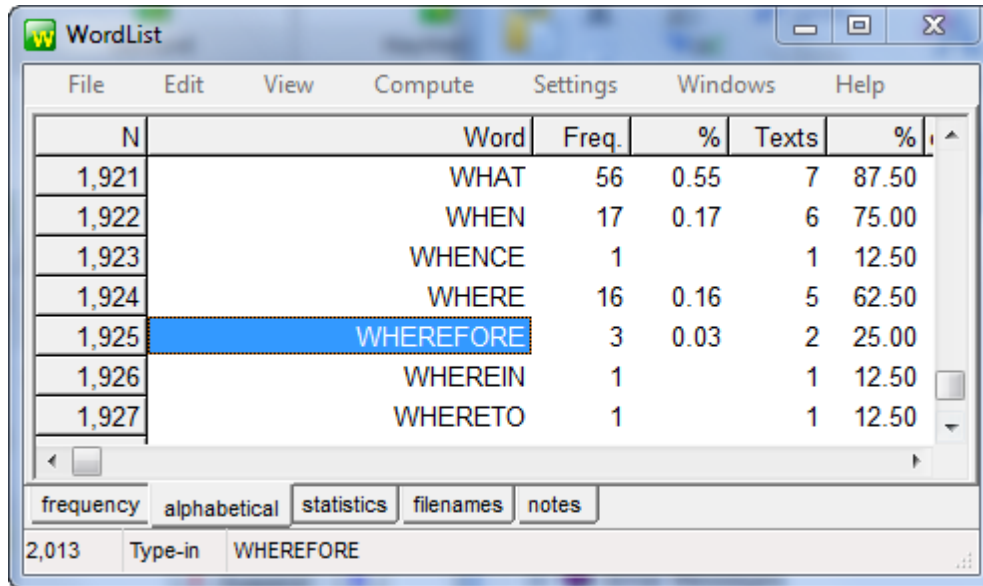


**V**

## 5 WordList

### 5.1 overview

A word list in WordSmith Tools looks something like this:



The screenshot shows the WordList application window with a menu bar (File, Edit, View, Compute, Settings, Windows, Help) and a table of word statistics. The table has columns for N, Word, Freq., %, Texts, and %. The word 'WHEREFORE' is highlighted in blue. Below the table are tabs for 'frequency', 'alphabetical', 'statistics', 'filenames', and 'notes'. At the bottom, there is a 'Type-in' field containing 'WHEREFORE' and a count of '2,013'.

| N     | Word      | Freq. | %    | Texts | %     |
|-------|-----------|-------|------|-------|-------|
| 1,921 | WHAT      | 56    | 0.55 | 7     | 87.50 |
| 1,922 | WHEN      | 17    | 0.17 | 6     | 75.00 |
| 1,923 | WHENCE    | 1     |      | 1     | 12.50 |
| 1,924 | WHERE     | 16    | 0.16 | 5     | 62.50 |
| 1,925 | WHEREFORE | 3     | 0.03 | 2     | 25.00 |
| 1,926 | WHEREIN   | 1     |      | 1     | 12.50 |
| 1,927 | WHERETO   | 1     |      | 1     | 12.50 |

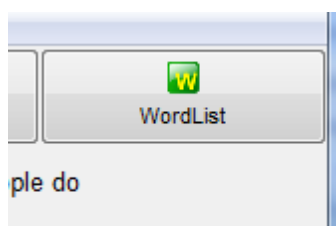
frequency alphabetical statistics filenames notes

2,013 Type-in WHEREFORE

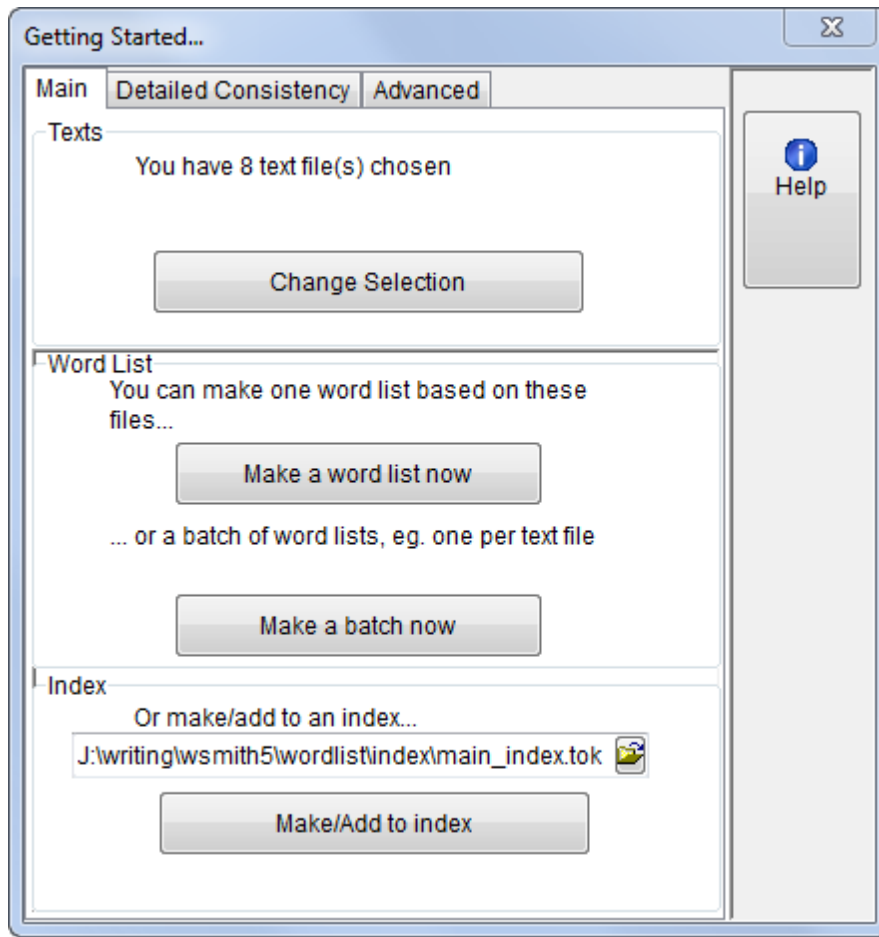
It shows how often each word occurs in the text files, what that is as a percent of the running words in the text, and how many text files each word was found in.

### 5.2 making a word list

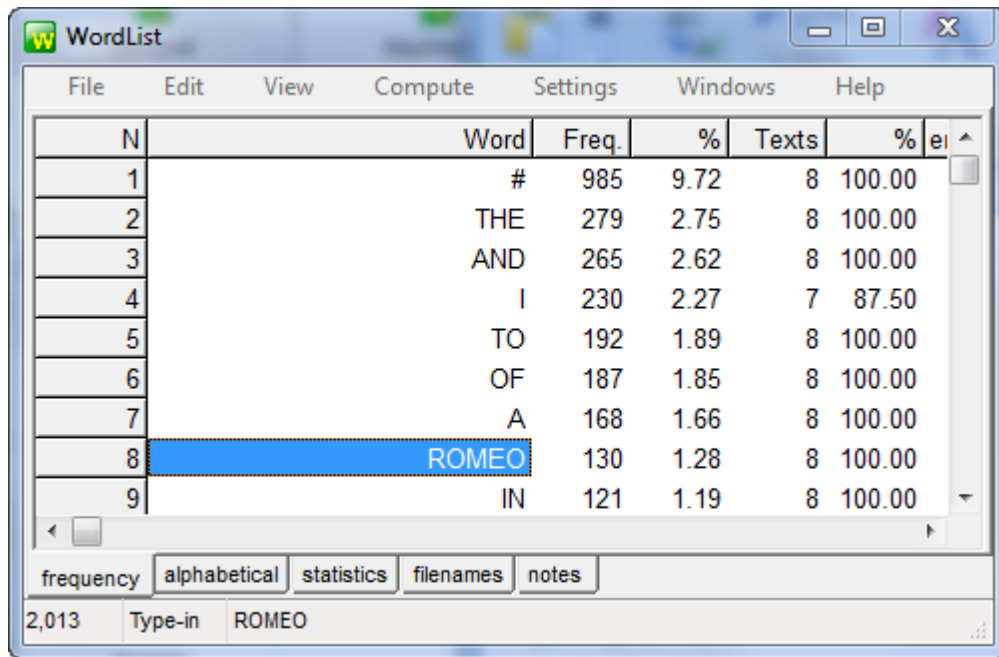
To make a word list, first press the WordList button in the main Controller.



When WordList starts up, choose your texts and then you will see something like this.



Here we're going to make one simple wordlist based on 8 text files from the play *Romeo and Juliet*, so press *Make a word list now*.



| N | Word  | Freq. | %    | Texts | %      | ei |
|---|-------|-------|------|-------|--------|----|
| 1 | #     | 985   | 9.72 | 8     | 100.00 |    |
| 2 | THE   | 279   | 2.75 | 8     | 100.00 |    |
| 3 | AND   | 265   | 2.62 | 8     | 100.00 |    |
| 4 | I     | 230   | 2.27 | 7     | 87.50  |    |
| 5 | TO    | 192   | 1.89 | 8     | 100.00 |    |
| 6 | OF    | 187   | 1.85 | 8     | 100.00 |    |
| 7 | A     | 168   | 1.66 | 8     | 100.00 |    |
| 8 | ROMEO | 130   | 1.28 | 8     | 100.00 |    |
| 9 | IN    | 121   | 1.19 | 8     | 100.00 |    |

frequency alphabetical statistics filenames notes

2,013 Type-in ROMEO

The WordList tool shows us a frequency listing. The most frequent word is "#". There are 985 of these #. Whatever has happened? Well, by default # is used to represent any number such as 65, 40 or \$997.82. In this case we have line numbers in the source text.

Below #, the most frequent words are *the*, *and*, *I* *to*, *of*. Beside each one you can see how frequent it is in the collection of 8 texts we used, the percentage of running words, and how many of our 8 texts each word occurred in. It seems *I* is a top frequency word but even so was not present in all the 8 texts.

To see the words in alphabetical order instead, click the alphabetical tab near the bottom of the window.

The screenshot shows the WordList application window with a menu bar (File, Edit, View, Compute, Settings, Windows, Help) and a table of word statistics. The table has columns for N, Word, Freq., %, Texts, and %. The word 'WHEREFORE' is highlighted in blue. Below the table are tabs for 'frequency', 'alphabetical', 'statistics', 'filenames', and 'notes'. At the bottom, there is a search bar with '2,013' on the left, 'Type-in' in the middle, and 'WHEREFORE' on the right.

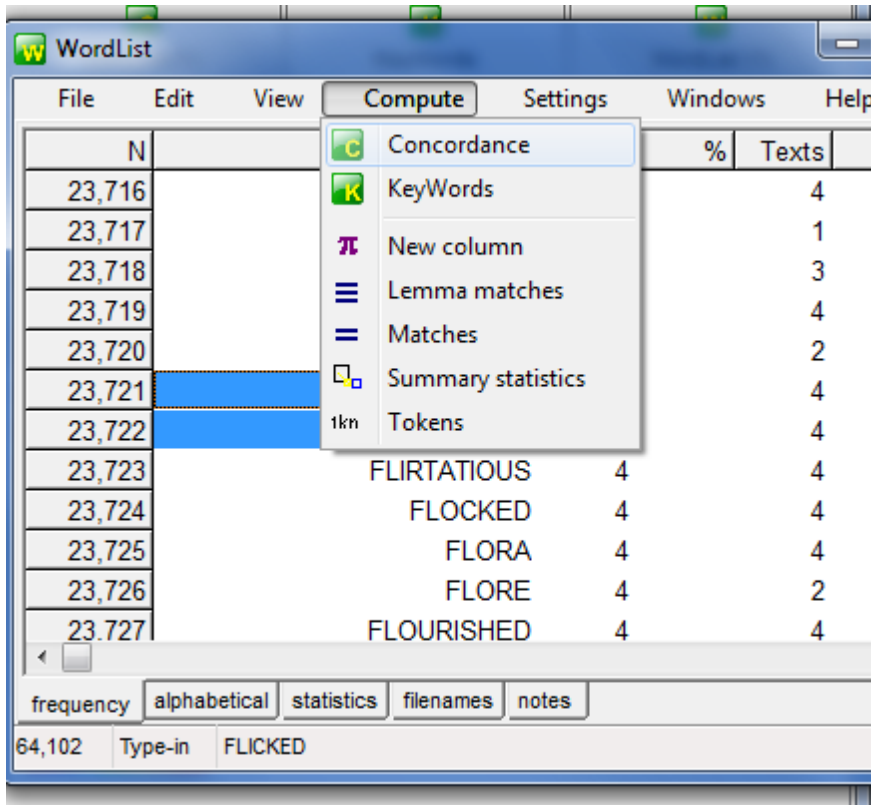
| N     | Word      | Freq. | %    | Texts | %     |
|-------|-----------|-------|------|-------|-------|
| 1,921 | WHAT      | 56    | 0.55 | 7     | 87.50 |
| 1,922 | WHEN      | 17    | 0.17 | 6     | 75.00 |
| 1,923 | WHENCE    | 1     |      | 1     | 12.50 |
| 1,924 | WHERE     | 16    | 0.16 | 5     | 62.50 |
| 1,925 | WHEREFORE | 3     | 0.03 | 2     | 25.00 |
| 1,926 | WHEREIN   | 1     |      | 1     | 12.50 |
| 1,927 | WHERETO   | 1     |      | 1     | 12.50 |

Now scroll down to **wherefore**. The results seem to confirm what we found when we made a concordance.

### 5.3 concordancing selected words

Once you have a word list on screen, you might want to see some of the words in it in their contexts.

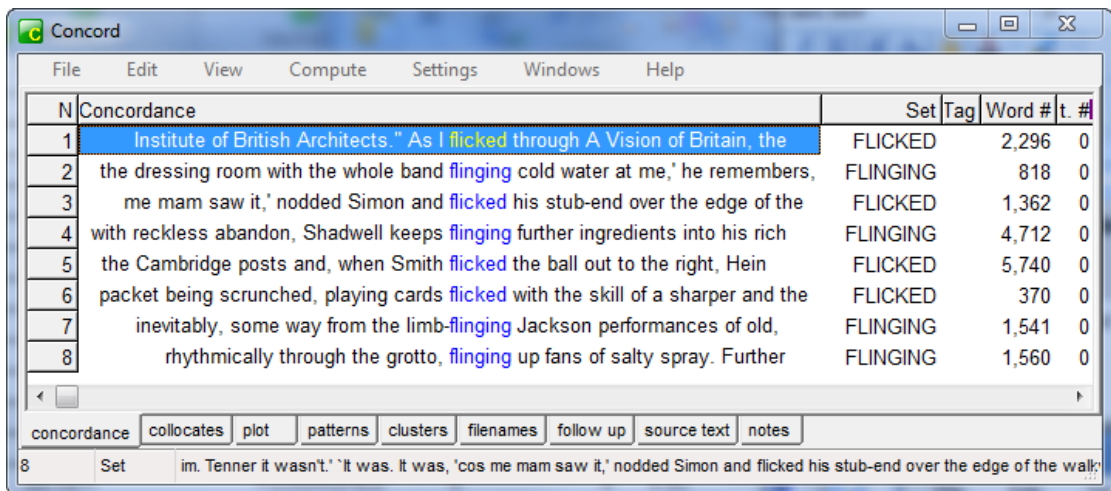
Select a word (or more)



e

and choose *Compute | Concordance*.

You will get something like this (if the original texts are still where they were when the word list was first made):



## 5.4 Lemmatising

To lemmatise manually, with a word list on screen,

| N     | Word        | Freq. | % | Texts | %     | emmas | Set |
|-------|-------------|-------|---|-------|-------|-------|-----|
| 6,052 | BLIN        | 2     |   | 1     | 0.21  |       |     |
| 6,053 | BLIND       | 111   |   | 53    | 11.04 |       |     |
| 6,054 | BLINDED     | 3     |   | 3     | 0.63  |       |     |
| 6,055 | BLINDFOLD   | 3     |   | 3     | 0.63  |       |     |
| 6,056 | BLINDFOLDED | 4     |   | 4     | 0.83  |       |     |
| 6,057 | BLINDING    | 5     |   | 5     | 1.04  |       |     |
| 6,058 | BLINDINGLY  | 2     |   | 2     | 0.42  |       |     |
| 6,059 | BLINDLY     | 3     |   | 3     | 0.63  |       |     |
| 6,060 | BLINDNESS   | 8     |   | 8     | 1.67  |       |     |
| 6,061 | BLINDS      | 20    |   | 4     | 0.83  |       |     |
| 6,062 | BLINDSIDE   | 1     |   | 1     | 0.21  |       |     |
| 6,063 | BLINDS'RE   | 1     |   | 1     | 0.21  |       |     |
| 6,064 | BLINIS      | 1     |   | 1     | 0.21  |       |     |

pull it onto the line you want to join it to.

| N     | Word        | Freq. | % | Texts | %     | emmas | Set |
|-------|-------------|-------|---|-------|-------|-------|-----|
| 6,052 | BLIN        | 2     |   | 1     | 0.21  |       |     |
| 6,053 | BLIND       | 111   |   | 53    | 11.04 |       |     |
| 6,054 | BLINDED     | 3     |   | 3     | 0.63  |       |     |
| 6,055 | BLINDFOLD   | 3     |   | 3     | 0.63  |       |     |
| 6,056 | BLINDFOLDED | 4     |   | 4     | 0.83  |       |     |
| 6,057 | BLINDING    | 5     |   | 5     | 1.04  |       |     |
| 6,058 | BLINDINGLY  | 2     |   | 2     | 0.42  |       |     |
| 6,059 | BLINDLY     | 3     |   | 3     | 0.63  |       |     |
| 6,060 | BLINDNESS   | 8     |   | 8     | 1.67  |       |     |
| 6,061 | BLINDS      | 20    |   | 4     | 0.83  |       |     |
| 6,062 | BLINDSIDE   | 1     |   | 1     | 0.21  |       |     |
| 6,063 | BLINDS'RE   | 1     |   | 1     | 0.21  |       |     |
| 6,064 | BLINIS      | 1     |   | 1     | 0.21  |       |     |

and drop it:



| N     | Word       | Freq. | % | Texts | %     | Lemmas                  | Set |
|-------|------------|-------|---|-------|-------|-------------------------|-----|
| 6,052 | BLIN       | 2     |   | 1     | 0.21  |                         |     |
| 6,053 | BLIND      | 119   |   | 53    | 11.04 | blind[111] blindness[8] |     |
| 6,054 | BLINDED    | 3     |   | 3     | 0.63  |                         |     |
| 6,055 | BLINFOLD   | 3     |   | 3     | 0.63  |                         |     |
| 6,056 | BLINFOLDED | 4     |   | 4     | 0.83  |                         |     |

frequency alphabetical statistics filenames notes

64,102 Type-in BLINDED

You will then see the totals change and the items become visible in the Lemmas column.

If there are a lot, you can double-click the Lemmas column to see the details:

| Word       | Freq. |
|------------|-------|
| BLIND      | 111   |
| BLINDNESS  | 8     |
| BLINFOLD   | 3     |
| BLINFOLDED | 4     |
| BLINDING   | 5     |
| BLINDINGLY | 2     |
| BLINDLY    | 3     |
| BLINDED    | 3     |

## 5.5 word list statistics

Press the statistics tab at the bottom of a word list,

|                                  | N | Overall  | 1       | 2        | 3       | 4       | 5        |
|----------------------------------|---|----------|---------|----------|---------|---------|----------|
| text file                        |   | Overall  | m01.txt | m02.txt  | m03.txt | m04.txt | m05.txt  |
| file size                        |   | 56,316   | 4,310   | 12,786   | 5,329   | 5,720   | 6,120    |
| tokens (running words) in text   |   | 10,132   | 672     | 2,303    | 962     | 1,074   | 1,110    |
| tokens used for word list        |   | 0        | 651     | 2,066    | 857     | 965     | 1,000    |
| sum of entries                   |   | 0        | 0       | 0        | 0       | 0       | 0        |
| types (distinct words)           |   | 2,013    | 356     | 691      | 398     | 388     | 470      |
| type/token ratio (TTR)           |   |          | 54.69   | 33.45    | 46.44   | 40.21   | 47.20    |
| standardised TTR                 |   | 37.43    |         | 35.80    |         | 36.00   | 42.60    |
| standardised TTR std.dev.        |   | 53.85    |         | 45.40    |         |         |          |
| standardised TTR basis           |   | 1,000    | 1,000   | 1,000    | 1,000   | 1,000   | 1,000    |
| mean word length (in characters) |   | 4.11     | 4.96    | 4.13     | 4.12    | 3.90    | 4.00     |
| word length std.dev.             |   | 1.91     | 2.54    | 1.88     | 1.79    | 1.75    | 1.90     |
| sentences                        |   | 351      | 13      | 83       | 23      | 45      | 20       |
| mean (in words)                  |   | 26.06    | 50.08   | 24.89    | 37.26   | 21.44   | 41.70    |
| std.dev.                         |   | 33.22    | 51.11   | 33.15    | 47.37   | 23.37   | 58.70    |
| paragraphs                       |   | 133      | 3       | 31       | 9       | 7       | 1        |
| mean (in words)                  |   | 68.77    | 217.00  | 66.65    | 95.22   | 137.86  | 100.20   |
| std.dev.                         |   | 109.85   | 280.49  | 98.89    | 89.50   | 248.82  | 127.50   |
| headings                         |   | 8        | 1       | 1        | 1       | 1       | 1        |
| mean (in words)                  |   | 1,143.38 | 651.00  | 1,066.00 | 857.00  | 965.00  | 1,002.00 |

frequency | alphabetical | **statistics** | filenames | notes

77 Type-in

and something like this should appear. Lots of numbers. Further down, the numbers are easier to understand:

| N               | Overall | 1   | 2   | 3   |
|-----------------|---------|-----|-----|-----|
| 1-letter words  | 538     | 17  | 103 | 42  |
| 2-letter words  | 1,507   | 94  | 363 | 120 |
| 3-letter words  | 1,904   | 127 | 419 | 203 |
| 4-letter words  | 2,622   | 90  | 578 | 279 |
| 5-letter words  | 1,696   | 93  | 426 | 143 |
| 6-letter words  | 733     | 82  | 146 | 63  |
| 7-letter words  | 486     | 59  | 114 | 63  |
| 8-letter words  | 361     | 47  | 96  | 27  |
| 9-letter words  | 166     | 26  | 38  | 16  |
| 10-letter words | 82      | 20  | 16  | 4   |
| 11-letter words | 21      | 7   | 2   | 2   |
| 12-letter words | 4       | 1   | 0   | 0   |
| 13-letter words | 9       | 6   | 2   | 0   |
| 14-letter words | 2       | 2   | 0   | 0   |
| 15-letter words | 1       | 1   | 0   | 0   |
| 16-letter words | 0       | 0   | 0   | 0   |
| 17-letter words | 0       | 0   | 0   | 0   |
| 18-letter words | 0       | 0   | 0   | 0   |
| 19-letter words | 0       | 0   | 0   | 0   |

There are lots of 4-letter words in Shakespeare, it seems.

## 5.6 multi-word units

### 5.6.1 using an index

To make a wordlist with pairs or triples of words (n-grams) such as

**OF THE**

**IN THE END**

**ONCE UPON A TIME**

etc you will need first to compute an index file. This essentially knows the position of each separate word in your corpus.

See also : making the multi-word unit wordlist

## 5.6.2 making a multi-word wordlist

The process is explained here and what you get looks like this.

| N  | Word          | Freq. | %    | Te |
|----|---------------|-------|------|----|
| 1  | SHE COULD NOT | 54    | 0.06 |    |
| 2  | SHE HAD BEEN  | 36    | 0.04 |    |
| 3  | I AM SURE     | 35    | 0.04 |    |
| 4  | A GREAT DEAL  | 34    | 0.04 |    |
| 5  | HE HAD BEEN   | 34    | 0.04 |    |
| 6  | IT WOULD BE   | 32    | 0.04 |    |
| 7  | COULD NOT BE  | 29    | 0.03 |    |
| 8  | I DO NOT      | 28    | 0.03 |    |
| 9  | IT WAS A      | 28    | 0.03 |    |
| 10 | AS SOON AS    | 23    | 0.03 |    |
| 11 | HAD NOT BEEN  | 23    | 0.03 |    |
| 12 | HE DID NOT    | 21    | 0.03 |    |
| 13 | IN THE WORLD  | 21    | 0.03 |    |
| 14 | THAT HE HAD   | 21    | 0.03 |    |

Press Ctrl/F2 to save it, and the suggested filename will be something like `_index_3-5-word clusters`. It can later be opened as an ordinary wordlist.

Step-by-step guide to WordSmith

# Key Words

Section

VI

## 6 KeyWords

### 6.1 overview

A key word list in WordSmith Tools looks something like this.

| N  | Key word | Freq. | %    | . Freq. | RC. % | e |
|----|----------|-------|------|---------|-------|---|
| 1  | ROMEO    | 115   | 0.48 | 115     | 0.01  |   |
| 2  | TYBALT   | 47    | 0.19 | 47      |       |   |
| 3  | JULIET   | 40    | 0.17 | 45      |       |   |
| 4  | NURSE    | 39    | 0.16 | 83      | 0.01  |   |
| 5  | LOVE     | 138   | 0.57 | 1,948   | 0.24  |   |
| 6  | NIGHT    | 82    | 0.34 | 849     | 0.10  |   |
| 7  | PARIS    | 27    | 0.11 | 81      |       |   |
| 8  | MONTAGUE | 21    | 0.09 | 41      |       |   |
| 9  | THOU     | 277   | 1.15 | 5,358   | 0.66  |   |
| 10 | O        | 161   | 0.67 | 2,615   | 0.32  |   |
| 11 | MERCUTIO | 14    | 0.06 | 14      |       |   |

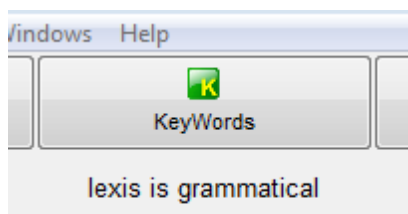
The key words are words which occur unusually frequently in comparison with some kind of reference corpus.

Beside each key word there are various numbers telling you how frequent each one was in the source text(s) and how that compares with its frequency in the reference corpus.

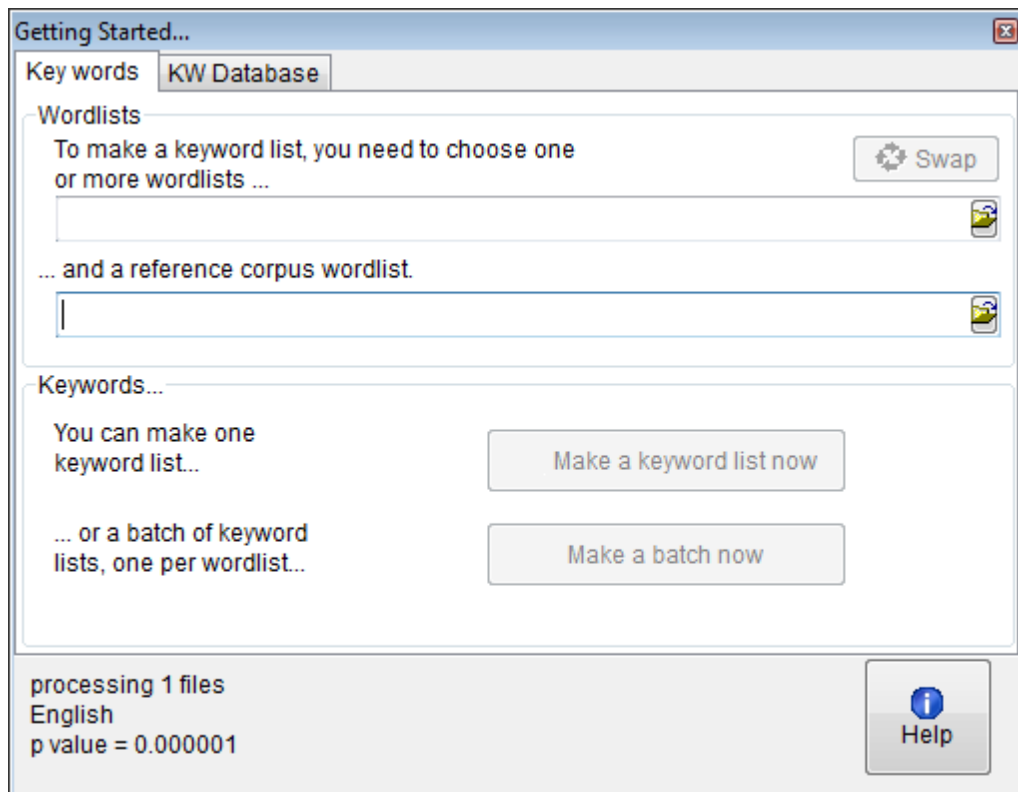
In the list above, based on the play Romeo and Juliet in comparison with all the Shakespeare plays, we see lots of names of the main characters, some pronouns like *thou*, plus theme words like *love* and *night*.

### 6.2 making a key word list

To make a key word list, first press the KeyWords button in the main Controller.



When KeyWords starts up, choose menu option *File*, then *New* and you will see something like this.



You have to choose word lists made and saved by WordSmith Tools.

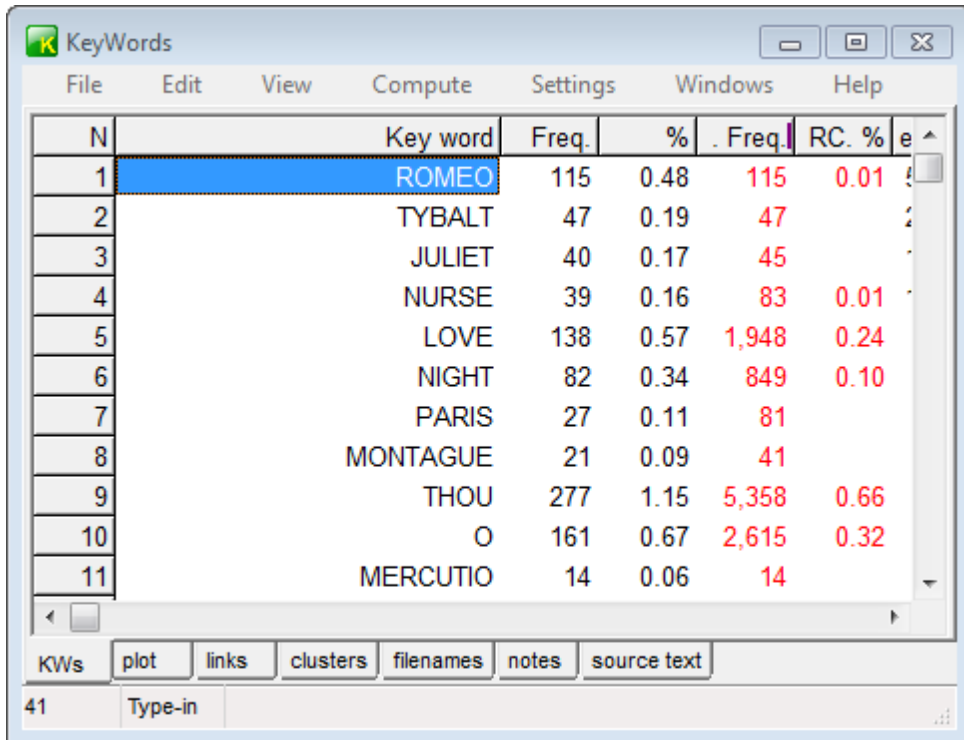
You can choose the word list files by pressing this button:



The reference corpus word list is assumed to be a big one, which will help WordSmith work out what is unusual about the words in your chosen text(s).

Once you have chosen a word list above and another for your reference below, press *Make a keyword list now*. (Until you have, that button won't be enabled.)

Then you will see something like this:



The screenshot shows the KeyWords software interface. The main window displays a table of key words. The table has the following columns: N, Key word, Freq., %, . Freq., and RC. %. The data is as follows:

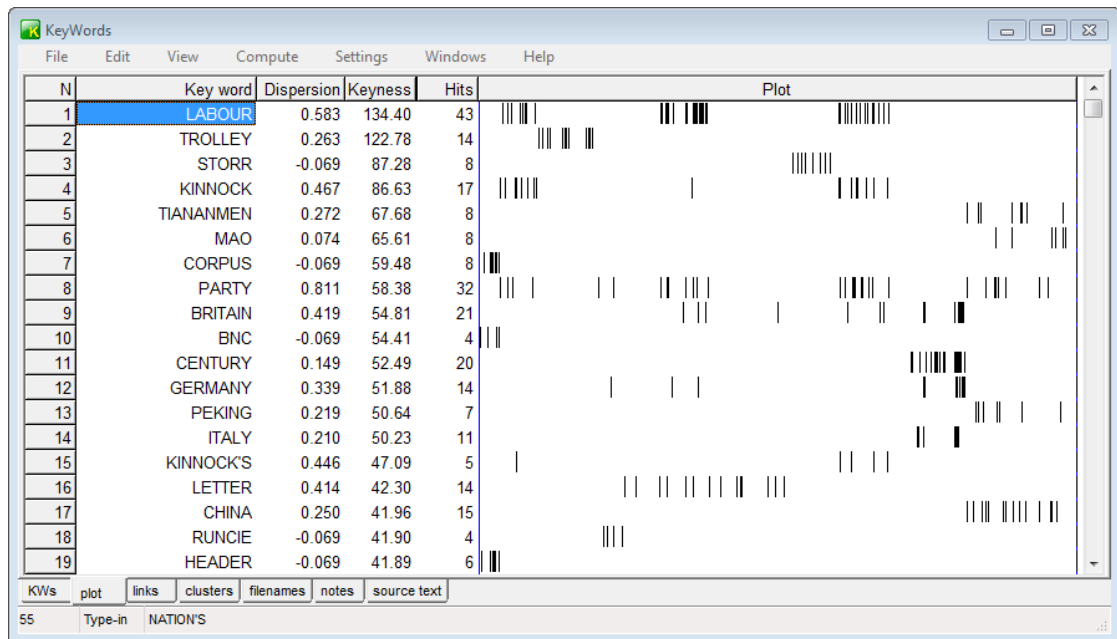
| N  | Key word | Freq. | %    | . Freq. | RC. % |
|----|----------|-------|------|---------|-------|
| 1  | ROMEO    | 115   | 0.48 | 115     | 0.01  |
| 2  | TYBALT   | 47    | 0.19 | 47      |       |
| 3  | JULIET   | 40    | 0.17 | 45      |       |
| 4  | NURSE    | 39    | 0.16 | 83      | 0.01  |
| 5  | LOVE     | 138   | 0.57 | 1,948   | 0.24  |
| 6  | NIGHT    | 82    | 0.34 | 849     | 0.10  |
| 7  | PARIS    | 27    | 0.11 | 81      |       |
| 8  | MONTAGUE | 21    | 0.09 | 41      |       |
| 9  | THOU     | 277   | 1.15 | 5,358   | 0.66  |
| 10 | O        | 161   | 0.67 | 2,615   | 0.32  |
| 11 | MERCUTIO | 14    | 0.06 | 14      |       |

At the bottom of the window, there are several tabs: KWs, plot, links, clusters, filenames, notes, and source text. The 'KWs' tab is currently selected. The status bar at the bottom left shows '41' and 'Type-in'.

### 6.3 key words plot

This is a key word plot where the text is the file `a1.f` in the British National Corpus (BNC), compared with the whole of the BNC.





You see:

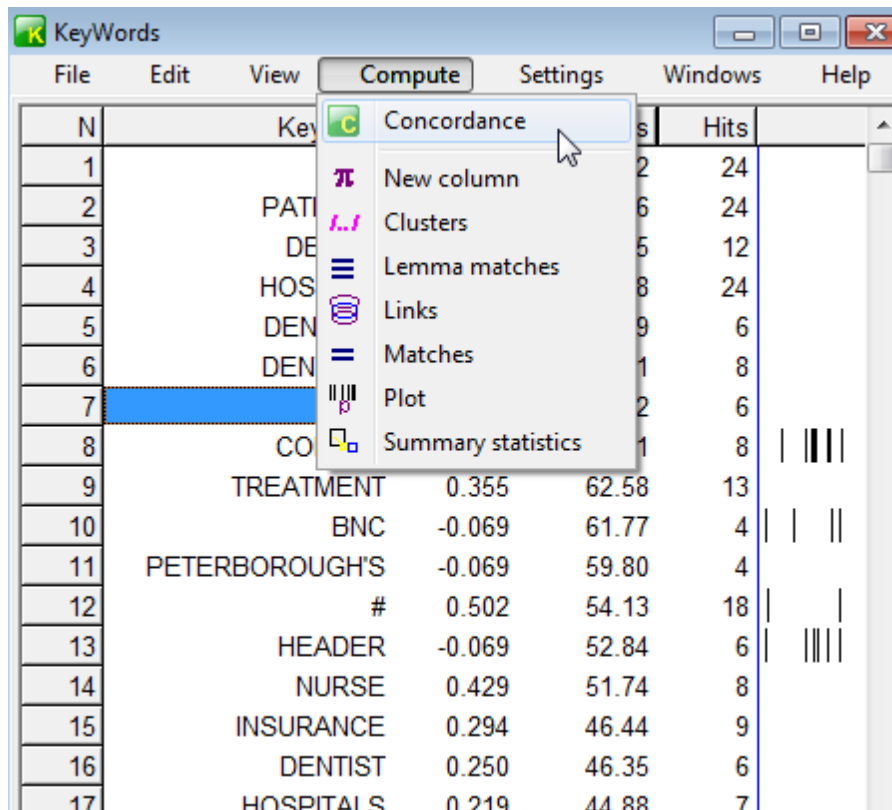
- each key word (KW) (these obviously have to do with international relations)
- a measure of its dispersion and its keyness
- how many times each KW came in the text (hits).
- a map showing where each word came.

At the left the blue line represents the start of the text, at the right the blue line represents the end. Look at **Britain**, **Germany**, **Italy** and **century** -- these seem to come in bursts more or less three-quarters of the way through the text. **China**, **Mao**, **Peking** come together a bit later in the text.

## 6.4 concordancing selected key words

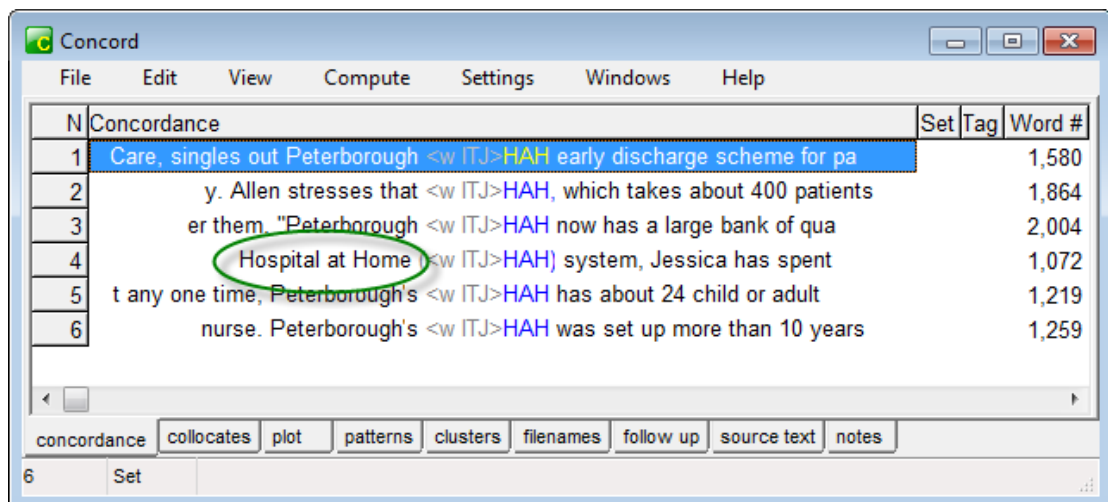
Once you have a key word list on screen, you might want to see some of the words in it in their contexts.

Select a word (or more)



and choose *Compute | Concordance*. Here, the rather mysterious **HAH** has been chosen.

You will get something like this (if the original texts are still where they were when the word list was first made):



It seems that HAH is a system for health care.

---

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