# Tools for Studying Texts: Ideas and Computer Resources

19 May 2014

Students and scholars often study and reference important texts in various fields. For example, some may study Shakespeare or other literary works, while others may study the Bible or other religious works. The WordCruncher Bookstore provides access to important works worth studying and rereading as well as reference works that facilitate study.

- Computers are useless; they can only give you answers. 1
- Questions are places in your mind where answers fit. ... If you haven't asked the question, the answer has nowhere to go. It hits your mind and bounces right off.<sup>2</sup>

Computers do not tell us what to questions to ask, but they help us find answers to questions. Computers are not very useful without questions. Every computer search has an implied question. *The value of our searches depends on what we search for and what we do when we find it.* 

A person who does not read good books has no advantage over one who can't read them.

## Computer program features suggest questions

An awareness of the capabilities of different programs can suggest types of questions and help you select the best tool for a question.

# 1. What documents contain these words? (Document search)

#### **See a list of documents in some order.** (Document retrieval)

Google shows results in a PageRank order based on a formula for measuring the relative importance of documents.<sup>3</sup> Others show documents with the most search hits.

*WordCruncher*. The Library Search shows how many times words occur in each book, and the Frequency Distribution helps one find parts of a book (e.g., chapter) that contain search words.

# Select and see a document, web page, or chapter.

For internet searches, books are usually split into chapters for searching and viewing.

# 2. How often are words used in a text? (Word counts)

When you search for words, the computer usually shows you how many times the words occur in a text or in parts of text.

*WordCruncher*. The WordWheel shows how many times each word appears in a Word list like Text or Headings. The Frequency Distribution shows which parts of a book (e.g., play, act) contain search words. See appendix A for more advanced information.

## 3. Where are words used in a text? (Word or text search)

This question comes up if you are studying a topic or word, or if you are trying to find a paragraph and remember some words in it.

*Printed text.* Many books include an index. To save space, they do not include (a) every word, or (b) every page containing each word.

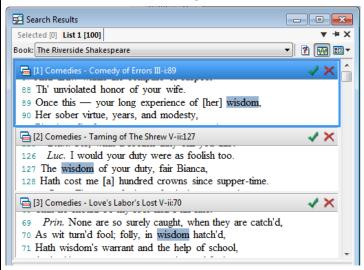
*WordCruncher*. You can find every place words occur in word lists (e.g., Text, Directions, Headings). The "<u>Getting Started</u> <u>Tutorial</u>" shows how to do simple and complex searches.

## **4.** Where is a line or paragraph? (Paragraph search)

In a class you may be invited to a page or to a play, act, and line. You may also want to check wording or context of a footnote or quote that includes the reference.

*WordCruncher*. To see pages mentioned in footnotes, click on the link. You can also select or type a reference to jump to that paragraph.

# 5. How can search results be organized? (Pattern searches)



WordCruncher. You can easily look up all forms of a word or words with a common stem. You can copy part or all of the entire list and paste it into a word processor so you can organize the results as you wish.

#### **6.** Where are words used the most? (Frequency Distribution)

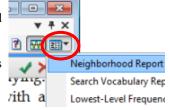
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Table of contents	Actual	≈Rating	≈Actual/Expected	Total	-
🖟 🧼 Comedies	29	-0.1		282,966	
Histories	18	-1.7		258,122	E
🕀 🥏 Tragedies	43	3.3		248,780	
🖟 🥏 Romances	9	-0.9	_	118,361	
Poems	1	-1.7		48,935	-

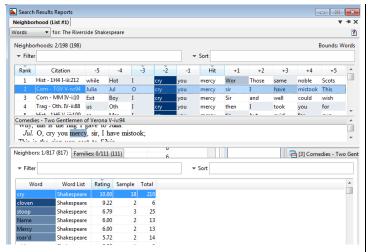
*WordCruncher*. You can quickly see were the search words occur in the text and position to the first search hit in a section. .

▲ Comedies			<b>√</b> 🗙 🖳 🎚	
Table of contents	Actual	≈Rating ≈Actua	I/Expected Total	A
🗏 🥏 Comedies	29	-0.1	282,966	
🕀 🧼 Comedy of Errors	1	-0.4	15,895	
🕀 🧼 Taming of The Shrew	1	-0.7	22,138	
⊕ 🧼 Love's Labor's Lost	2	-0.2	22,749	
Merchant of Venice	3	0.4	22,186	Ŧ

#### 7. What words are found near search words? (Neighborhood)

WordCruncher. After a word search, you can see a Neighborhood Report. The top part shows the words before and after the search word. The bottom part shows words found near the search word. The better "friends" are highlighted. Click on a column heading to sort.





#### 8. What were the actual search words?

When you search using "All Forms" or wildcards (e.g., \*ing), you can see the actual search words by selecting Search Vocabulary Report from the menu with the Neighborhood Report (see above).

#### **9.** Which phrases are repeated? (Phrase Compare Report)

WordCruncher. While looking at a text window, you can select the Phrase Compare Report. This shows repeated phrases in the different books, the same book, or in parts of a book.



Num.	Freq.[1]	Fr	Phrase	Freq./M.[1]	Fre	Len.
1	2		"a better man than troilus"	7.1		5
2	2		"a costard broken in a"	7.1		5
3	2		"a deformed thief this fashion"	7.1		5
4	2		"a fool and full of"	7.1		5
5	2		"a haud credo twas a"	7.1		5
6	4		"a hey and a ho"	14.1		5
7	4		"a ho and a hey"	14.1		5

Click on a column heading to sort the list.

Num.	Freq.[1]	Fre	Phrase	Freq./M.[1]	Fre	Len.
8	8		"know not what to say"	8.4		5
9	8		"i pray you tell me"	8.4		5
10	8		"as i am a gentleman"	8.4		5
11	8		"am glad to see you"	8.4		5
12	7		"take my leave of you"	7.3		5
13	7		"i pray you pardon me"	7.3		5

## 10. How are words used in the text? (Search for contexts)

Words change meanings over time. For example, Shakespeare and the King James Version of the Bible were written about 400 years ago. When these books were written, *gay* meant beautiful, fine, or cheerful. About 1950 *gay* began to refer to same-sex attraction or behavior. Many words (e.g., quit, quick, perfect, mean) have different meanings than those that are common now. To understand an author, it is important to know how that author uses a word regardless of how others use the word now.

*WordCruncher*. You can quickly see the context of each search hit. This will help you understand how a word is used.

## 11. What are the meanings of a word? (Meaning Search)

Google: type *define flatter* to search for the definition. This will usually find modern meanings, not old meanings.

Webster's 1844. If you have downloaded this WordCruncher book, you can click on an English word to see the meaning in the dictionary window. This dictionary is basically the same as the

1828 dictionary, but with more technical words. Webster's often gave Bible examples for word meanings.

(Shorter) Oxford English Dictionary (OED or SOED): This dictionary shows the historical meanings of words. It is very helpful when studying Shakespeare, the KJV Bible, and related books with meanings from A.D. 1500–1800.

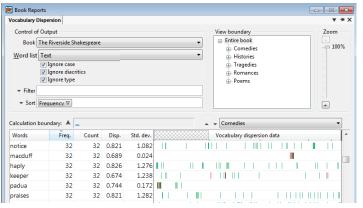
#### 12. What paragraphs contain more of these words?

For language learning, it may be useful to look of the most frequent 50 words and to find paragraphs with many of these words. You might also look up all words ending in *ing*.

WordCruncher. You can sort the WordWheel by frequency, add a Normal text filter, and search for the top 50 words (e.g., the, and). While looking at the Search Results window, you can select Lowest-Level Frequency Distribution Report. You can click on the "Hits" or "Unique" column header to sort the list. When you select one of the paragraphs, you will see that paragraph with top 50 words highlighted in the window below.

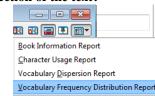
## 13. Where do words appear in a text?

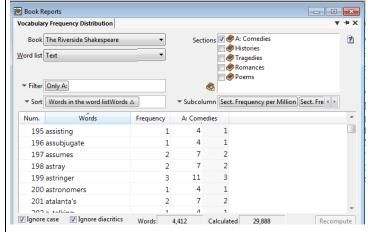
In the top right corner of a text window, select the Vocabulary Dispersion Report. You can also add a word filter to see only some words, and set the "Calculation boundary" to a section of the text.



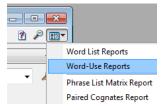
# 14. What words occur only in a section of the text?

In the top right corner of a text window, (a) select the Vocabulary Frequency Distribution Report, (b) select a section, (c) select the filter "Only in Section A," and (d) click on the Recompute button.

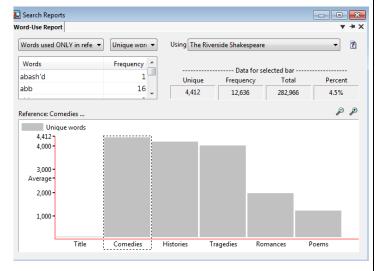




For a similar graphical report, (a) select "Word-Use Reports" from the top right corner of the Search Window, (b) select "Words used ONLY in reference," and (c) click on a section bar in the chart to see the words in the top left window.



To zoom in, double-click on a section bar.

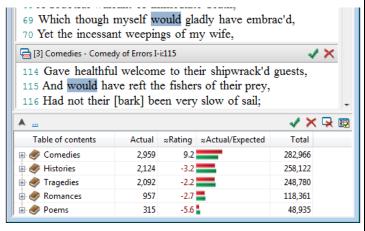


# 15. Other WordCruncher reports and features

The Search window, Search Results window, and text windows all have report buttons in the top right corner. Reports may have filters and sort options (e.g., click on a column heading). If you have questions about a report, you can press the F1 key or select Contents... from the Help menu.

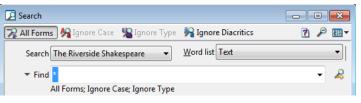
# Appendix A: Word Counts

**Frequency Distribution:** At the bottom of each search you can see the total number of words in each section (e.g., Comedies) of the text. This "Total" count includes all *normal* words in <u>all Word Lists</u> (e.g., Text, Headings). It does not count punctuation, paragraph numbers, subwords, or tagwords. If you cannot see the "Total" column, right-click on a column heading and select Total.

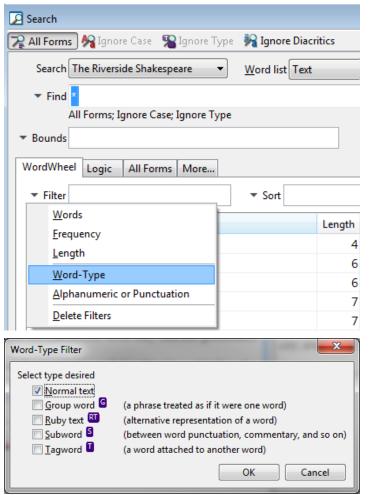


#### Word Counts for a Word list

Search for all words in a Word list (e.g., Text): Type an asterisk in the Find box and press Enter to see the Frequency Distribution. This type of search gets the same results for a Word list regardless of which search options (e.g., All Forms) are selected. However, it also includes all "words" (e.g., punctuation marks, subwords, and tagwords) that are in the WordWheel. Therefore, in the Frequency Distribution, you\* will see that the Actual column is greater than the Total column.

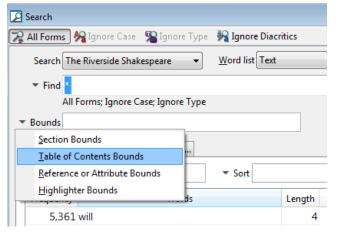


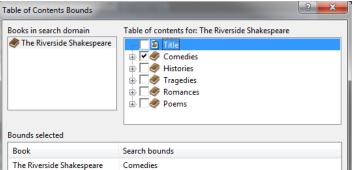
Search for all "normal" words in a Word list: To omit punctuation marks or other "words" from your search, add a Word-Type filter and put a check by "Normal text." If you have version 7.1.56 or later of WordCruncher, adding this filter will shut off the *All Forms* and *Ignore Type* search options. If you now search for all words ("\*"), the Actual column will be less than the Total column which includes prefaces and headings. [The Actual and Total column are the same when you search "All text" for "Normal words."]



**Search for all words in part of a book** (e.g., Comedies): Set the bounds (e.g., Table of Contents). Type an asterisk in the Find box and press Enter to see the Frequency Distribution. This type of

search gets the same results for a Word list regardless of which search options (e.g., All Forms) are selected. However, it also includes all "words" (e.g., punctuation marks, subwords, and tagwords) that are in the WordWheel. Therefore, in the Frequency Distribution, you will see that the Actual column is greater than the Total column.

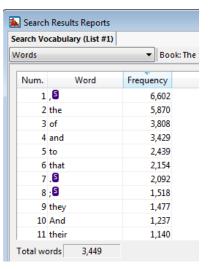




To find the most frequently used words in this part of the text, select the Search Vocabulary Report to see an alphabetical list of all words in the Search Results.

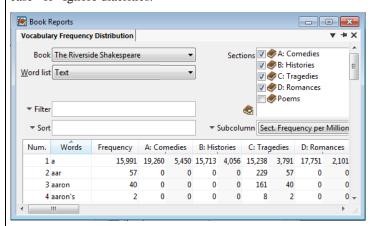


To sort the list by frequency, click on the Frequency column heading.



#### **Section Word Counts**

Vocabulary Frequency Distribution Report (Book Report): This report can show word counts for each word in up to FOUR sections. You can also select different Word lists (e.g., Preface, Heading, Text). In the bottom left corner, you can check "Ignore case" or "Ignore diacritics."



<sup>&</sup>lt;sup>1</sup> Pablo Picasso, 1881–1973; c. 1964.

<sup>&</sup>lt;sup>2</sup> Jason Fried, "A Conversation with Innovation Guru Clayton Christensen," <a href="http://www.inc.com/magazine/20121001">http://www.inc.com/magazine/20121001</a>

<sup>&</sup>lt;sup>3</sup> https://en.wikipedia.org/wiki/PageRank