UNIVERSITY COLLEGE CARDIFF

COCOA MANUAL

ATLAS COMPUTER LABORATORY

C O C O A

A Word Count
and Concordance
Generator

BY

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C ONCORDANCE
  c O NCORDANCE
  CON C ORDANCE
  CONC O RDANCE
CONCORD A NCE
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COCOA is an acronym derived
from the first program for
word COunt and
      COncordance generation
   on Atlas

FOREWORD

This manual describes a computer program which will carry out
a variety of text processing operations; in particular it
will produce concordances. The original COCOA program was
written by Dr D B Russell in 1967 in Atlas assembly code, and
could therefore be run only on an Atlas machine. The program
proved very successful and was used by quite a considerable
number of research workers concerned with analytical studies
of text, so that a need arose to make it available on other
computers. The program available here is a new version
written in FORTRAN and therefore much more fully transportable
than the original Atlas form; it has been implemented on the
ICL 1900 and System 4 series.

The work of producing this new version was done under a
contract between the Atlas Laboratory and the University College
at Cardiff, supervised by Mr E B Fossey (Chilton) and Professor
R F Churchhouse (Cardiff). The actual work was done by
Dr G L M Berry-Rogghe of the Laboratory and Mr T D Crawford
of University College; considerable help and advice was given
at various stages by Mr Alan Jones of the Oriental Institute
at Oxford and Mrs S M Hockey of the Atlas Laboratory.

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C O N T E N T S

CARD

A computer card consists of 80 columns counted from left to
right. Within these columns holes are punched in various positions
and combinations to represent numbers, letters of the alphabet,
punctuation marks, etc. It is usual at the time of punching for
the character thus represented to be printed at the head of the
column. This enables the content of the card to be read at a
glance. From the point of view of the user, each card is
equivalent to a single line of printed text 80 characters in
length.

The first two cards of the text used for Example No 14 are
reproduced below.

WORD-COUNT

A listing of words occurring in a text, together with a statement of the number of times that each word occurs.

CONCORDANCE

A further development of the WORD-COUNT. After each word listed appears one or more lines of context illustrating each occurrence of the word in the text under examination.

KEYWORD

A word whose contexts of occurrence appear in a CONCORDANCE.

WORD FREQUENCY PROFILE

A set of tables stating:

(a)   the number of words occurring once in a text;
      the number occurring twice;
      three times, etc.

(b)   the cumulative number of different words contained in
      the first table.

(c)   the cumulative number of words represented in the
      first table, each occurrence being treated as a
      separate word.

(d) & (e)   the information from (b) and (c) respectively,
      represented as percentages of each total.

Note:

Words occurring in upper case letters within definitions are themselves defined in the glossary.

I N T R O D U C T I O N

COCOA is a computer program which can produce *concordances, word-counts,* and *word-frequency profiles* based on texts supplied by the user. These texts may be in any language, but non-Roman alphabets must be transliterated by means of characters (ie Roman letters, punctuation marks, numerals, arithmetical signs, etc) acceptable to the computer upon which the program is to be run.

For each of these facilities the following options are available:

1. CONCORDANCE

If a word occurs more than once, the occurrences may be listed in the order in which they appear in the text, or in alphabetical order according to the right or left context. Keywords will normally be listed in the concordance in alphabetical order, but *reverse* alphabetical order (eg to assist the study of morphology or rhyme-schemes) is also possible. One can restrict the concordance to keywords falling within a certain frequency range, or to keywords beginning or ending with certain specified characters; also, particular keywords can be specifically included in or excluded from the concordance. Furthermore, it is possible to single out instances in which two specified words occur consecutively or with not more than a defined number of other words separating them.

2. WORD-COUNT

This may be arranged in *alphabetical order, reverse alphabetical order,* or by *frequency.* Wordcounts in alphabetical and in frequency order may be obtained in a single run, but a wordcount in reverse alphabetical order cannot be combined with either of the other two. Any one of these, or alphabetical and frequency order together, may be obtained in conjunction with a word-frequency profile.

3. WORD-FREQUENCY PROFILE

The format of this is fixed; an example may be found on p 54.

TEXT PREPARATION

When preparing the text, the user may employ any characters and format he wishes, subject to the restrictions stated below.

1.   USE OF "PLUS" AND "OBLIQUE"

The computer will regard each card as beginning a fresh line of text subject to the following conventions:

(a) A "plus" sign + indicates to the computer that it is to regard the beginning of the next card as a continuation of the current line of text, *and that it should pass immediately to this next card, ignoring anything appearing on the current card to the right of the "plus" sign.* The user may therefore employ the space to the right of a "plus" sign for the insertion of comments; these will not be regarded as part of the text, and will not appear in contexts in the concordance.

A space before the "plus" sign or before the first entry on the continuation card indicates that the latter is a separate word from the last entry before the "plus" sign on the previous card. The absence of a space at either point, eg PLEAS+ on one card and ANT in the first three columns of the next, indicates that the two entries form one word, ie PLEASANT. In this latter case, if the user wishes a new line to be counted as starting after PLEASANT, he must insert a /.

The "plus" sign must not be used in the text other than for the purpose of indicating line continuation.

(b) An oblique line / indicates that the next line of text is to be regarded as starting at this point instead of at the end of the card. The idea is that a text consisting of short lines may be punched with two or more lines per card. Used in combination with the "plus" sign convention, this oblique line convention allows poetry to be punched almost as prose, thus making optimum use of card-space.

However, the user may find that it is easier to check the text for errors if each card corresponds exactly to a line of poetry; the precise nature of the input text will determine which procedure it is advisable to adopt.

The oblique line must not appear in the text other than for the purpose of indicating the start of a new line.

2.   USE OF ANGLE BRACKETS

Angle brackets (the arithmetical signs for "is less than" and "is greater than") are reserved for enclosing text references, and must not be used in the text for any other purpose.

A text reference consists of (a) the opening angle bracket; (b) a letter; (c) a space; (d) the reference; and (e) the closing angle bracket; eg

     <A SHAKESPEARE> <P MND> <B 1><S 1><L 1><C THESEUS>.

The letter preceding the reference can be chosen by the user to suit his own convenience, except that L is reserved for the line number reference. In the example above we have used A for author, P for play, B for act, S for scene, and C for character reference respectively, so that the full reference reads "Shakespeare: A Midsummer-Night's Dream: Act 1: Scene 1: Line 1: Theseus speaking". Text references subsequently produced by the computer will of course follow the conventions stated by the user, ie MND for "A Midsummer-Night's Dream", and so on.

Whenever the machine encounters a text reference which is included in the user's text selection request (see below under "Card No 11"), the line-count is reset to zero. Therefore if the first line of text following such a reference is to be counted as "one", references must be included on separate cards from those containing text. Several references may of course be included on one card, but the text should not recommence until the next card. Cards containing no actual text, and only such references as are not specified in the user's selection request, are ignored altogether for the purpose of line-counting. One of the advantages of this system is that a user analysing a play can escape having his line-count reset to zero each time a different character speaks! Unless he includes character-references in his selection request, they will have no effect on the line-count. Thus such references can, unlike others, be put on the same card as part of the text, eg

<C AGAMEMNON> What's his excuse? <C ULYSSES> He doth rely on none,

though since all references are dropped from lines appearing under
keywords in the concordance, it would not be obvious in the output
that the above line is in fact split between two characters. The
user might overcome this by following the character-reference with
the character's name repeated between double round brackets as a
comment.

If the user has a prose text, the simplest method of line-numbering
is to reset the count to zero after each page-reference by including
a card of the type

    <P 217><L 1>

at the beginning of each page. If the text has already been
prepared without such line-references after the page-references,
the user may still reset the line-count to zero at the start of
each page by employing a text-selection statement of the type

    P<P1>(<1><2><3><4><5><6><7><8><9>)<@>1000000

on card no 11. As the relevant section of the manual (pp 18-21 below)
makes clear, this statement will in fact select the entire text
for analysis, since all page-numbers begin with one of the digits
1-9. However, if the user has the choice of how to prepare
his text, the former method is by far the more preferable, as it
is less prodigal of computer-time.

Users intending to employ the Standard User's Request as described
in the next section of the manual must begin their texts with the
reference <T TEXT>.

3.   USE OF DOUBLE ROUND BRACKETS

Double round brackets, ie ((and)), are used for enclosing
comments which the user does not wish to see included in the
text for the purposes of word-counting or keyword selection, but
which he does wish to see appear in the appropriate contexts
in the concordance. *Double* round brackets are restricted to
this function, but *single* round brackets, ie (and), may be
employed as the user wishes.

TRANSLITERATION OF NON-ROMAN ALPHABETS

If the user has a text written in a non-Roman alphabet, or in
a variant of the Roman alphabet employing non-Roman characters
or diacritics, he may choose any transliteration system which
does not infringe the rules set out above. He may be helped
in his choice of transliterations by the information given on
pp 13-15 of this manual.

All users are strongly advised to prepare initially only 100 or
so cards of text according to their chosen format, and to test
these on COCOA with the User's Request they intend to employ.
In this way they can avoid the unintentional production of large
batches of text unsuitable for use on COCOA, and can verify at
the same time that their intended User's Request will in fact
produce the desired result.

Users who require a concordance are recommended to obtain first
a word-count and word frequency profile. These are often of
great assistance in determining whether specific words should be
included in or excluded from the concordance. Also a preliminary
concordance, giving references only (see p 23) may be useful
for correcting any spelling errors in the text before a production
run is undertaken.

C R E A T I O N   O F   A   T E X T   A R C H I V E

A user of the COCOA system quickly finds that a very considerable part of the work is the preparation of accurate computer-readable texts. For this reason it is advisable to ensure that the text is available in more than one form. It is still a common practice to prepare the text on punched cards, or to a lesser extent on paper tape, and to use the same medium for the purpose of correcting it.

However, the sheer bulk of data in this form makes it impractical for continuous handling for any length of time. Such data is better handled on some kind of computer-readable medium. Examples of this would be magnetic tape or magnetic disc storage.

In whatever form the data is held, the user will be well advised to consider how he may recover it if his information be damaged or lost. Accidents happen from time to time; card decks can be shuffled and magnetic tapes can become unreadable.

It is impossible to be very precise in a general manual of this kind about solutions to this particular problem since a great deal depends upon the facilities provided for the operating system under which COCOA runs. The operating system may provide facilities for the storage of program text and data. It may also provide facilities to enable the user to edit such material. In addition it may automatically preserve copies of the information filed within the store, thereby relieving the user of the need to provide separate copies. If there are no such automatic facilities, the user will have to concern himself with ensuring that he can recover information which gets lost or damaged within the system.

More specific notes on this aspect of using COCOA will be available as an adjunct to this manual from the appropriate computer centre where the work is to be done.

The user must supply the computer with a small set of punched
cards specifying the operations which he wishes the machine to
perform. The cards should be supplied in sequence as follows:

FORMAT OF DATA CARDS (CARD NO 1)

Here the user should declare whether he has employed the full
width (80 columns) of his data cards in preparing his text, or
whether he has used only the first 72 columns, leaving the last
8 for numeration and other purposes. If he has used all 80
columns, he should punch 80 in columns 1 and 2 of his card; if he
has used only the first 72 columns, he should punch 72 in columns
1 and 2. In either case the other 78 columns of this card should
be left blank.

THE STANDARD OPTION

At this point the user who intends to submit an unpre-edited
text in English or in some other language which employs the Roman
alphabet in the English fashion, and who wishes a concordance,
word-count, or word frequency profile to be produced for the
entire text, may omit to read pp 10-17 of this manual and supply
cards nos 2-11 inclusive as follows:

```
0<.,:;!?&">
1<'->
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<1 24>
P<T4>(<TEXT>)<ZZZZ>1000000
```

The user of this option should continue reading the manual at
p 21 in order to supply the necessary requests on cards 12 and
13. He is also recommended to read pp 18-21 relating to card no 11,
although this card is included in the Standard Option. If his
text contains words of more than 24 letters, he should also read
p 17 and if necessary, alter card no 10 in the Standard Option.

DECLARATION OF CHARACTERS OF TYPE ZERO (CARD NO 2)

This card is used for declaring those characters which are to be
considered as punctuation marks or word separators. Such
characters will appear when a line of context is printed out, but
will otherwise be ignored.

To prepare the card, punch the figure 0 in the first column, and
< (ie the mathematical sign meaning "is less than") in the second.
Then from the third column onwards use one column for each of the
punctuation marks that you wish to declare, and in the column
immediately following the last of these punch > (ie the mathematical
sign meaning "is greater than"). *Do not try to declare "space"
as a punctuation mark*; COCOA is so designed that a blank space
is automatically disregarded except insofar as it separates one
word from another.

The user should note that all punctuation marks act as word-
separators. For instance, if the hyphen - is declared as a
punctuation mark, TEA-LEAF will be listed as two separate words,
TEA and LEAF. If TEA-LEAF is to be treated as a single word,
the hyphen should be declared on Card No 3 as a character of
Type One.

The following would be a typical sequence for the present card:

    0<.,:;!?&">

If you do not wish to declare any characters as punctuation marks,
punch the figure 0 in the first column of the card, and an asterisk
* in the second. Leave the rest of the card blank.

DECLARATION OF CHARACTERS OF TYPE ONE (CARD NO 3)

This card declares those characters which the user wishes to
appear when the word in which they occur is printed, but which
he wishes to be ignored when the word is sorted. For example,
if one declares the hyphen - as such a character, then the
word TEA-LEAF will be sorted as though it were TEALEAF and
indexed between TEAK and TEAM; but it will always be printed as
TEA-LEAF in the context.

To prepare this card, punch the figure 1 in the first column,
and < in the second. Then from the third column onwards use
one column for each of the characters that you wish to declare as
being of this type, and in the column immediately after the last
of these punch >.

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Assuming that an English text is to be concordanced, the following would be a typical sequence for this card:

    1<-'>

A variation of this character type can be useful where a language (eg French) uses accents to distinguish one word from another, but conventionally lists such words consecutively in its dictionaries. Characters declared on this card between round brackets will serve this purpose; they distinguish an accented word from its unaccented homograph, but do not otherwise affect the order of listing. Assuming that the numerals 1-5 have been used to represent the various French diacritics (punched after the letters on which the diacritics occur), the card may read:

    1<-(12345)>

Even if there are no normal characters of this type to be declared, the angle brackets may not be omitted, eg:

    1<(12345)>

If you wish to declare round brackets as characters of Type One, you must do so in the order) (. This can be done independently of their possible use in the normal order to enclose special Type One characters.

If you have no characters of either the normal or the variant type to declare on this card, punch the figure 1 in the first column of the card, and an asterisk * in the second. Leave the rest of the card blank.

CHARACTER SPACING AND ALIGNMENT (CARDS NOS 4-9)

The spacing of the characters to be declared on these six cards will depend upon whether the alphabet of the text language is declared as having a maximum of one, two, or three characters per letter. The user should read pp 13-15 relating to card no 5 (declaration of characters of Type Three) and make his decision on this point before preparing any more "request" cards.

Whatever maximum number of characters per letter is declared on card no 5, that declaration governs also the spacing of characters on cards nos 4 and 6-9. Moreover, the order in which characters are declared on these cards determines their alphabetical status when outputting. In other words, if A is declared at the end of

the alphabet after Z instead of at the beginning, words which
begin with A will be listed after words which begin with Z.

For the purpose of determining alphabetical order, cards Nos 4-9
are regarded as forming a single unit. Therefore, if, for example, a
letter occupies column 25 on one of these cards, column 25 on the
other five cards will normally be left blank. It is permissible
to enter more than one letter in the same column on different
cards, but in this case when the letter with the lower type
number would normally be printed, the letter from the same
column with the higher type number will appear in its place. Several
examples of such character spacing and alignments may be found
in the appendix.

DECLARATION OF CHARACTERS OF TYPE TWO (CARD NO 4)

This card declares characters which the user wishes to be
regarded as significant when the keywords are sorted, but which he
does not wish to see appear in the printed contexts. Such
characters can be useful if one wishes to distinguish between
homographs by pre-editing. Thus ROW ("propel a boat") may be
separated from ROW ("line of objects") and ROW ("heated argument")
by pre-editing the two latter to read ROW£ and ROW$ respectively.
If £ and $ are declared on card no 4, the three words will be
counted and indexed separately, but all three will appear as ROW
when they are printed out in contexts.

To prepare the card, punch the figure 2 in the first column,
and < in the second. In the third column punch 1, 2, or 3,
depending upon the number of characters per letter that you
wish to declare (see under card no 5). Then from column four
onwards use one, two or three columns for each character to be
declared on this card. Where two or three columns per
character are used, the character should appear in the left-most
column of the group. Close your entry with > in the column
immediately following the last utilised column or column group.

Assuming that only the characters £ and $ have been used in
pre-edition, the card will read in one of the following ways:

    2<1£$>

    2<2£ $ >

    2<3£ $ >

depending on the number of columns per character to be employed.

If you do not wish to declare any characters as being of this
type, punch the figure 2 in the first column of the card, and an
asterisk * in the second. Leave the rest of the card blank.

DECLARATION OF CHARACTERS OF TYPE THREE (CARD NO 5)

On this card the user declares the alphabet in which the text
that he wishes to submit is written. The order in which characters
are declared determines the order in which words will be indexed.
Thus for an English text written in the standard manner, the user
will declare the English alphabet from A to Z in its customary
order; but should he, for instance, declare B before A, words
beginning with B will be indexed before words beginning with A.

TREATMENT OF FOREIGN LANGUAGES

Many languages written in the Roman alphabet combine two or even
three characters to form a separate letter. Spanish, for example,
regards CH and LL as letters in their own right (despite the fact
that in Spanish C, H, and L also exist as separate letters); CH
follows C, and LL follows L. In consequence, in a Spanish
dictionary CHURRO comes after COBARDE, and LLANO after LUZ.
Welsh has no less than eight such "double letters", with the
added complication that one of these, NG, falls, not after N, but
after G. Breton takes the matter one stage further by having both
CH and C'H as composite letters, though in this case C by itself
has no place in the language. Concordances carried out upon such
languages by means of normal programs necessarily result in the
indexing of words in quite a different order from that which a
native speaker of the language is used to.

It is in such cases that the new COCOA option of declaring up to
three characters in a particular sequence to represent a single
letter can prove advantageous. The beginning of the Spanish
alphabet can then be declared as A, B, C, CH, D, etc., which is
precisely what a Spaniard finds in his dictionary. Similarly
the Breton alphabet can be declared as A, B, CH, C*H, D, and
so on, again just as in a dictionary, except that here we must
use an asterisk (or some other substitute) for the apostrophe in
C'H because the apostrophe will have appeared elsewhere in our
declaration as a character of Type Zero or Type One. The
appearance of a character as a part of two or more different
letters on the present card is, of course, quite permissible.

If a text has to be transliterated from a non-Roman alphabet, the
transliterator can allow himself up to three Roman letters for
the representation of any letter in the other alphabet, regardless
of their position in the standard Roman alphabet. For instance,
the first eight letters of the Russian alphabet may be declared
as A, B, V, G, D, YE, ZH, Z; words beginning with these letters
will be indexed in this declared order despite the fact that Z is
normally the last letter of the English alphabet or that Y and
E or Z and H are conventionally two separate letters. Such a
transliteration will achieve a very fair phonetic representation

of Russian; only Щ (pronounced "shch") cannot be adequately
represented by three Roman letters, and in fact the other letters
of the Russian alphabet can all be conveniently represented by only
one or two characters each.

COCOA places limits on the user's alphabet declaration of 256
letters at one character per letter, 128 letters at two characters
per letter, or 85 letters at three characters per letter. Practical
limits below these are likely to be imposed by the nature of
the keyboard used, and also by restrictions as to what characters
can actually be read by the computer in question. However, we do
not expect the user to encounter serious difficulties in this
direction unless, of course, the input text has to be transliterated
not from another alphabet but from a syllabary or ideographic
system.

To declare the alphabet, punch the figure 3 in the first column
of the card, and < in the second. In the third column punch
1, 2, or 3, depending upon the number of characters per letter
which you wish to declare.

If you have punched 1, insert the letters of your alphabet in the
desired order from column four onwards, utilising every column,
and in the column immediately following the last letter punch >.

If you have punched 2 in column three, insert the first letter
of your alphabet in columns four and five, the second in columns
six and seven, and so on. Where you wish to insert a letter of
one character only, punch this letter in the first of the two
relevant columns, and leave the other column blank. In the column
immediately following the last letter, punch >. *If you have
declared your alphabet correctly, this > should fall in an even-
numbered column.*

If you have punched 3 in column three, insert the first letter
of your alphabet in columns four, five and six, the second in
columns seven, eight and nine, and so on. Where you wish to
insert a letter of one character only, punch this letter in the
first of the three relevant columns, and leave the other two
columns blank. Where you wish to insert a letter of two
characters only, punch these characters in the first two of the
three relevant columns, and leave the third column blank. In
the column immediately following the last letter, punch >.
*If you have declared your alphabet correctly, the number of the
column containing > will, when divided by three, give a remainder
of one.*

When declaring an alphabet at two or three characters per letter, you may need to use more than one card. This is perfectly in order, but for the purpose of this manual such continuation cards are to be regarded as part and parcel of card no 5. When "card no 5" is in reality more than one card, these should of course be placed in order between card no 4 and card no 6. See Example no 24.

It is written into the COCOA system that the numbers zero to nine inclusive are to be regarded as characters of Type Three; they are placed in ascending order at the beginning of the alphabet. It is, however, open to the user to override this convention by declaring them elsewhere on this card or on any other.

A typical card using one character per letter for the English alphabet might read:

    3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ >

Using two characters per letter for the Welsh alphabet (probably as complicated an example as one could find), the declaration might be:

    3<2A B C CHD DDE F FFG NGH I J K L LLM N O P PHQ R RHS
    T THU V W X Y Z >

Allowing three characters per letter for Breton, the declaration might begin:

    3<3A   B   C   CH C*HD E .....

and end:

      X   Y   Z   >

In theory, as we have said, C by itself does not occur in Breton, nor for that matter do J , K , Q , V , X , or Z occur in Welsh, but unless the user is quite satisfied that his text and references will not contain loan-words from other languages using these letters, he would do best to include them, since undeclared letters are ignored by COCOA.

DECLARATION OF CHARACTERS OF TYPES FOUR, FIVE, SIX AND SEVEN
(CARDS NOS 6, 7, 8 AND 9)

The declarations made on these cards concern the COCOA facility
which permits, among other possibilities, the pre-edition of
forms of irregular verbs with a view to having them indexed
together in the concordance. Suppose that one is dealing
with English and would prefer all forms of the verb TO BE to appear
together in the output. By declaring some sign such as @ on one
of these four cards, and pre-editing all parts of the verb TO BE
in the text with this sign, ie @BE, @AM, @WAS, @WERE, etc.,
one could ensure that all these words were grouped together as
keywords at the head of the concordance, since COCOA is so
designed that words containing any character declared on these
cards have precedence over all words which do not contain such a
character. Within this priority grouping, normal alphabetical
order prevails, so that if the five words listed
above were the only ones so pre-edited, the keyword order
would be AM , BE , IS , WAS , WERE.

Characters punched on any of cards 6 to 9 give this
priority in listing, but characters on card no 6 are not actually
printed in either the keyword or the context; those on card no 7
appear in the context but not in the keyword; those on card no 8
appear in the keyword but not in the context; and those on
card no 9 appear in both keyword and context.

To prepare these cards, punch the figures 4 , 5 , 6 , and
7 in column one of cards 6 , 7 , 8 and 9 respectively,
and in column two in each case punch <. From column three onwards
on each card use one, two or three columns for each character
which you wish to declare on that particular card, and close the
list on each card with > in the next vacant column. If you have
no characters to declare on a certain card, punch the appropriate
number in the first column, put an asterisk * in the second
column, and leave the rest of the card blank.

Let us suppose that the user wishes to employ the facility as
indicated above, but does not wish @ to appear in either the
keywords or the contexts. His declaration for these four cards
will read:

    4<1@>

    5*

    6*

    7*

assuming that he is using one character per letter. If he is using two or three characters per letter, the last three of these cards will remain the same, but the first will read:

    4 <2@ >

or:

    4 <3@   >

respectively.

WORD LENGTH DECLARATION (CARD NO 10)

On this card the user declares the minimum and maximum length of those words in the text which he wishes to be considered as keywords, the minimum figure coming first in the declaration. If, as is usual, he wishes all words in the text to be considered, he will specify the minimum length to be one letter and the maximum to be equal to the length of the longest word in the text. However, since COCOA works more efficiently when the maximum length of the key-words is not very great, the user who has a text consisting mostly of words of less than, for example, twelve letters, but also containing a few words of considerably greater length, might consider running the program twice; the first time with the specification that the word-length must fall between one and twelve letters; the second time that it must fall between thirteen and, say, twenty-five letters.

Users should note that unless the hyphen - is declared to be a character of Type Zero, hyphenated words must be counted as one, not two, words for the purpose of delimiting word-length.

To make the declaration, punch W in the first column of the card, and < in the second. Then insert the minimum word-length, leave one blank column, and insert the maximum word-length. Close the entry with > in the next vacant column.

The card for the first run of our hypothetical example above would be:

    W<1 12>

and for the second run:

    W<13 25>

TEXT SELECTION STATEMENT (CARD NO 11)

This card controls the choice of texts on which the computer is
to operate. It enables the user to obtain concordances, word-
counts, and word-frequency profiles drawn from sub-sections of
the data which he has submitted, and therefore relieves him of
the necessity of physically separating these sub-sections from the
rest of the data-set.

The correct use of this facility can best be explained by
examples. Let us suppose that the user has a data-set containing
all the plays of Shakespeare and of Shaw. For his text references
he has used A to stand for *author*, P for *play*, B for *act* , S for
scene, L for *line* (which is obligatory), and C for *character*.
Therefore his text contains such items as <A SHAKESPEARE>,
<A SHAW> , <P MND> (Midsummer-Night's Dream), <P JOAN>, <B 1>,
<S 7>, <C HAMLET> , <C RAINA>, and so forth.

For our first example, we assume that the user wishes the entire
text of both authors to be processed. Since both A-references,
ie "SHAKESPEARE" and "SHAW", begin with "S", this is very
simple. Punch P in the first column of the card, and < in the
second. In the third column punch the relevant reference
letter (in this case A, which we are using for author), and follow
this immediately with a number indicating how many letters of the
reference are to be taken into account; here it is 1, since it
is the initial S common to both "SHAKESPEARE" and "SHAW" that is
being sought. Punch in the next three columns a closing angle bracket
>, an opening round bracket (, and an opening angle bracket< .
Now insert the A-reference which is being sought, ie S. Close
this part of the entry with a closing angle bracket > and a
closing round bracket) in the next two columns.

Still on the same card, we must now state where we wish the computer
to regard the text as ending. This is because COCOA allows the
user to terminate analysis of the text at a certain point of
reference or after a certain number of lines have been read.
Since we want the entire text processed, we must supply the computer
with a reference which it will not find and a number of lines which
it will in any case not exceed.

In the column immediately following the closing round bracket)
punch <. The next column is for the non-existent terminating
reference, which must, like the previous search reference,
occupy one column only, as declared by the number within the
first brackets on this card. For this "dummy" reference @
will serve very well. Punch > in the next column. Finally
insert a number large enough to represent more lines than the

computer will find in the text; we do not know the precise
combined length of the plays of Shakespeare and Shaw, but
1000000 will probably suffice. The completed card will read:

    P<A1>(<S>)<@>1000000

The above is a very simple text selection example. Let us suppose
now that the second author in the data-set is not Shaw but
Marlowe, and that the text contains references of the type <A MARLOWE>.
If the computer is to analyze the works of both authors, the
previous search for an initial S in the A-reference will no longer
suffice; the machine will stop analyzing when it reaches the
first <A MARLOWE> reference and not begin again unless it finds
another A-reference beginning with S . It must therefore be
instructed to accept also those A-references beginning with M.
To achieve this we alter the card as follows:

    P<A1>(<S><M>)<@>1000000

Back with our original Shakespeare-Shaw text, suppose now that
the user wishes to analyze only the plays of Shakespeare. This
time the computer must be made to distinguish between the two
A-references <A SHAKESPEARE> and <A SHAW> , and since both begin
with "SHA", it must take the first *four* letters into account.
This involves changing the number following A on the card thus.

    P<A4>(<SHAK>)<@@@@>1000000

Such a card is adequate for the purpose, though if all Shaw's
plays appear in the data-set after the last of Shakespeare's,
it means that the computer will search fruitlessly through
Shaw's work looking for <A SHAKESPEARE> references. We can
prevent this by removing the "dummy" terminator @@@@ and
inserting SHAW in its place. As soon as the computer finds the
latter, it will stop searching the text. The card now reads:

    P<A4>(<SHAK>)<SHAW>1000000

Now for something more complex! The user wishes to analyse only
the speeches of Julius Caesar in the play of that name. These
speeches are prefaced by the reference <C CAESAR>. It so happens
that Caesar is also a character in one of Shaw's plays, namely
"Caesar and Cleopatra", so we must take precautions to avoid inclusion
of the speeches of Caesar in this latter play, for these are likewise
prefaced by the reference <C CAESAR>. Given that Shakespeare's
plays appear first in the data-set, we can use the reference of
a character from the next play after "Julius Caesar" as a terminator,
so that analysis of the data-set does not proceed

beyond the end of "Julius Caesar". Supposing that the play
following "Julius Caesar" is "Macbeth", we can use Duncan as
the terminator and punch the card as follows:

    P<C6>(<CAESAR>)<DUNCAN>1000000

But suppose now that it is the speeches of Caesar in "Caesar
and Cleopatra", not Caesar in "Julius Caesar", that the user
wishes to analyse. This time the computer must pass over all
of Shakespeare's plays in order to reach the relevant one of
Shaw's, and we must therefore include a P-reference as well as
a C-reference in order to achieve the correct identification.
Assuming that the reference for "Julius Caesar" is <P JULCAES> and
for "Caesar and Cleopatra" <P CAESCLEO>, we prepare the card
thus:

    P<P8C6>(<CAESCLEOCAESAR>)<JOAN   >1000000

On such a card, accuracy of format is essential. The statement
"P8C6" means that in both the selection reference and in the
termination reference 8 places must be given to the identification
of the play and 6 places to that of the character. Since the
termination reference JOAN (for "Joan of Arc", which we assume
to be the next play) has only 4 characters, the four columns
after it must be left blank to make up the 8 required, and
since we do not need to specify a character reference
termination (the P-reference being sufficient for this purpose),
we must leave 6 more columns blank to achieve the correct format.

The user may wish to specify for analysis certain acts or scenes
within a play. Suppose he requires the last three acts of
"Pericles". He will need to specify both P-references and B-
references (the latter for "acts") as follows:

    P<P3B1>(<PER3><PER4><PER5>)<WT 1>1000000

We assume "The Winter's Tale" (reference <P WT>) to be the
next play, and thus use Act One of that play as a search terminator.
Note that a space must be left between WT and 1 in the terminator
in accordance with the declared P3B1 format. Note also that it
is not enough to specify Acts 3 and 5 and expect Act 4 to be
included; one must specify all three acts if all three are
required. If a single card is of insufficient length to carry all
the specifications, continuation cards can be used as for card
no 5, treating the first column of the continuation card as if it
were column 81 of the original card.

If the user intends to request the author's name as part of a context reference (see pp 21-22 below); he must include an author specification on this card and follow it with a zero to indicate that it is a dummy specification, eg

P<AOP3B1>(<PER3><PER4><PER5>)<WT 1>1000000

There is one final feature requiring explanation. In all the above cases we have begun the card with P in the first column. The effect of this is that as the computer scans the text, it prints out any references it encounters which are of the type mentioned in the format declaration immediately following the P. Thus in our last example on the previous page, all changes of play and act reference would be listed as they were encountered among the data. This allows the user to trace the search made by the computer, but if he feels that this is unnecessary and constitutes an undesirable increase in the bulk of the output, he can suppress this feature by punching Q instead of P in column 1. Context references in any concordance output will still be printed.

CONCORDANCE OR WORDCOUNT REQUEST (CARD NO 12)

This card controls the output of COCOA. We shall explain its operation by means of examples, assuming the same text referencing conventions as for card no 11.

A possible version of this card would be as follows:

C<A4P3B1S2L4>60/10 C(A Z/1 99999)

The C in the first column signifies that the user requires a concordance in which the keywords are listed in alphabetical order, with their occurrences listed under each of them in the order in which they are found in the text. The format specification

<A4P3B1S2L4>

means that each line of context is to be accompanied by a reference allowing up to 4 characters for the name of the author, 3 for the title of the play, 1 for the act, 2 for the scene, and 4 for the line number. For instance, the line "To be or not to be, that is the question" would be given the reference SHAK HAM 3 1 56. The 60 immediately following means that up to 60 characters of context surrounding the keyword are to be printed. The / restricts this by specifying that if the boundary between one line and another falls within this number of characters, the context shall not be printed

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beyond that boundary. Where space is vacant on the left of the keyword for this reason, the context to the right of the keyword may be extended to fill the space on the extreme left; the 10 following the / means that 10 spaces are to be left clear between the end of this "overflow" and the beginning of the left context. The C in the next space but one indicates that the contexts are to be aligned on the centre of the page rather than on the left. Within the round brackets, A Z (the space between the two is essential!) means that all words whose first letter falls within the alphabetic range A to Z (ie all words) are to be accepted as keywords, with the numbers 1 99999 after the oblique stroke signifying the restriction that the frequency of occurrence of such words must fall within the range 1 to 99999. In practice the setting of so high a figure as 99999 implies no restriction whatever on frequency.

REFERENCE FORMAT

The effect of changing the reference format specification can easily be deduced from the examples given in the Appendix, and here we shall simplify the rest of our declarations by including only a line specification of the type which one might use in analysing a long poem or a prose tract. If we rewrite the above card as:

C<L5>60/10(A Z/1 99999)

we shall now obtain simply the line number alongside each line of context.

If the user is working with more than one text and requires different references depending upon which text is involved, the declaration:

C<1,2(A4P3B1S2L4)3(L5)>60/10 C(A Z/1 99999)

will give him the long, detailed reference for texts one and two, and the simple line-reference for text three.

TYPES OF CONCORDANCES

Changing the C in the first column to E causes the keywords to be listed in *reverse* alphabetical order, ie starting from the end of the word. This is useful for the study of morphology or of rhyme-schemes. If L is punched in the first column, the keywords

are listed in normal alphabetical order, but the contexts listed
under each keyword are ordered not according to their place in
the text but on the alphabetical order of the context to the left
of the keyword. The letter R in the first column similarly
produces listings ordered on the context to the right of the keyword.
Examples of these types of output can be found in the Appendix,
pp 40 & 41 respectively.

TYPES OF WORDCOUNT

The letter F in the first column followed by the figures 1, 2,
3, or 4 within angle brackets obtains a word-count in
alphabetic order, a word-count in reverse alphabetic order,
a word-count in frequency order, and a word-frequency profile
respectively. Since the part of our previous declarations
represented by 60/10 is not relevant here, the card might read

    F<1>(A Z/1 99999)

The declaration:

    F<1,3,4>(A Z/1 99999)

obtains the first, third, and fourth of these options in one
run; the second option cannot be combined with either the
first or the third option, but with this proviso, all other
combinations of two or three options are permissible.

CONTEXT WIDTH

Returning to our concordancing examples, the figure 60 may be
varied to control the amount of context printed, though the
latter may turn out to be slightly greater or less than the
width specified. Up to two widths of the line-printer may
be used for each context, and since line-printer widths are
variable, the user should ascertain the dimensions of the one
which will produce his output. He should also note that the
length of context he specifies should leave room for the text
references, which are *not* included in the context length
specification.

It is also possible to specify a zero context width. For example

    C<L5>0/0 C(A Z/1 9999)

This request would obtain only references and no context. This feature
provides, as it were, a more extensive word-count and may be parti-
cularly valuable as a guide to pre-editing the data or to correcting
typing errors, or to produce an index.

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The / following the 60 may also be replaced by other symbols limiting
the scope of the context, for instance:

C<L5>60.10 C(A Z/1 99999)

would extend the context for the whole length of the sentence
in which the keyword occurred, subject to there being no full
stop used as an abbreviation mark within the sentence, and
also to the limitation imposed by the preceding 60 or whatever
other figure the user has inserted. Similarly

C<L5>60,10 C(A Z/1 99999)

would extend the context forward and backward until a comma was
met. If one does not wish to restrict the context in this way,
one can insert a character not to be found in the text, eg.

C<L5>60@10 C(A Z/1 99999)

The 10 signifies that ten spaces are to be left blank between
the beginning of the left context and the end of the left context
and the end of any overflow from the right context which may be
inserted on the extreme left. If the user does not wish
for this overflow, he may effectively suppress it by increasing
the number of spaces to be left blank, eg

C<L5>60/60 C(A Z/1 99999)

CONTEXT ALIGNMENT

The C immediately before the brackets signifies that the contexts
are to be so aligned that the keyword appears each time in the
centre of the context. Should the user prefer the context to be
set as far as left as possible, irrespective of the resulting
position of the keyword, he may substitute L for C, thus:

C<L5>60/10 L(A Z/1 99999)

OUTPUT RESTRICTED BY ALPHABET

Within the brackets, A Z in practice imposes no restriction at
all on the selection of keywords, but

C<L5>60/10 C(A M/1 99999)

would restrict keywords to those beginning with one of the
letters A-M and likewise

C<L5>60/10 C(PE RZ/1 99999)

would allow only those falling between PE and the end of the
Rs.

If characters of Types 4-7 are included in the User's Request,
and he wishes only words containing such characters to be
considered, he can achieve this aim simply by omitting to declare
an alphabet range, thus:

C<L5>60/10 C(/1 99999)

OUTPUT RESTRICTED BY FREQUENCY RANGE

The numbers after the oblique stroke can be used to limit the
selection of keywords according to their frequency. For instance,

C<L5>60/10 C(A Z/2 25)

would accept as keywords only those words occurring more than once
but not more than 25 times. One can of course combine this with
an effective alphabetic restriction, eg

C<L5>60/10 C(L N/2 25)

so that only words beginning with L, M, or N and occurring
between 2 and 25 times would be accepted as keywords.

LEMMATISATION

There are other output instructions which can be inserted in
the brackets. An asterisk * followed by a list of words
separated only by commas indicates that these words are to be
accepted as keywords and listed together with the first of the
series at their head and occupying its appropriate alphabetical
position within the concordance. Thus

C<L5>60/10 C(A Z *BE,IS,AM,ARE *GO,WENT,GONE/1 99999)

means that IS, AM, and ARE should be listed immediately after
BE, and that WENT and GONE should come immediately
after GO.

CO-OCCURRENCE

A pound sterling sign £ followed by a word, a number, and then
another word, means that where this pair of words occurs *in the
order given* with not more than the stated number of other words
intervening, then the contexts of these co-occurrences should be
listed after and separately from the individual occurrences
of the first word of the pair. Thus

        C<L5>60/10 C(A Z £COMMON 0 SENSE £CULTURE 5 LANGUAGE
        £LANGUAGE 5 CULTURE/1 99999)

means that all occurrences of the composite expression COMMON
SENSE should be singled out, and also all co-occurrences of the
words LANGUAGE and CULTURE, whichever comes first, if not more
than 5 other words separate them. Note that a continuation
card can be used if necessary.

The last two features mentioned can be combined as follows:

        C<L5>60/10 C(A Z *BE,IS,AM,ARE * GO,WENT,GONE £COMMON 0 SENSE
        £CULTURE 5 LANGUAGE £LANGUAGE 5 CULTURE/1 99999)

IN/EXCLUSION LIST OF SPECIFIED WORDS

The system also allows the concordance to be limited by the
specific inclusion or exclusion of certain words. Instead of
the round brackets and their contents, we punch angle brackets
and list within them the words to be included in or excluded
from the concordance. If the opening angle bracket < appears
to the left of the list, and the closing angle bracket > to the right,
the words in the list are to be included; if the brackets
appear in the reverse order, *all except* these words are to be
included. Thus

        C<L5>60/10 C<SATAN DEVIL BEELZEBUB LUCIFER>

means that only these four words are to be allowed as keywords; while

        C<L5>60/10 C>A THE AND BUT OF<

means that all words in the text may be accepted as keywords except
for the five listed.

The facilities introduced by * and £ may also be used within angle
brackets if only the words and groups so designated are to be

concordanced. As before, the * and £ facilities may be used in the same declaration, eg:

    C<L5>60/10 C<*BE,IS,AM,ARE *GO,WENT,GONE £COMMON 0 SENSE
    £CULTURE 5 LANGUAGE £LANGUAGE 5 CULTURE>

but they cannot be combined with the inclusion or exclusion of specified single words.

LIST OF SUFFIXES

Lastly, it is possible to specify as keywords all words ending with particular suffixes. This is also done within angle brackets, each suffix being preceded by an "equal" sign, eg:

    C<L5>60/10 C<=ED =ES =ING>

This facility cannot be combined with any other; nor can the angle brackets be reversed to exclude words ending with particular suffixes.

END OF USER'S REQUESTS (CARD NO 13)

This card closes the list of declarations. Punch the "plus" sign + in column one, and leave the rest of the card blank.

E R R O R   D I A G N O S T I C S

ERROR IN CHARACTER TYPE DECLARATION

: The > terminating each character type declaration card does not fall in the appropriate column (cfr. manual p14).

ERROR IN REFERENCE DECLARATION

: There is an error in your reference declaration (card 11). Such an error is most likely in the case of multiple reference declarations (ie different references for each text). Check the correct format on pp 21-22.

INCORRECT COMBINATION OF WORDCOUNT OPTIONS :

You cannot obtain the combination of wordcount options requested in a single run. The permissible combinations are listed on p 23.

IN/EXCLUSION LIST TOO LONG

: The total number of characters in an in/exclusion list should not exceed 1024.

INVALID START TO LINE

: The first character of each program card (other than continuation cards) must start with one of the characters 01234567WPQFCELR and *in that order*.

LIMIT OF FREQUENCY PROFILE REACHED

: Your text is too long to do a frequency profile in a single run. In this case it will be necessary to submit two runs, limiting the frequency range (eg run 1: 1-50; run 2: 50-10000).

NO CHARACTER OPTION DECLARED : Each card of the character
type declarations (cards
4-9) if not introduced by
* must contain a number
(1, 2, or 3) denoting
how many characters are to
be considered as a single
unit.

NO < OR * IN COLUMN TWO : Each user's program card
should contain one of these
symbols in the second column.

NO SUITABLE TEXT FOUND FOR ANALYSIS : This is output when no
match is found between the
text selection statement in
the user's program (card 11)
and any references in the
text. As a general rule,
try to have a single
reference to cover your
entire text, unless dis-
continuous parts are to be
selected.

NO SUITABLE WORDS FOUND IN SELECTED TEXT : This is output after the
text submitted for analysis
has been entirely read and
no keywords have been selected.
This diagnostic may be genuine
if the user's requests have
been too stringent, but more
likely it is caused by a
fault in the user's program.
Check carefully alphabet
range and frequency limits,
particularly correct
spacing and herald
characters (ie, £, *, =)
when requesting variants or
pairs.

ONLY 10 MASTER VARIANTS ALLOWED : Reduce the number of master
variants (keywords) to 10.

ONLY 32 PAIRS ALLOWED

: The number of ordered pairs of words to be found must be reduced to this limit.

ONLY 21 SUFFIXES ALLOWED

: The user must decide which are the least important suffixes and reduce his list to 21 suffixes.

PAIR NUMBER n IS TOO LONG

: The nth ordered pair of words has a total length exceeding 66 characters.

POSITION OF KEYWORD OMITTED

: You have not stated whether you wish the context to be centred round the keyword (C) or left aligned (L). cfr p 24.

VARIANT STRING n IS TOO LONG

: The product of (number of component words) X (maximum word length) exceeds 146. Reduce word length or number of variants.

db

EXAMPLES

The following examples illustrate the type of output
which can be obtained from COCOA by a variety of
User's Requests.   The texts themselves are included
along with the requests and output, except that for
Examples 1-10 it has not been practicable to print the
whole of the text involved, owing to its considerable
length.   Similarly, it has proved necessary in most
cases to select from the total output of each example
a moderately sized section which illustrates the most
important aspects of the request.

(We wish to thank users for allowing us to borrow some
of their texts to illustrate this manual; particularly
Mr M G Farringdon from University College of Swansea
for providing the D H Lawrence text.)

<T TEXT>
<A LAWRENCE>
<E 1950>
<P 11>

((ST MAWR))

<L 2>
LOU WITT HAD HAD HER OWN WAY SO LONG,THAT BY THE AGE OF
TWENTY-FIVE SHE DID'NT KNOW WHERE SHE WAS.HAVING ONE'S OWN
WAY LANDED ONE COMPLETELY AT SEA.
    TO BE SURE FOR A WHILE SHE HAD FAILED IN HER GRAND LOVE AFFAIR
WITH RICO.AND THEN SHE HAD HAD SOMETHING REALLY TO DESPAIR
ABOUT.BUT EVEN THAT HAD WORKED OUT AS SHE WANTED.RICO HAD
COME BACK TO HER,AND WAS DUTIFULLY MARRIED TO HER.AND NOW,
WHEN SHE WAS TWENTY-FIVE AND HE WAS THREE MONTHS OLDER,THEY
WERE A CHARMING MARRIED COUPLE.HE FLIRTED WITH OTHER WOMEN
STILL,TO BE SURE.HE WOULDN'T BE THE HANDSOME RICO IF HE DIDN'T.
BUT SHE HAD 'GOT' HIM.OH YES!YOU HAD ONLY TO SEE THE UNEASY
BACKWARD GLANCE AT HER,FROM HIS BIG BLUE EYES:JUST LIKE A HORSE
THAT IS EDGING AWAY FROM ITS MASTER:TO KNOW HOW COMPLETELY HE
WAS MASTERED.
SHE,WITH HER ODD LITTLE MUSEAU,NOT EXACTLY PRETTY,BUT VERY
ATTRACTIVE;AND HER QUAINT AIR OF PLAYING AT BEING WELL-BRED,IN
A SORT OF CHARADE GAME;AND HER QUEER FAMILIARITY WITH FOREIGN
CITIES AND FOREIGN LANUAGES;AND THE LURKING SENSE OF BEING AN
OUTSIDER EVERYWHERE,LIKE A SORT OF GIPSY,WHO IS AT HOME ANY-+
WHERE/ AND NOWHERE:ALL THIS MADE UP HER CHARM AND HER FAILURE.
SHE DIDN'T QUITE BELONG.
    OF COURSE SHE WAS AMERICAN: LOUISIANA FAMILY,MOVED DOWN
TO TEXAS.AND SHE WAS MODERATELY RICH,WITH NO CLOSE RELATIONS
EXCEPT HER MOTHER.BUT SHE HAD BEEN SENT TO SCHOOL IN FRANCE
WHEN SHE WAS TWELVE,AND SINCE SHE HAD FINISHED SCHOOL,SHE HAD
DRIFTED FROM PARIS TO PALERMO,BIARRITZ TO VIENNA AND BACK VIA
MUNICH TO LONDON,THEN DOWN AGAIN TO ROME.ONLY FLEETING TRIPS
TO HER AMERICA.
    SO WHAT SORT OF AMERICAN WAS SHE,AFTER ALL?
    AND WHAT SORT OF EUROPEAN WAS SHE EITHER?SHE DIDN'T 'BELONG'
ANYWHERE.PERHAPS MOST OF ALL IN ROME,AMONG THE ARTISTS AND
THE EMBASSY PEOPLE.
    IT WAS IN ROME SHE HAD MET RICO.HE WAS AN AUSTRALIAN,SON
<P 12><L 1>
OF A GOVERNMENT OFFICIAL IN MELBOURNE,WHO HAD BEEN MADE A
BARONET.SO ONE DAY RICO WOULD BE SIR HENRY,AS HE WAS THE
ONLY SON.MEANWHILE HE FLOATED ROUND EUROPE ON A VERY SMALL
ALLOWANCE - HIS FATHER WASN'T RICH IN CAPITAL - AND WAS BEING
AN ARTIST.
    THEY MET IN ROME WHEN THEY WERE TWENTY-TWO,AND HAD A
LOVE AFFAIR IN CAPRI.RICO WAS HANDSOME,ELEGANT,BUT MOSTLY
HE HAD SPOTS OF PAINT ON HIS TROUSERS AND HE RUINED A NECKTIE
PULLING IT OFF.HE BEHAVED IN A MOST FLORIDLY ELEGANT FASHION,

FASCINATING TO THE ITALIANS.BUT AT THE SAME TIME HE WAS CANNY AND
SHREWD AND SENSIBLE AS ANY YOUNG POSER COULD BE AND,ON PRIN-+
CIPLE/ GOOD-HEARTED,ANXIOUS.HE WAS ANXIOUS FOR HIS FUTURE,
AND ANXIOUS FOR HIS PLACE IN THE WORLD,HE WAS POOR,AND SUDDENLY
WASTEFUL IN SPITE OF ALL HIS TENSION OF ECONOMY,AND SUDDENLY
SPITEFUL IN SPITE OF ALL HIS INGRATIATING EFFORTS,AND SUDDENLY UN-+
GRATEFUL/ IN SPITE OF ALL HIS BURDEN OF GRATITUDE,AND SUDDENLY RUDE
IN SPITE OF ALL HIS GOOD MANNERS,AND SUDDENLY DETESTABLE IN SPITE
OF ALL HIS SUAVE,COURTIER-LIKE AMIABILITY.
     HE WAS FASCINATED BY LOU'S QUAINT APLOMB,HER EXPERIENCES,
HER'KNOWLEDGE',HER GAMINE KNOWINGNESS,HER ALONENESS,HER
PRETTY CLOTHES THAT WERE SOMETIMES AN UTTER FAILURE,AND HER
SOUTHERN 'DRAWL' THAT WAS SOMETIMES SO IRRITATING,THAT SING-+
SONG/ WHICH WAS SO AMERICAN.YET SHE USED NO AMERICANISMS AT
ALL,EXCEPT WHEN SHE LAPSED INTO HER ODD SPASMS OF ACID IRONY,
WHEN SHE WAS VERY AMERICAN INDEED!
     AND SHE WAS FASCINATED BY RICO.THEY PLAYED TO EACH OTHER
LIKE TWO BUTTERFLIES AT ONE FLOWER.THEY PRETENDED TO BE VERY POOR
IN ROME - HE WAS POOR: AND VERY RICH IN NAPLES.EVERYBODY
STARED THEIR EYES OUT AT THEM.AND THEY HAD THAT LOVE AFFAIR IN
CAPRI.
     BUT THEY REACTED BADLY ON EACH OTHER'S NERVES.SHE BECAME ILL.
HER MOTHER APPEARED.HE COULDN'T STAND MRS WITT,AND MRS
WITT COULDN'T STAND HIM.THERE WAS A TERRIBLE FORTNIGHT.THEN
LOU WAS POPPED INTO A CONVENT NURSING-HOME IN UMBRIA,AND
RICO DASHED OFF TO PARIS.NOTHING WOULD STOP HIM.HE MUST GO
BACK TO AUSTRALIA.
     HE WENT TO MELBOURNE,AND WHILE THERE HIS FATHER DIED,LEAVING
HIM A BARONET'S TITLE AND AN INCOME STILL VERY MODERATE.LOU
<P 13><L 1>
VISITED AMERICA ONCE MORE,AS THE STRANGEST OF STRANGE LANDS TO
HER.SHE CAME AWAY DISHEARTENED,PANTING FOR EUROPE,AND OF
COURSE,DOOMED TO MEET RICO AGAIN.
THEY COULDN'T GET AWAY FROM ONE ANOTHER,EVEN THOUGH IN THE
COURSE OF THEIR RATHER RESTRAINED CORRESPONDENCE HE INFORMED HER
THAT HE WAS 'PROBABLY' MARRYING A VERY DEAR GIRL,FRIEND OF HIS
CHILDHOOD,ONLY DAUGHTER OF ONE OF THE OLDEST FAMILIES IN VICTORIA,
NOT SAYING MUCH.
     HE DIDN'T COMMIT THE PROBABILITY,BUT REAPPEARED IN PARIS,
WANTING TO PAINT HIS HEAD OFF,TERRIBLY INSPIRED BY CEZANNE AND
BY OLD RENOIR.HE DINED AT THE ROTONDE WITH LOU AND MRS WITT,
WHO,WITH HER QUEER DEMOCRATIC NEW ORLEANS SORT OF CONCEIT
LOOKED ROUND THE DRINKING-HALL WITH SAVAGE CONTEMPT,AND AT
RICO AS PART OF THE SHOW.'CERTAINLY',SHE SAID,'WHEN THESE POEPLE
HERE HAVE GOT ANY MONEY,THEY FALL IN LOVE ON A FULL STOMACH.
AND WHEN THEY'VE GOT NO MONEY,THEY FALL IN LOVE WITH A FULL
POCKET.I NEVER WAS IN A MORE DISGUSTING PLACE.THEY TAKE THEIR
LOVE LIKE SOME PEOPLE TAKE AFTER-DINNER PILLS.'
     SHE WOULD WATCH WITH HER ARCHING,FULL,STRONG GREY EYES,SIT-+
TING/ THERE ERECT AND SILENT IN HER WELL-BOUGHT AMERICAN CLOTHES.
AND THEN SHE WOULD DELIVER SOME SUCH CHARGE OF GRAPE-SHOT.
RICO ALWAYS WRITHED.

EXAMPLE 1

The Standard User's Option, here used to give a full, centrally
aligned concordance with left overflow suppressed.

```
72
0<,.;:?!>
1<'->
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>:
4*
5*
6*
7*
W<1 24>.
P<T4>(<TEXT>)<ZZZZ>1000000
C<E5P3L3>100#100 C(A Z/1 99999)
+
```

1950	11	5	WAY LANDED ONE COMPLETELY AT SEA. TO BE SURE FOR A WHILE SHE HAD FAILED IN HER GRAND LOVE AFFAIR WITH
1950	11	10	TWENTY-FIVE AND HE WAS THREE MONTHS OLDER,THEY WERE A CHARMING MARRIED COUPLE.HE FLIRTED WITH OTHER WOME
1950	11	13	WARD GLANCE AT HER,FROM HIS BIG BLUE EYES:JUST LIKE A HORSE THAT IS EDGING AWAY FROM ITS MASTER:TO KNOW
1950	11	18	AND HER QUAINT AIR OF PLAYING AT BEING WELL-BRED,IN A SORT OF CHARADE GAME;AND HER QUEER FAMILIARITY WIT
1950	11	20	LURKING SENSE OF BEING AN OUTSIDER EVERYWHERE,LIKE A SORT OF GIPSY,WHO IS AT HOME ANY-WHERE AND NOWHER
1950	12	1	ROME SHE HAD MET RICO.HE WAS AN AUSTRALIAN,SON OF A GOVERNMENT OFFICIAL IN MELBOURNE,WHO HAD BEEN MADE
1950	12	1	GOVERNMENT OFFICIAL IN MELBOURNE,WHO HAD BEEN MADE A BARONET.SO ONE DAY RICO WOULD BE SIR HENRY,AS HE W
1950	12	3	S THE ONLY SON.MEANWHILE HE FLOATED ROUND EUROPE ON A VERY SMALL ALLOWANCE - HIS FATHER WASN'T RICH IN C
1950	12	6	THEY MET IN ROME WHEN THEY WERE TWENTY-TWO,AND HAD A LOVE AFFAIR IN CAPRI.RICO WAS HANDSOME,ELEGANT,BUT
1950	12	8	HE HAD SPOTS OF PAINT ON HIS TROUSERS AND HE RUINED A NECKTIE PULLING IT OFF.HE BEHAVED IN A MOST FLORID
1950	12	9	ND HE RUINED A NECKTIE PULLING IT OFF.HE BEHAVED IN A MOST FLORIDLY ELEGANT FASHION, FASCINATING TO THE
1950	12	30	MRS WITT,AND MRS WITT COULDN'T STAND HIM.THERE WAS A TERRIBLE FORTNIGHT.THEN LOU WAS POPPED INTO A CONV
1950	12	31	E WAS A TERRIBLE FORTNIGHT.THEN LOU WAS POPPED INTO A CONVENT NURSING-HOME IN UMBRIA,AND RICO DASHED OFF
1950	12	35	LBOURNE,AND WHILE THERE HIS FATHER DIED,LEAVING HIM A BARONET'S TITLE AND AN INCOME STILL VERY MODERATE.
1950	13	6	NCE HE INFORMED HER THAT HE WAS 'PROBABLY' MARRYING A VERY DEAR GIRL,FRIEND OF HIS CHILDHOOD,ONLY DAUGHT
1950	13	15	POEPLE HERE HAVE GOT ANY MONEY,THEY FALL IN LOVE ON A FULL STOMACH. AND WHEN THEY'VE GOT NO MONEY,THEY F
1950	13	16	ND WHEN THEY'VE GOT NO MONEY,THEY FALL IN LOVE WITH A FULL POCKET.I NEVER WAS IN A MORE DISGUSTING PLACE
1950	13	17	THEY FALL IN LOVE WITH A FULL POCKET.I NEVER WAS IN A MORE DISGUSTING PLACE.THEY TAKE THEIR LOVE LIKE SO

1   ABOUT

| 1950 | 11 | 7 | CO.AND THEN SHE HAD HAD SOMETHING REALLY TO DESPAIR ABOUT.BUT EVEN THAT HAD WORKED OUT AS SHE WANTED.RIC |

1   ACID

| 1950 | 12 | 21 | T ALL,EXCEPT WHEN SHE LAPSED INTO HER ODD SPASMS OF ACID IRONY, WHEN SHE WAS VERY AMERICAN INDEED! AND |

3   AFFAIR

1950	11	5	E SURE FOR A WHILE SHE HAD FAILED IN HER GRAND LOVE AFFAIR WITH RICO.AND THEN SHE HAD HAD SOMETHING REAL
1950	12	7	ET IN ROME WHEN THEY WERE TWENTY-TWO,AND HAD A LOVE AFFAIR IN CAPRI.RICO WAS HANDSOME,ELEGANT,BUT MOSTLY
1950	12	26	TARED THEIR EYES OUT AT THEM.AND THEY HAD THAT LOVE AFFAIR IN CAPRI. BUT THEY REACTED BADLY ON EACH OTH

1   AFTER

| 1950 | 11 | 29 | TO HER AMERICA. SO WHAT SORT OF AMERICAN WAS SHE,AFTER ALL? AND WHAT SORT OF EUROPEAN WAS SHE EITHER |

                              1   AFTERDINNER

1950 13 18   NG PLACE.THEY TAKE THEIR LOVE LIKE SOME PEOPLE TAKE AFTER-DINNER PILLS.' SHE WOULD WATCH WITH HER ARCHI

                              2   AGAIN

1950 11 27   Z TO VIENNA AND BACK VIA MUNICH TO LONDON.THEN DOWN AGAIN TO ROME.ONLY FLEETING TRIPS TO HER AMERICA. S
1950 13 3   ANTING FOR EUROPE,AND OF COURSE,DOOMED TO MEET RICO AGAIN. THEY COULDN'T GET AWAY FROM ONE ANOTHER,EVEN

                              1   AGE

1950 11 2   ) LOU WITT HAD HAD HER OWN WAY SO LONG,THAT BY THE AGE OF TWENTY-FIVE SHE DID'NT KNOW WHERE SHE WAS,HAV

                              1   AIR

1950 11 17   T EXACTLY PRETTY,BUT VERY ATTRACTIVE;AND HER QUAINT AIR OF PLAYING AT BEING WELL-BRED,IN A SORT OF CHARA

                              9   ALL

1950 11 20   SORT OF GIPSY,WHO IS AT HOME ANY-WHERE AND NOWHERE;ALL THIS MADE UP HER CHARM AND HER FAILURE. SHE DIDN
1950 11 29   AMERICA.   SO WHAT SORT OF AMERICAN WAS SHE,AFTER ALL? AND WHAT SORT OF EUROPEAN WAS SHE EITHER?SHE D
1950 11 31   EITHER?SHE DIDN'T 'BELONG' ANYWHERE.PERHAPS MOST OF ALL IN ROME,AMONG THE ARTISTS AND THE EMBASSY PEOPLE
1950 12 13   WORLD,HE WAS POOR,AND SUDDENLY WASTEFUL IN SPITE OF ALL HIS TENSION OF ECONOMY,AND SUDDENLY SPITEFUL IN
1950 12 14   ENSION OF ECONOMY,AND SUDDENLY SPITEFUL IN SPITE OF ALL HIS INGRATIATING EFFORTS,AND SUDDENLY UN-GRATEFU
1950 12 14   ATING EFFORTS,AND SUDDENLY UN-GRATEFUL IN SPITE OF ALL HIS BURDEN OF GRATITUDE,AND SUDDENLY RUDE IN SPI
1950 12 15   S BURDEN OF GRATITUDE,AND SUDDENLY RUDE IN SPITE OF ALL HIS GOOD MANNERS,AND SUDDENLY DETESTABLE IN SPIT
1950 12 16   IS GOOD MANNERS,AND SUDDENLY DETESTABLE IN SPITE OF ALL HIS SUAVE,COURTIER-LIKE AMIABILITY. HE WAS FASC
1950 12 21   ICH WAS SO AMERICAN.YET SHE USED NO AMERICANISMS AT ALL,EXCEPT WHEN SHE LAPSED INTO HER ODD SPASMS OF AC

                              1   ALLOWANCE

1950 12 4   N.MEANWHILE HE FLOATED ROUND EUROPE ON A VERY SMALL ALLOWANCE - HIS FATHER WASN'T RICH IN CAPITAL - AND

                              1   ALONENESS

1950 12 18   ERIENCES, HER'KNOWLEDGE',HER GAMINE KNOWINGNESS,HER ALONENESS,HER PRETTY CLOTHES THAT WERE SOMETIMES AN

1   ALWAYS

1950 13 21   WOULD DELIVER SOME SUCH CHARGE OF GRAPE-SHOT. RICO ALWAYS WRITHED.   MRS WITT HATED PARIS: 'THIS SORDID

2   AMERICA

1950 11 28   ,THEN DOWN AGAIN TO ROME.ONLY FLEETING TRIPS TO HER AMERICA. SO WHAT SORT OF AMERICAN WAS SHE.AFTER ALL
1950 13   1   ITLE AND AN INCOME STILL VERY MODERATE.LOU VISITED AMERICA ONCE MORE,AS THE STRANGEST OF STRANGE LANDS

5   AMERICAN

1950 11 22   LURE. SHE DIDN'T QUITE BELONG.   OF COURSE SHE WAS AMERICAN: LOUISIANA FAMILY,MOVED DOWN TO TEXAS.AND S
1950 11 29   Y FLEETING TRIPS TO HER AMERICA.   SO WHAT SORT OF AMERICAN WAS SHE,AFTER ALL? AND WHAT SORT OF EUROPE
1950 12 20   OMETIMES SO IRRITATING.THAT SING-SONG WHICH WAS SO AMERICAN.YET SHE USED NO AMERICANISMS AT ALL,EXCEPT
1950 12 22   NTO HER ODD SPASMS OF ACID IRONY, WHEN SHE WAS VERY AMERICAN INDEED! AND SHE WAS FASCINATED BY RICO,THE
1950 13 19   SIT-TING THERE ERECT AND SILENT IN HER WELL-BOUGHT AMERICAN CLOTHES. AND THEN SHE WOULD DELIVER SOME SU

1   AMERICANISMS

1950 12 20   AT SING-SONG WHICH WAS SO AMERICAN.YET SHE USED NO AMERICANISMS AT ALL,EXCEPT WHEN SHE LAPSED INTO HER

1   AMIABILITY

1950 12 16   DETESTABLE IN SPITE OF ALL HIS SUAVE,COURTIER-LIKE AMIABILITY. HE WAS FASCINATED BY LOU'S QUAINT APLOM

1   AMONG

1950 11 31   IDN'T 'BELONG' ANYWHERE.PERHAPS MOST OF ALL IN ROME,AMONG THE ARTISTS AND THE EMBASSY PEOPLE. IT WAS IN

5   AN

1950 11 19   AND FOREIGN LANUAGES:AND THE LURKING SENSE OF BEING AN OUTSIDER EVERYWHERE,LIKE A SORT OF GIPSY,WHO IS A
1950 11 33   Y PEOPLE.   IT WAS IN ROME SHE HAD MET RICO.HE WAS AN AUSTRALIAN,SON OF A GOVERNMENT OFFICIAL IN MELBO
1950 12   5   - HIS FATHER WASN'T RICH IN CAPITAL - AND WAS BEING AN ARTIST. THEY MET IN ROME WHEN THEY WERE TWENTY-T
1950 12 19   ER ALONENESS,HER PRETTY CLOTHES THAT WERE SOMETIMES AN UTTER FAILURE,AND HER SOUTHERN 'DRAWL' THAT WAS S
1950 12 35   E HIS FATHER DIED,LEAVING HIM A BARONET'S TITLE AND AN INCOME STILL VERY MODERATE.LOU VISITED AMERICA O

EXAMPLE 2

Standard centrally aligned concordance of all words occurring
more than once and not more than 100 times, and having not more
than 15 letters. Forms of the verb "to be" output together.
Concordance restricted to first 60 lines of text. Left overlap
suppressed.


```
72
0<,.;:?!>.
1<'->.
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>:
4*
5*
6*
7*
W<1 15>
P<A2>(<LA>)<XX>60
C<P3L3>80.100 C(A Z *BE,IS,WAS,WERE,BEING,AM/2 100)
+
```

```
11   8                         RICO HAD COME BACK TO HER,AND WAS DUTIFULLY MARRIED TO
11  26 PARIS TO PALERMO,BIARRITZ TO VIENNA AND BACK VIA MUNICH TO LONDON,THEN DOWN AGAI
```

5   BE

```
11   5                              TO BE SURE FOR A WHILE SHE HAD FAILED IN HE
11  11                   HE WOULDN'T BE THE HANDSOME RICO IF HE DIDN'T.
11  11    HE FLIRTED WITH OTHER WOMEN STILL,TO BE SURE.
12   2                  SO ONE DAY RICO WOULD BE SIR HENRY,AS HE WAS THE ONLY SON.
12  11 D AND SENSIBLE AS ANY YOUNG POSER COULD BE AND,ON PRIN-CIPLE  GOOD-HEARTED,ANXIO
```

3   BE   BEING

```
11  17 ACTIVE;AND HER QUAINT AIR OF PLAYING AT BEING WELL-BRED,IN A SORT OF CHARADE GAM
11  19 REIGN LANUAGES;AND THE LURKING SENSE OF BEING AN OUTSIDER EVERYWHERE,LIKE A SORT
12   4 FATHER WASN'T RICH IN CAPITAL - AND WAS BEING AN ARTIST.
```

2   BE   IS

```
11  14 IS BIG BLUE EYES;JUST LIKE A HORSE THAT IS EDGING AWAY FROM ITS MASTER;TO KNOW H
11  20 DER EVERYWHERE,LIKE A SORT OF GIPSY,WHO IS AT HOME ANY-WHERE  AND NOWHERE;ALL TH
```

21   BE   WAS

```
11   3 F TWENTY-FIVE SHE DIDN'T KNOW WHERE SHE WAS.
11   8          RICO HAD COME BACK TO HER,AND WAS DUTIFULLY MARRIED TO HER.
11   9                 AND NOW, WHEN SHE WAS TWENTY-FIVE AND HE WAS THREE MONTHS
11   9 ND NOW, WHEN SHE WAS TWENTY-FIVE AND HE WAS THREE MONTHS OLDER,THEY WERE A CHARM
11  15 OM ITS MASTER;TO KNOW HOW COMPLETELY HE WAS MASTERED.
11  22                      OF COURSE SHE WAS AMERICAN: LOUISIANA FAMILY,MOVED DOW
11  23                     AND SHE WAS MODERATELY RICH,WITH NO CLOSE RELATI
11  25  BEEN SENT TO SCHOOL IN FRANCE WHEN SHE WAS TWELVE,AND SINCE SHE HAD FINISHED SC
11  29         SO WHAT SORT OF AMERICAN WAS SHE,AFTER ALL?  AND WHAT SORT OF EUR
11  30 AFTER ALL?    AND WHAT SORT OF EUROPEAN WAS SHE EITHER?SHE DIDN'T 'BELONG' ANYWH
11  33                       IT WAS IN ROME SHE HAD MET RICO.
11  33                       HE WAS AN AUSTRALIAN,SON  OF A GOVERNMENT O
12   2 O ONE DAY RICO WOULD BE SIR HENRY,AS HE WAS THE ONLY SON.
12   4 HIS FATHER WASN'T RICH IN CAPITAL - AND WAS BEING AN ARTIST.
12   7                       RICO WAS HANDSOME,ELEGANT,BUT MOSTLY HE HAD S
12  10          BUT AT THE SAME TIME HE WAS CANNY AND SHREWD AND SENSIBLE AS ANY
12  11                       HE WAS ANXIOUS FOR HIS FUTURE, AND ANXIOUS
12  12 D ANXIOUS FOR HIS PLACE IN THE WORLD,HE WAS POOR,AND SUDDENLY WASTEFUL IN SPITE
12  17                       HE WAS FASCINATED BY LOU'S QUAINT APLOMB,HE
12  20 R FAILURE,AND HER SOUTHERN 'DRAWL' THAT WAS SOMETIMES SO IRRITATING.
12  20            THAT SING-SONG  WHICH WAS SO AMERICAN.
```

3   BE   WERE

```
11  10 FIVE AND HE WAS THREE MONTHS OLDER,THEY WERE A CHARMING MARRIED COUPLE.
12   6           THEY MET IN ROME WHEN THEY WERE TWENTY-TWO,AND HAD A LOVE AFFAIR IN
12  19 S,HER ALONENESS,HER PRETTY CLOTHES THAT WERE SOMETIMES AN UTTER FAILURE,AND HER
```

2   BEEN

```
11  24                   BUT SHE HAD BEEN SENT TO SCHOOL IN FRANCE WHEN SHE W
12   1 OVERNMENT OFFICIAL IN MELBOURNE,WHO HAD BEEN MADE A BARONET.
```

EXAMPLE 3

Concordance of single word "LOVE", with occurrences listed by
alphabetical order of the left context.   The context is
unrestricted (use of asterisk as 'dummy' terminator).

```
72
0<,.;:?!>
1<'->
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<1 15>
p<A2>(<LA>)<ZZ>1000
L<p3L3>80*100 C<LOVE>
*
```

<pre>
                                     12   LOVE

12   7 OME WHEN THEY WERE TWENTY-TWO,AND HAD A LOVE AFFAIR IN CAPRI.RICO WAS HANDSOME,E
11   5 FOR A WHILE SHE HAD FAILED IN HER GRAND LOVE AFFAIR WITH RICO.AND THEN SHE HAD H
14   23 NERVOUS ATTACHMENT,RATHER THAN A SEXUAL LOVE.A CURIOUS TENSION OF WILL,RATHER TH
24   16 'T KNOW, RICO DEAR. BUT I'M SURE YOU'LL LOVE HIM, FOR MY SAKE.' -- SHE FELT, NOW,
20   38 BE RICO'S.   FOR SHE WAS ALREADY HALF IN LOVE WITH ST MAWR. HE WAS OF SUCH A LOVE
13   16 WHEN THEY'VE GOT NO MONEY,THEY FALL IN LOVE WITH A FULL POCKET.I NEVER WAS IN A
13   15 LE HERE HAVE GOT ANY MONEY,THEY FALL IN LOVE ON A FULL STOMACH. AND WHEN THEY'VE
13   18 A MORE DISGUSTING PLACE.THEY TAKE THEIR LOVE LIKE SOME PEOPLE TAKE AFTER-DINNER
34   4 VERY CHARM WAS A SORT OF ANGER, AND HIS LOVE WAS A DESTRUCTION IN ITSELF. HE JUS
23   17 MISTRUST, WHICH HE COVERED WITH ANXIOUS LOVE.   AT THE MIDDLE OF HIS EYES WAS A C
12   29 HEIR EYES OUT AT THEM.AND THEY HAD THAT LOVE AFFAIR IN CAPRI.   BUT THEY REACTED
26   38 IN THE SOFT VOICE OF A WOMAN HAUNTED BY LOVE. AND SHE WENT AND LAID HER HAND ON
</pre>

EXAMPLE 4

Concordance of single word "LOVE", with occurrences listed by
alphabetical order of the right context.

```
72
0<,.;:?!>
1<'->
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<1 15>
P<A2>(<LA>)<ZZ>1000
R<P3L3>80*100 C<LOVE>
*
```

                              12   LOVE

```
14  23 NERVOUS ATTACHMENT,RATHER THAN A SEXUAL LOVE.A CURIOUS TENSION OF WILL,RATHER TH
12  29 HEIR EYES OUT AT THEM,AND THEY HAD THAT LOVE AFFAIR IN CAPRI.  BUT THEY REACTED
12   7 OME WHEN THEY WERE TWENTY-TWO,AND HAD A LOVE AFFAIR IN CAPRI.RICO WAS HANDSOME,E
11   5 FOR A WHILE SHE HAD FAILED IN HER GRAND LOVE AFFAIR WITH RICO.AND THEN SHE HAD H
26  38 IN THE SOFT VOICE OF A WOMAN HAUNTED BY LOVE. AND SHE WENT AND LAID HER HAND ON
23  17 MISTRUST, WHICH HE COVERED WITH ANXIOUS LOVE.  AT THE MIDDLE OF HIS EYES WAS A C
24  16 'T KNOW, RICO DEAR. BUT I'M SURE YOU'LL LOVE HIM, FOR MY SAKE,' -- SHE FELT, NOW,
13  18 A MORE DISGUSTING PLACE.THEY TAKE THEIR LOVE LIKE SOME PEOPLE TAKE AFTER-DINNER
13  15 LE HERE HAVE GOT ANY MONEY,THEY FALL IN LOVE ON A FULL STOMACH. AND WHEN THEY'VE
34   4 VERY CHARM WAS A SORT OF ANGER, AND HIS LOVE WAS A DESTRUCTION IN ITSELF. HE JUS
13  16  WHEN THEY'VE GOT NO MONEY,THEY FALL IN LOVE WITH A FULL POCKET.I NEVER WAS IN A
20  38 BE RICO'S.  FOR SHE WAS ALREADY HALF IN LOVE WITH ST MAWR. HE WAS OF SUCH A LOVE
```

EXAMPLE 5

Hyphen as character of Type 7; output restricted to hyphenated
words of between 7 and 30 letters. Note that because the user
has erroneously included a hyphen before the plus sign in split
words at the end of lines, many such words have been concordanced
as hyphenated words.


```
72
0<.,;:?!>
1<'>
2*
3<1 ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7<1->
W<7 30>
P<A2>(<LA>)<ZZ>10000
C<P3L3>80*100 C(/1 100)
+
```

```
                         1    -    AFTER-DINNER
13  18 Y TAKE THEIR LOVE LIKE SOME PEOPLE TAKE AFTER-DINNER PILLS,' SHE WOULD WATCH WI


                         1    -    ANY-WHERE
11  20 ERE,LIKE A SORT OF GIPSY,WHO IS AT HOME ANY-WHERE  AND NOWHERE:ALL THIS MADE UP


                         1    -    COURTIER-LIKE
12  16 LY DETESTABLE IN SPITE OF ALL HIS SUAVE,COURTIER-LIKE AMIABILITY.  HE WAS FASCIN


                         1    -    DRINKING-HALL
13  13 RLEANS SORT OF CONCEIT LOOKED ROUND THE DRINKING-HALL WITH SAVAGE CONTEMPT,AND A


                         1    -    GOOD-HEARTED
12  11 YOUNG POSER COULD BE AND,ON PRIN-CIPLE  GOOD-HEARTED,ANXIOUS.HE WAS ANXIOUS FOR


                         1    -    GRAPE-SHOT
13  20 N SHE WOULD DELIVER SOME SUCH CHARGE OF GRAPE-SHOT. RICO ALWAYS WRITHED.   MRS W


                         1    -    NURSING-HOME
12  31 IGHT.THEN LOU WAS POPPED INTO A CONVENT NURSING-HOME IN UMBRIA,AND RICO DASHED O


                         1    -    PRIN-CIPLE
12  11 IBLE AS ANY YOUNG POSER COULD BE AND,ON PRIN-CIPLE  GOOD-HEARTED,ANXIOUS.HE WAS


                         1    -    SING-SONG
12  20 ' THAT WAS SOMETIMES SO IRRITATING,THAT SING-SONG  WHICH WAS SO AMERICAN,YET SHE


                         1    -    SIT-TING
13  19' WITH HER ARCHING,FULL,STRONG GREY EYES,SIT-TING  THERE ERECT AND SILENT IN HER


                         2    -    TWENTY-FIVE
11   3 HER OWN WAY SO LONG,THAT BY THE AGE OF TWENTY-FIVE SHE DID'NT KNOW WHERE SHE WA
11   9' LY MARRIED TO HER.AND NOW, WHEN SHE WAS TWENTY-FIVE AND HE WAS THREE MONTHS OLDE


                         1    -    TWENTY-TWO
12   6 IST.    THEY MET IN ROME WHEN THEY WERE TWENTY-TWO,AND HAD A LOVE AFFAIR IN CAPR


                         1    -    UN-GRATEFUL
12  14 L HIS INGRATIATING EFFORTS,AND SUDDENLY UN-GRATEFUL  IN SPITE OF ALL HIS BURDEN


                         1    -    WELL-BOUGHT
13  19 SIT-TING  THERE ERECT AND SILENT IN HER WELL-BOUGHT AMERICAN CLOTHES. AND THEN S


                         1    -    WELL-BRED
11  17 ;AND HER QUAINT AIR OF PLAYING AT BEING WELL-BRED,IN A SORT OF CHARADE GAME;AND
```

EXAMPLE 6

Concordance of occurrences of "ST MAWR" as consecutive words, and
of co-occurrences of "MAN" and "ANIMAL" in either word where no
more than 5 words intervene.


```
72
0<,.;:?!>
1<'->.
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>:
4*
5*
6*
7*
W<1 15>
P<P2>(<55><56><57>)<58>5000
C<P3L3>80*10 C<£ST 0 MAWR £MAN 5 ANIMAL £ANIMAL 5 MAN>:
+
```

4   ANIMAL   MAN

55   3   KNOW.' 'ISN'T THAT CURIOUS NOW! - JUST AN ANIMAL! NO MIND! A MAN WITH NO MIND! I'VE
55   8   KING A CAT'S FUR, JUST THE SAME. JUST THE ANIMAL IN MAN. CURIOUS THAT I NEVER SEEM T
56   3   SEE THAT I AM TO BE IMPRESSED BY THE MERE ANIMAL IN MAN. THE ANIMALS ARE THE SAME AS
57   38   T ALL. HE'S A BRUTE, A DEGENERATE. A PURE ANIMAL MAN WOULD BE AS LOVELY AS A DEER OR

1   MAN   ANIMAL

57   17   CATED, LIKE DOGS. I DON'T KNOW ONE SINGLE MAN WHO IS A PROUD LIVING ANIMAL. I KNOW T

6   ST   MAWR

55   24   . PERHAPS IT IS THE ANIMAL. JUST THINK OF ST MAWR! I'VE THOUGHT SO MUCH ABOUT HIM. W
55   29   A MAN. BUT THERE'S A TERRIBLE MYSTERY IN ST MAWR.' MRS WITT WATCHED HER DAUGHTER Q
56   12   OMMONPLACE, THAT CLEVERNESS? I WOULD HATE ST MAWR TO BE SPOILT BY SUCH A MIND.' 'YES
56   28   , MOTHER. I'M TOO TIRED OF IT ALL. I LOVE ST MAWR BECAUSE HE ISN'T INTIMATE. HE STAN
56   33   Y CAN'T MEN GET THEIR LIFE STRAIGHT, LIKE ST MAWR, AND THEN THINK? WHY CAN'T THEY TH
57   3   OESN'T RUSH INTO US, AS IT DOES EVEN INTO ST MAWR, AND HE'S A DEPENDENT ANIMAL. I CA

EXAMPLE 7

Concordance of words ending in "-LY" and "-FUL" which have not
more than 15 letters and which occur in the first 60 lines of
text. The words are sorted on the endings.


```
72
0<,.;:?!>
1<'->
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<1 15>
P<A2>(<LA>)<XX>60
E<P3L3>80.100 C<=LY =FUL>
*
```

```
                                               1        SPITEFUL
12  15  F ALL HIS TENSION OF ECONOMY,AND SUDDENLY SPITEFUL IN SPITE OF ALL HIS INGRATIATING


                                               1        WASTEFUL
12  14  ACE IN THE WORLD,HE WAS POOR,AND SUDDENLY WASTEFUL IN SPITE OF ALL HIS TENSION OF EC


                                               1        FLORIDLY
12   9·      HE BEHAVED IN A MOST FLORIDLY ELEGANT FASHION, FASCINATING TO T


                                               1        MODERATELY
11  24            AND SHE WAS MODERATELY RICH,WITH NO CLOSE RELATIONS EX.


                                               2        COMPLETELY
11   4         HAVING ONE'S OWN WAY LANDED ONE COMPLETELY AT SEA.
11  14  S EDGING AWAY FROM ITS MASTER;TO KNOW HOW COMPLETELY HE WAS MASTERED.


                                               1        FAMILY
11  23  OF COURSE SHE WAS AMERICAN: LOUISIANA FAMILY,MOVED DOWN TO TEXAS.


                                               1        REALLY
11   6        AND THEN SHE HAD HAD SOMETHING REALLY TO DESPAIR ABOUT.


                                               1        DUTIFULLY
11   8        RICO HAD COME BACK TO HER,AND WAS DUTIFULLY MARRIED TO HER.


                                               5        SUDDENLY
12  13  OR HIS PLACE IN THE WORLD,HE WAS POOR,AND SUDDENLY WASTEFUL IN SPITE OF ALL HIS TENS
12  14  N SPITE OF ALL HIS TENSION OF ECONOMY,AND SUDDENLY SPITEFUL IN SPITE OF ALL HIS INGR
12  15  SPITE OF ALL HIS INGRATIATING EFFORTS,AND SUDDENLY UN-GRATEFUL  IN SPITE OF ALL HIS
12  16   SPITE OF ALL HIS BURDEN OF GRATITUDE,AND SUDDENLY RUDE IN SPITE OF ALL HIS GOOD MAN
12  17  RUDE IN SPITE OF ALL HIS GOOD MANNERS,AND SUDDENLY DETESTABLE IN SPITE OF ALL HIS SU


                                               3        ONLY
11  12            OH YES;YOU HAD ONLY TO SEE THE UNEASY BACKWARD GLANCE AT
11  28                        ONLY FLEETING TRIPS TO HER AMERICA.
12   3  DAY RICO WOULD BE SIR HENRY,AS HE WAS THE ONLY SON.


                                               1        EXACTLY
11  16      SHE,WITH HER ODD LITTLE MUSEAU,NOT EXACTLY PRETTY,BUT VERY ATTRACTIVE;AND HER


                                               1        MOSTLY
12   7       RICO WAS HANDSOME,ELEGANT,BUT MOSTLY HE HAD SPOTS OF PAINT ON HIS TROUSE
```

EXAMPLE 8

Word-counts in alphabetical and frequency order, excluding words
of less than 2 and more than 24 letters.


```
72
0<,.;:?!>
1<'->
2*
3<¶ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<2 24>
P<A2>(<LA>)<XX>100
F<1,3> (A Z/Z 1000)
*
```

18	A		3	AFFAIR
2	AGAIN		9	ALL
2	AMERICA		5	AMERICAN
5	AN		42	AND
3	ANXIOUS		2	ANY
2	ANYWHERE		5	AS
10	AT		3	AWAY
3	BACK		6	BE
2	BEEN		3	BEING
2	BELONG		8	BUT
5	BY		2	CAPRI
2	CLOTHES		2	COMPLETELY
3	COULDNT		3	COURSE
5	DIDNT		2	DOWN
2	EACH		2	ELEGANT
2	EUROPE		2	EVEN
2	EXCEPT		3	EYES
2	FAILURE		2	FALL
2	FASCINATED		2	FATHER
4	FOR		2	FOREIGN
4	FROM		3	FULL
3	GOT		17	HAD
2	HANDSOME		23	HE
24	HER		4	HIM
13	HIS		27	IN
2	INTO		2	IS
2	IT		2	KNOW
4	LIKE		4	LOU
6	LOVE		2	MADE
2	MARRIED		2	MELBOURNE
2	MET		2	MONEY
2	MORE		2	MOST
2	MOTHER		3	MRS
3	NO		2	NOT
2	ODD		28	OF
3	OFF		5	ON
5	ONE		4	ONLY
2	OTHER		2	OUT
2	OWN		2	PAINT
3	PARIS		2	PEOPLE
2	PLACE		3	POOR
2	PRETTY		2	QUAINT
2	QUEER		3	RICH
10	RICO		5	ROME
2	ROUND		2	SCHOOL
28	SHE		5	SO
2	SOME		2	SOMETIMES
2	SON		5	SORT
5	SPITE		2	STAND
2	STILL		5	SUDDENLY
2	SURE		2	TAKE
8	THAT		17	THE
3	THEIR		4	THEN
3	THERE		11	THEY
23	TO		2	TWENTYFIVE
7	VERY		28	WAS
2	WAY		3	WERE
2	WHAT		7	WHEN
2	WHILE		3	WHO
10	WITH		4	WITT
4	WOULD			

2	MOTHER	2	EXCEPT
2	ROUND	2	ANY
2	STAND	2	AGAIN
2	STILL	2	FALL
2	NOT	2	AMERICA
2	ODD	2	FATHER
2	TAKE	2	CLOTHES
2	SON	2	FOREIGN
2	PEOPLE	2	BEEN
2	PLACE	2	MADE
2	SCHOOL	2	ANYWHERE
2	PRETTY	2	DOWN
2	QUAINT	2	HANDSOME
2	QUEER	2	ELEGANT
2	PAINT	2	EUROPE
2	OTHER	2	EVEN
2	OUT	2	IT
2	WAY	2	CAPRI
2	TWENTYFIVE	2	BELONG
2	WHAT	2	IS
2	SOMETIMES	2	EACH
2	OWN	2	MONEY
2	SURE	2	MORE
2	SOME	2	COMPLETELY
2	WHILE	2	FASCINATED
2	MARRIED	2	KNOW
2	MET	2	MELBOURNE
2	FAILURE	2	MOST
3	AFFAIR	2	INTO
3	BEING	3	POOR
3	ANXIOUS	3	MRS
3	EYES	3	WERE
3	COULDNT	3	RICH
3	FULL	3	OFF
3	BACK	3	WHO
3	AWAY	3	PARIS
3	GOT	3	THERE
3	COURSE	3	NO
4	FROM	3	THEIR
4	LOU	4	WITT
4	FOR	4	ONLY
4	HIM	4	THEN
4	LIKE	4	WOULD
5	ON	5	AS
5	SUDDENLY	5	BY
5	SPITE	5	AMERICAN
5	ROME	5	AN
5	ONE	5	DIDNT
5	SORT	5	SO
6	LOVE	6	BE
7	WHEN	7	VERY
8	THAT	8	BUT
10	AT	9	ALL
10	WITH	10	RICO
13	HIS	11	THEY
17	THE	17	HAD
23	HE	18	A
24	HER	23	TO
28	OF	27	IN
28	WAS	28	SHE
		42	AND

EXAMPLE 9

Word-count listed in reverse alphabetical order and excluding
words of less than 2 and more than 12 letters. The number of
columns obtained in the output of a single wordcount is a factor
of the maximum wordlength declared. If a single column is wanted,
the maximum wordlength should be at least 50. (It should be
noted, however, that increasing the wordsize entails a considerable
increase of storage demand in the machine and hence of computing
time ....).


```
72
0<,.;:?!>
1<'->
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<2 12>
P<A2>(<LA>)<XX>100
F<?>.(A Z/2 1000)
*
```

WORDCOUNT IN REVERSE ALPHABET ORDER

Count	Word	Count	Word	Count	Word	Count	Word
18	A	2	AMERICA	17	HAD	2	ODD
2	MARRIED	2	FASCINATED	4	WOULD	42	AND
2	STAND	2	ROUND	6	BE	2	PLACE
2	MADE	23	HE	28	SHE	17	THE
2	TAKE	4	LIKE	2	WHILE	2	PEOPLE
5	ROME	2	SOME	2	HANDSOME	5	ONE
2	MELBOURNE	2	EUROPE	3	THERE	2	ANYWHERE
3	WERE	2	MORE	2	FAILURE	2	SURE
3	COURSE	5	SPITE	2	TWENTYFIVE	6	LOVE
3	OFF	28	OF	3	BEING	2	BELONG
2	EACH	3	RICH	10	WITH	2	CAPRI
3	BACK	9	ALL	2	FALL	2	STILL
3	FULL	2	SCHOOL	4	HIM	4	FROM
5	AN	5	AMERICAN	2	BEEN	4	THEN
7	WHEN	2	EVEN	2	FOREIGN	27	IN
2	AGAIN	5	ON	2	SON	2	OWN
2	DOWN	10	RICO	3	WHO	3	NO
5	SO	23	TO	2	INTO	2	QUEER
24	HER	2	FATHER	2	OTHER	2	MOTHER
3	AFFAIR	3	THEIR	4	FOR	3	POOR
5	AS	28	WAS	2	CLOTHES	2	SOMETIMES
3	EYES	2	IS	13	HIS	3	PARIS
3	MRS	3	ANXIOUS	10	AT	8	THAT
2	WHAT	2	MET	2	IT	2	ELEGANT
5	DIDNT	3	COULDNT	2	PAINT	2	QUAINT
3	GOT	2	NOT	2	EXCEPT	5	SORT
2	MOST	4	WITT	8	BUT	2	OUT
4	LOU	2	KNOW	2	WAY	3	AWAY
5	BY	11	THEY	2	MONEY	2	COMPLETELY
5	SUDDENLY	4	ONLY	2	ANY	7	VERY
2	PRETTY						

EXAMPLE 10

Word-frequency profile for all words of not more than 12 letters,
occurring in the first 500 lines.

```
72
0<,.:;?!>
1<'->
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<1 12>
P<A2>(<LA>)<XX>500
F<4> (A Z/1 1000)
```

WORD COUNT	NUMBER SUCH	VOCAB TOTAL	WORD TOTAL	PERC. OF VOCABULARY	PERC. OF WORDS
1	817	817	817	61.80	16.52
2	197	1014	1211	76.70	24.49
3	86	1100	1469	83.21	29.71
4	47	1147	1657	86.76	33.51
5	33	1180	1822	89.26	36.85
6	22	1202	1954	90.92	39.51
7	27	1229	2143	92.97	43.34
8	19	1248	2295	94.40	46.41
9	9	1257	2376	95.08	48.05
10	9	1266	2466	95.76	49.87
12	2	1268	2490	95.92	50.35
13	1	1269	2503	95.99	50.62
14	6	1275	2587	96.44	52.32
15	1	1276	2602	96.52	52.62
16	4	1280	2666	96.82	53.91
17	2	1282	2700	96.97	54.60
18	2	1284	2736	97.13	55.33
19	2	1286	2774	97.28	56.10
20	3	1289	2834	97.50	57.31
21	1	1290	2855	97.58	57.74
22	5	1295	2965	97.96	59.96
23	1	1296	2988	98.03	60.42
25	1	1297	3013	98.11	60.93
27	1	1298	3040	98.18	61.48
28	1	1299	3068	98.26	62.04
29	2	1301	3126	98.41	63.22
30	2	1303	3186	98.56	64.43
41	1	1304	3227	98.64	65.26
43	2	1306	3313	98.79	67.00
47	1	1307	3360	98.87	67.95
49	1	1308	3409	98.94	68.94
55	1	1309	3464	99.02	70.05
60	1	1310	3524	99.09	71.26
61	1	1311	3585	99.17	72.50
62	1	1312	3647	99.24	73.75
87	1	1313	3734	99.32	75.51
95	1	1314	3829	99.39	77.43
96	1	1315	3925	99.47	79.37
105	1	1316	4030	99.55	81.50
114	2	1318	4258	99.70	86.11
144	1	1319	4402	99.77	89.02
151	1	1320	4553	99.85	92.07
194	1	1321	4747	99.92	96.00
198	1	1322	4945	100.00	100.00

```
WORD TOTAL        4945
VOCABULARY TOTAL  1322
```

TEXT USED FOR EXAMPLES 11 - 13

<A LEWIS>
((CECIL DAY LEWIS))
<P ENGLAND>
((YOU THAT LOVE ENGLAND))
<S 1>
YOU THAT LOVE ENGLAND, WHO HAVE AN EAR FOR HER MUSIC,
THE SLOW MOVEMENT OF CLOUDS IN BENEDICTION,
CLEAR ARIAS OF LIGHT THRILLING OVER HER UPLANDS,
OVER THE CHORDS OF SUMMER SUSTAINED PEACEFULLY;
CEASELESS THE LEAVES' COUNTERPOINT IN A WEST WIND LIVELY,
BLOSSOM AND RIVER RIPPLING LOVELIEST ALLEGRO,
AND THE STORMS OF WOOD STRINGS BRASS AT YEAR'S FINALE:
LISTEN. CAN YOU NOT HEAR THE ENTRANCE OF A NEW THEME?
<S 2>
YOU WHO GO OUT ALONE, ON TANDEM, OR ON PILLION,
DOWN ARTERIAL ROADS RIDING IN APRIL,
OR SAD BESIDE LAKES WHERE HILL-SLOPES ARE REFLECTED
MAKING FIRES OF LEAVES, YOUR HIGH HOPES FALLEN:
CYCLISTS AND HIKERS IN COMPANY, DAY EXCURSIONISTS,
REFUGEES FROM CURSED TOWNS AND DEVASTATED AREAS;
KNOW YOU SEEK A NEW WORLD, A SAVIOUR TO ESTABLISH
LONG-LOST KINSHIP AND RESTORE THE BLOOD'S FULFILMENT.
<A ELIOT>
<P GIDDING>
FROM FOUR QUARTETS
LITTLE GIDDING II
<S 1>
ASH ON AN OLD MAN'S SLEEVE
IS ALL THE ASH THE BURNT ROSES LEAVE.
DUST IN THE AIR SUSPENDED
MARKS THE PLACE WHERE A STORY ENDED.
DUST INBREATHED WAS A HOUSE-
THE WALL, THE WAINSCOT AND THE MOUSE.
THE DEATH OF HOPE AND DESPAIR,
THIS IS THE DEATH OF AIR.
<S 2>
THERE ARE FLOOD AND DROUTH
OVER THE EYES AND IN THE MOUTH,
DEAD WATER AND DEAD SAND
CONTENDING FOR THE UPPER HAND.
THE PARCHED EVISCERATE SOIL
GAPES AT THE VANITY OF TOIL,
LAUGHS WITHOUT MIRTH.
THIS IS THE DEATH OF EARTH.
<S 3>
WATER AND FIRE SUCCEED
THE TOWN, THE PASTURE AND THE WEED.
WATER AND FIRE DERIDE
THE SACRIFICE THAT WE DENIED.
WATER AND FIRE SHALL ROT
THE MARRED FOUNDATIONS WE FORGOT,
OF SANCTUARY AND CHOIR.
THIS IS THE DEATH OF WATER AND FIRE.
<S 4>
IN THE UNCERTAIN HOUR BEFORE THE MORNING
NEAR THE ENDING OF INTERMINABLE NIGHT
AT THE RECURRENT END OF THE UNENDING
AFTER THE DARK DOVE WITH THE FLICKERING TONGUE
HAD PASSED BELOW THE HORIZON OF HIS HOMING
WHILE THE DEAD LEAVES STILL RATTLED ON LIKE TIN

EXAMPLE 11

Letters "A" and "E" as characters of Type 7; only words containing
these letters to be concordanced. Centrally aligned concordance
with 10 blank spaces between main context and left overlap.
Second stanza by Lewis excluded.


```
80
0<,.;:-'>
1*
2*
3<1 BCD FGHIJKLMNOPQRSTUVWXYZ>.
4*
5*
6*
7<1A . E>
W<1 24>.
P<A2S1> (<LE1><EL >) <ZZ >200
C<A2S1L3>80/10 C(/1 100)
+
```

| | 1 | A | VANITY |
| EL 2 | 6 | | GAPES AT THE VANITY OF TOIL, |

| | 1 | A | WAINSCOT |
| EL 1 | 6 | | THE WALL, THE WAINSCOT AND THE MOUSE. |

| | 1 | A | WALL |
| EL 1 | 6 | | THE WALL, THE WAINSCOT AND THE MOUSE. |

| | 1 | A | WAS |
| EL 1 | 5 | | DUST INBREATHED WAS A HOUSE- |

| | 1 | AA | ARIAS |
| LE 1 | 3 | S, | CLEAR ARIAS OF LIGHT THRILLING OVER HER UPLAND |

| | 1 | AA | SANCTUARY |
| EL 3 | 7 | | OF SANCTUARY AND CHOIR. |

| | 1 | AE | AFTER |
| EL 4 | 4 | TONGUE | AFTER THE DARK DOVE WITH THE FLICKERING |

| | 1 | AE | ALLEGRO |
| LE 1 | 6 | | BLOSSOM AND RIVER RIPPLING LOVELIEST ALLEGRO, |

| | 1 | AE | ARE |
| EL 2 | 1 | | THERE ARE FLOOD AND DROUTH |

| | 1 | AE | FINALE |
| LE 1 | 7 | | STORMS OF WOOD STRINGS BRASS AT YEAR'S FINALE: |

| | 1 | AE | GAPES |
| EL 2 | 6 | | GAPES AT THE VANITY OF TOIL, |

| | 1 | AE | HAVE |
| LE 1 | 1 | | YOU THAT LOVE ENGLAND, WHO HAVE AN EAR FOR HER MUSIC, |

| | 1 | AE | MARRED |
| EL 3 | 6 | | THE MARRED FOUNDATIONS WE FORGOT, |

| | 1 | AE | PARCHED |
| EL 2 | 5 | | THE PARCHED EVISCERATE SOIL |

| | 1 | AE | PASSED |
| EL 4 | 5 | | HAD PASSED BELOW THE HORIZON OF HIS HOMING |

| | 1 | AE | PASTURE |
| EL 3 | 2 | | THE TOWN, THE PASTURE AND THE WEED. |

EXAMPLE 12

Letter "A" and "E" as characters of Type 7; only words containing
these letters to be concordanced. Concordance to be left-aligned.
First and second stanzas only are included from each poem.
The linenumber is reset every time a new stanza is selected.

```
80
0<.,;:?!>
1<'->
2*
3<1 BCD FGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7<1A    E>
W<1 24>
P<A0S1>(<1><2>)<Z>500
C<A1S1L1>80/10 L(/1 100)
+
. . . .
```

```
                                   1    EA        CLEAR

L 1 3    CLEAR ARIAS OF LIGHT THRILLING OVER HER UPLANDS,


                                   2    EA        DEAD

E 2 3    DEAD WATER AND DEAD SAND
E 2 3    DEAD WATER AND DEAD SAND


                                   3    EA        DEATH

E 1 7    THE DEATH OF HOPE AND DESPAIR,
E 1 8    THIS IS THE DEATH OF AIR.
E 2 8    THIS IS THE DEATH OF EARTH.


                                   1    EA        DESPAIR

E 1 7    THE DEATH OF HOPE AND DESPAIR,


                                   1    EA        EAR

L 1 1    YOU THAT LOVE ENGLAND, WHO HAVE AN EAR FOR HER MUSIC,


                                   1    EA        EARTH

E 2 8    THIS IS THE DEATH OF EARTH.


                                   1    EA        ENGLAND

L 1 1    YOU THAT LOVE ENGLAND, WHO HAVE AN EAR FOR HER MUSIC,


                                   1    EA        ESTABLISH

L 2 7    KNOW YOU SEEK A NEW WORLD, A SAVIOUR TO ESTABLISH


                                   1    EA        HEAR

L 1 8    LISTEN. CAN YOU NOT HEAR THE ENTRANCE OF A NEW THEME?


                                   1    EA        YEARS

L 1 7    AND THE STORMS OF WOOD STRINGS BRASS AT YEAR'S FINALE:
```

EXAMPLE 13

Letters "A" and "E" as characters of Type 7; variation
of output reference format. Centrally aligned concordance with
left overlap suppressed. Only words containing "A" or
"E" to be concordanced. Final stanza of each poem excluded.

```
80
0<,.;:-'>
1*
2*
3<1 BCD FGHIJKLMNOPQRSTUVWXYZ>.
4*
5*
6*
7<1A    E>
W<1 24>
P<A2S1>(<LE1><EL1><EL2><EL3>)<EL4>5000
C<1(A2L3)2,3,4(A2S1L3)>80/100 C(/1 100)
*
```

```
                            1    EA       HEAR
LE    8                LISTEN. CAN YOU NOT HEAR THE ENTRANCE OF A NEW THEME


                            1    EA       YEAR
LE    7         AND THE STORMS OF WOOD STRINGS BRASS AT YEAR'S FINALE;


                            1    EAE      ENTRANCE
LE    8                LISTEN. CAN YOU NOT HEAR THE ENTRANCE OF A NEW THEME


                            1    EAE      INBREATHED
EL 1  5                          DUST INBREATHED WAS A HOUSE--


                            1    EAE      LEAVE
EL 1  2                IS ALL THE ASH THE BURNT ROSES LEAVE.


                            1    EAE      LEAVES
LE    5                   CEASELESS THE LEAVES' COUNTERPOINT IN A. WEST WIND LIVE


                            1    EAE      PEACEFULLY
LE    4          OVER THE CHORDS OF SUMMER SUSTAINED PEACEFULLY;


                            1    EAEE     CEASELESS
LE    5                          CEASELESS THE LEAVES' COUNTERPOINT IN A


                            1    EE       BENEDICTION
LE    2            THE SLOW MOVEMENT OF CLOUDS IN BENEDICTION,


                            1    EE       DENIED
EL 3  4                 THE SACRIFICE THAT WE DENIED.


                            1    EE       DERIDE
EL 3  3                  WATER AND FIRE DERIDE


                            1    EE       ENDED
EL 1  4              MARKS THE PLACE WHERE A STORY ENDED.


                            1    EE       EYES
EL 2  2                     OVER THE EYES AND IN THE MOUTH,


                            1    EE       LOVELIEST
LE    6            BLOSSOM AND RIVER RIPPLING LOVELIEST ALLEGRO,
```

EXAMPLE 14

FRENCH :   Correct alphabetic order is achieved by declaring diacritics
           as special characters of type 1:

                    1 = acute accent
                    2 = grave accent
                    3 = circumflex
                    4 = cedilla
                    5 = diaeresis

<A BAUDELAIRE>
<P 73>.
LA HAINE EST LE TONNEAU DES PA3LES DANAI5DES;
LA VENGEANCE E1PERDUE AUX BRAS ROUGES ET FORTS
A BEAU PRE1CIPITER DANS SES TE1NE2BRES VIDES
DE GRANDS SEAUX PLEINS DU SANG ET DES LARMES DES MORTS.
LE DE1MON FAIT DES TROUS SECRETS A2 CES ABI3MES,
PAR OU2 FUIRAIENT MILLE ANS DE SUEURS ET D'EFFORTS,
QUAND ME3ME ELLE SAURAIT RANIMER SES VICTIMES,
ET POUR LES PRESSURER RESSUSCITER LEURS CORPS.
LA HAINE EST UN IVROGNE AU FOND D'UNE TAVERNE,
QUI SENT TOUJOURS LA SOIF NAI3TRE DE LA LIQUEUR
ET SE MULTIPLIER COMME L'HYDRE DE LERNE.
- MAIS LES BUVEURS HEUREUX CONNAISSENT LEUR VAINQUEUR,
ET LA HAINE EST VOUE1E A2 CE SORT LAMENTABLE
DE NE POUVOIR JAMAIS S'ENDORMIR SOUS LA TABLE.

80
0<,.;:!?"'&>
1<-(12345)>
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>.
4*
5*
6*
7*
W<1 24>
P<A4>(<BAUD>) <ZZZ>1000000
C<A4P3L3>80/80 C(A Z/1 99999)
*

```
                                          1   A
BAUD  73   3                                     A BEAU PRE1CIPITER DANS SES TE1NE2BRES VID


                                          2   A
BAUD  73   5              LE DE1MON FAIT DES TROUS SECRETS A2 CES ABI3MES,
BAUD  73  13                   ET LA HAINE EST VOUE1E A2 CE SORT LAMENTABLE


                                          1   ABIMES
BAUD  73   5         LE DE1MON FAIT DES TROUS SECRETS A2 CES ABI3MES,


                                          1   ANS
BAUD  73   6              PAR OU2 FUIRAIENT MILLE ANS DE SUEURS ET D'EFFORTS,


                                          1   AU
BAUD  73   9              LA HAINE EST UN IVROGNE AU FOND D'UNE TAVERNE,


                                          1   AUX
BAUD  73   2              LA VENGEANCE E1PERDUE AUX BRAS ROUGES ET FORTS


                                          1   BEAU
BAUD  73   3                                     A BEAU PRE1CIPITER DANS SES TE1NE2BRES VIDES


                                          1   BRAS
BAUD  73   2              LA VENGEANCE E1PERDUE AUX BRAS ROUGES ET FORTS


                                          1   BUVEURS
BAUD  73  12                  - MAIS LES BUVEURS HEUREUX CONNAISSENT LEUR VAINQUEUR


                                          1   CE
BAUD  73  13              ET LA HAINE EST VOUE1E A2 CE SORT LAMENTABLE


                                          1   CES
BAUD  73   5         LE DE1MON FAIT DES TROUS SECRETS A2 CES ABI3MES,


                                          1   COMME
BAUD  73  11                  ET SE MULTIPLIER COMME L'HYDRE DE LERNE.


                                          1   CONNAISSENT
BAUD  73  12                  - MAIS LES BUVEURS HEUREUX CONNAISSENT LEUR VAINQUEUR,


                                          1   CORPS
BAUD  73   8         ET POUR LES PRESSURER RESSUSCITER LEURS CORPS.


                                          2   D
BAUD  73   6         PAR OU2 FUIRAIENT MILLE ANS DE SUEURS ET D'EFFORTS,
BAUD  73   9              LA HAINE EST UN IVROGNE AU FOND D'UNE TAVERNE,
```

EXAMPLE 15

GERMAN: Diacritics as special characters of Type 1.
         Job split into two runs, the first including
         words of between one and twelve letters, the
         second words of more than 12 letters. In the
         latter run the hyphen is declared as a type
         three character so that it would be printed in the
         keyword.

         1 = acute accent (rare)
         5 = umlaut

```
<J PRAKT CHEM>
<Y 1971>
<N 03>
DIE ARBEIT WURDE IM RAHMEN DES WISSENSCHAFTLICH-PRODUKTIVEN STUDIUMS
VON DEN STUDENTEN SIEGMUND, HESSE UND GROSS DES ZWEITEN STUDIENJAHRES
DER SEKTION CHEMIE DER HUMBOLDT-UNIVERSITA5T ZU BERLIN ANGEFERTIGT.
VON ALLEN BEKANNTEN METHODEN ZUR FLUORID-BESTIMMUNG KO5NNEN AUF GRUND
DER VORGEGEBENEN BEDINGUNGEN NUR SPEKTROPHOTOMETRISCHE VERFAHREN ZUR
ANWENDUNG KOMMEN, WEIL HIERBEI EINE HO5HERE ERFASSUNGSGRENZE GEWA5HRLEISTET
IST. VON DEN IN DER LITERATUR BEKANNTEN VERFAHREN WURDEN NACH EINER KRIT◆·
ISCHEN / EINSCHA5TZUNG DREI METHODEN GETESTET.
```

```
80
0<,.;:?!&'>
1<-(15)>
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<1 12>
P<J4>(<PRAK>)<ZZZZ>100000
C<J10Y4N2L2> 80.80 C<A Z/1 99999)
◆
```

```
                                             1    ALLEN
PRAKT CHEM 1971 03  4                              VON ALLEN BEKANNTEN METHODEN ZUR FLUORID-BES


                                             1    ANGEFERTIGT
PRAKT CHEM 1971 03  3.  MIE DER HUMBOLDT-UNIVERSITAST ZU BERLIN ANGEFERTIGT.


                                             1    ANWENDUNG
PRAKT CHEM 1971 03  6   NUR SPEKTROPHOTOMETRISCHE VERFAHREN ZUR ANWENDUNG KOMMEN, WEIL HIERBEI EINE HOSH


                                             1    ARBEIT
PRAKT CHEM 1971 03  1                              DIE ARBEIT WURDE IM RAHMEN DES WISSENSCHAFTL


                                             1    AUF
PRAKT CHEM 1971 03  4   METHODEN ZUR FLUORID-BESTIMMUNG KOSNNEN AUF GRUND DER VORGEGEBENEN BEDINGUNGEN N


                                             1    BEDINGUNGEN
PRAKT CHEM 1971 03  5   MUNG KOSNNEN AUF GRUND DER VORGEGEBENEN BEDINGUNGEN NUR SPEKTROPHOTOMETRISCHE VE


                                             2    BEKANNTEN
PRAKT CHEM 1971 03  4                     VON ALLEN BEKANNTEN METHODEN ZUR FLUORID-BESTIMMUN
PRAKT CHEM 1971 03  7               VON DEN IN DER LITERATUR BEKANNTEN VERFAHREN WURDEN NACH EINER KR


                                             1    BERLIN
PRAKT CHEM 1971 03  3   ION CHEMIE DER HUMBOLDT-UNIVERSITAST ZU BERLIN ANGEFERTIGT.


                                             1    CHEMIE
PRAKT CHEM 1971 03  3   S DES ZWEITEN STUDIENJAHRES DER SEKTION CHEMIE DER HUMBOLDT-UNIVERSITAST ZU BERL


                                             2    DEN
PRAKT CHEM 1971 03  2   SSENSCHAFTLICH-PRODUKTIVEN STUDIUMS VON DEN STUDENTEN SIEGMUND, HESSE UND GROSS
PRAKT CHEM 1971 03  7                              VON DEN IN DER LITERATUR BEKANNTEN VERFAHREN


                                             4    DER
PRAKT CHEM 1971 03  3   SSE UND GROSS DES ZWEITEN STUDIENJAHRES DER SEKTION CHEMIE DER HUMBOLDT-UNIVERSI
PRAKT CHEM 1971 03  3   WEITEN STUDIENJAHRES DER SEKTION CHEMIE DER HUMBOLDT-UNIVERSITAST ZU BERLIN ANGE
PRAKT CHEM 1971 03  5   UR FLUORID-BESTIMMUNG KOSNNEN AUF GRUND DER VORGEGEBENEN BEDINGUNGEN NUR SPEKTRO
PRAKT CHEM 1971 03  7                              VON DEN IN DER LITERATUR BEKANNTEN VERFAHREN WURDEN


                                             2    DES
PRAKT CHEM 1971 03  1              DIE ARBEIT WURDE IM RAHMEN DES WISSENSCHAFTLICH-PRODUKTIVEN STUDIUM
PRAKT CHEM 1971 03  2   DEN STUDENTEN SIEGMUND, HESSE UND GROSS DES ZWEITEN STUDIENJAHRES DER SEKTION CH


                                             1    DIE
PRAKT CHEM 1971 03  1                              DIE ARBEIT WURDE IM RAHMEN DES WISSENSCH


                                             1    DREI
PRAKT CHEM 1971 03  8   EN NACH EINER KRITISCHEN  EINSCHASTZUNG DREI METHODEN GETESTET.


                                             1    EINE
PRAKT CHEM 1971 03  6   HREN ZUR ANWENDUNG KOMMEN, WEIL HIERBEI EINE HOSHERE ERFASSUNGSGRENZE GEWASHRLEI
```

```
80
0<,.;:?|&'>
1<(15)>
2*
3<1-ABCDEFGHIJKLMNOPQRSTUVWXYZ>
4*
5*
6*
7*
W<13 30>
P<J4>(<PRAK>)<ZZZZ>100000
C<J10Y4N2L2> 80.80 C(A Z/1 99999)
+
```

| | 1 | ERFASSUNGSGRENZE |

PRAKT CHEM 1971 03 6   NDUNG KOMMEN, WEIL HIERBEI EINE HOSHERE ERFASSUNGSGRENZE GEWASHRLEISTET IST.

| | 1 | FLUORID-BESTIMMUNG |

PRAKT CHEM 1971 03 4   VON ALLEN BEKANNTEN METHODEN ZUR FLUORID-BESTIMMUNG KOSNNEN AUF GRUND DER

| | 1 | GEWAHRLEISTET |

PRAKT CHEM 1971 03 6   L HIERBEI EINE HOSHERE ERFASSUNGSGRENZE GEWASHRLEISTET IST.

| | 1 | HUMBOLDT-UNIVERSITAT |

PRAKT CHEM 1971 03 3   EN STUDIENJAHRES DER SEKTION CHEMIE DER HUMBOLDT-UNIVERSITAST ZU BERLIN ANGEFERT

| | 1 | SPEKTROPHOTOMETRISCHE |

PRAKT CHEM 1971 03 5   GRUND DER VORGEGEBENEN BEDINGUNGEN NUR SPEKTROPHOTOMETRISCHE VERFAHREN ZUR ANWE

| | 1 | STUDIENJAHRES |

PRAKT CHEM 1971 03 2   N SIEGMUND, HESSE UND GROSS DES ZWEITEN STUDIENJAHRES DER SEKTION CHEMIE DER HUM

| | 1 | WISSENSCHAFTLICH-PRODUKTIVEN |

PRAKT CHEM 1971 03 1   DIE ARBEIT WURDE IM RAHMEN DES WISSENSCHAFTLICH-PRODUKTIVEN STUDIUMS VO

EXAMPLE 16

ITALIAN : A concordance using two widths of the lineprinter
for each entry. Note that "central alignment" of
the keyword in this case results in its being
printed on the far right because of the double
width involved.

2 = grave accent
3 = circumflex

<A MONTALE> <P82> ((FALSETTO))
ESTERINA, I VENT'ANNI TI MINACCIANO, / GRIGIOROSEA NUBE / CHE A POCO A POCO IN ✦
SE2 TI CHIUDE. / CIO2 INTENDI E NON PAVENTI. / SOMMERSA TI VEDREMO / NELLA ✦
FUME2A CHE IL VENTO / LACERA O ADDENSA, VIOLENTO . / POI DAL FIOTTO DI CENERE ✦
USCIRAI / ADUSTA PIU2 CHE MAI, / PROTESO A UN'AVVENTURA PIU2 LONTANA
L'INTENTO VISO CHE ASSEMBRA / L'ARCIERA DIANA. / SALGONO I VENTI AUTUNNI,
T'AVVILUPPANO ANDATE PRIMAVERE; / ECCO PER TE RINTOCCA / UN PRESAGIO ✦
NELL'ELISIE SFERE. / UN SUONO NON TI RENDA / QUAL D'INCRINATA BROCCA.
PERCOSSA!; IO TI PREGO SIA / PER TE CONCERTO INEFFABILE / DI SONAGLIERE.
LA DUBBIA DIMANE NON T'IMPAURA. / LEGGIADRA TI DISTENDI / SULLO SCOGLIO ✦·
LUCENTE DI SALE / E AL SOLE BRUCI LE MEMBRA. / RICORDI LA LUCERTOLA / FERMA ✦·
SUL MASSO BRULLO; / TE INSIDIA GIOVINEZZA, / QUELLA IL LACCIO2LO D'ERBA DEL ✦·
FANCIULLO. / L'ACQUA E2 LA FORZA CHE TI TEMPRA, / NELL'ACQUA TI RITROVI E TI ✦·
RINNOVI: / NOI TI PENSIAMO COME UN'ALGA, UN CIOTTOLO, / COME UN'EQUOREA ✦·
CREATURA / CHE LA SALSEDINE NON INTACCA / MA TORNA AL LITO PIU2 PURA.
HAI BEN RAGIONE TU! NON TURBARE / DI UBBIE IL SORRIDENTE PRESENTE. / LA TUA ✦
GAIEZZA IMPEGNA GIA2 IL FUTURO / ED UN CROLLAR DI SPALLE / DIROCCA I ✦·
FORTILIZI / DEL TUO DOMANI OSCURO. / T'ALZI E T'AVANZI SUL PONTICELLO
ESIGUO, SOPRA IL GORGO CHE STRIDE: / IL TUO PROFILO S'INCIDE / CONTRO UNO ✦
SFONDO DI PERLA. / ESITI A SOMMO DEL TREMULO ASSE. / POI RIDI, E COME ✦
SPICCATA DA UN VENTO / T'ABBATTI FRA LE BRACCIA / DEL TUO DIVINO AMICO CHE ✦
T'AFFERRA. / TI GUARDIAMO NOI, DELLA RAZZA / DI CHI RIMANE A TERRA.

80
0<,.;:!?'"&>
1<-(23)>
2✦
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ>.
4✦
5✦
6✦
7✦
W<1 24>
P<A4> (<MONT>)<ZZZZ>1000000
C<A4P3L3>200.80 C(A Z/1 9999)
✦

1   CIOTTOLO

MONT 82 32   A E2 LA FORZA CHE TI TEMPRA, NELL'ACQUA TI RITROVI E TI RINNOVI; NOI TI PENSIAMO COME UN'ALGA, UN CIOT
TOLO, COME UN'EQUOREA CREATURA CHE LA SALSEDINE NON INTACCA MA TORNA AL LITO PIU2 PURA.

                                3   COME

MONT 82 32   L'ACQUA E2 LA FORZA CHE TI TEMPRA, NELL'ACQUA TI RITROVI E TI RINNOVI; NOI TI PENSIAMO COME
UN'ALGA, UN CIOTTOLO, COME UN'EQUOREA CREATURA CHE LA SALSEDINE NON INTACCA MA TORNA AL LITO

MONT 82 33   ZA CHE TI TEMPRA, NELL'ACQUA TI RITROVI E TI RINNOVI: NOI TI PENSIAMO COME UN'ALGA, UN CIOTTOLO, COME
UN'EQUOREA CREATURA CHE LA SALSEDINE NON INTACCA MA TORNA AL LITO PIU2 PURA.

MONT 82 47   POI RIDI, E COME
SPICCATA DA UN VENTO T'ABBATTI FRA LE BRACCIA DEL TUO DIVINO AMICO CHE T'AFFERRA.

                                1   CONCERTO

MONT 82 20   UN SUONO NON TI RENDA QUAL D'INCRINATA BROCCA PERCOSSA!; IO TI PREGO SIA   PER TE CONC
ERTO INEFFABILE DI SONAGLIERE.

                                1   CONTRO

MONT 82 45   T'ALZI E T'AVANZI SUL PONTICELLO ESIGUO, SOPRA IL GORGO CHE STRIDE; IL TUO PROFILO S'INCIDE CONT
RO UNO SFONDO DI PERLA.

1   CREATURA

MONT 82 33   , NELL'ACQUA TI RITROVI E TI RINNOVI: NOI TI PENSIAMO COME UN'ALGA, UN CIOTTOLO. COME UN'EQUOREA CREA
TURA CHE LA SALSEDINE NON INTACCA MA TORNA AL LITO PIU2 PURA.

1   CROLLAR

MONT 82 39   LA. TUA. GAIEZZA IMPEGNA GIA2 IL FUTURO ED UN CROL
LAR DI SPALLE DIROCCA I FORTILIZI DEL TUO DOMANI OSCURO.

2   D

MONT 82 18   UN SUONO NON TI RENDA QUAL D'IN
CRINATA BROCCA PERCOSSAI; IO TI PREGO SIA PER TE CONCERTO INEFFABILE DI SONAGLIERE.

MONT 82 29   RICORDI LA LUCERTOLA FERMA SUL MASSO BRULLO: TE INSIDIA GIOVINEZZA, QUELLA IL LACCIO2LO D'ER
BA DEL FANCIULLO.

1   DA

MONT 82 47   POI RIDI. E COME SPICCATA DA U
N VENTO T'ABBATTI FRA LE BRACCIA DEL TUO DIVINO AMICO CHE T'AFFERRA.

1   DAL

MONT 82 8   SO CHE ASSEMB   POI DAL
FIOTTO DI CENERE USCIRAI ADUSTA PIU2 CHE MAI, PROTESO A UN'AVVENTURA PIU2 LONTANA L'INTENTO VI

EXAMPLE 17

LATIN : Proper names preceded by $ sign, and thus listed
         at the end of the concordance.

< THE PRO CLUENTIO >
<A CICERO>
<S PRO CLUENTIO>
<P 3>
SED IN HAC DIFFICULTATE ILLA ME RES TAMEN, IUDICES, CONSOLATUR QUOD VOS
DE CRIMINIBUS SIC AUDIRE CONSUESTIS UT EORUM OMNIUM DISSOLUTIONEM AB
ORATORE QUAERATIS, UT NON EXISTIMETIS PLUS VOS AD SALUTEM REO LARGIRI
OPORTERE QUAM QUANTUM DEFENSOR PURGANDIS CRIMINIBUS CONSEQUI ET DICENDO
PROBARE POTUERIT. DE INVIDIA AUTEM SIC INTER NOS DISCEPTARE DEBETIS
UT NON QUID DICATUR A NOBIS SED QUID OPORTEAT DICI CONSIDERETIS. AGITUR
ENIM IN CRIMINIBUS $A.$CLUENTI PROPRIUM PERICULUM, IN INVIDIA CAUSA COMMUNIS.
QUAM OB REM ALTERAM PARTEM CAUSAE SIC AGEMUS UT VOS DOCEAMUS, ALTERAM SIC·UT
OREMUS: IN ALTERA DILIGENTIA VESTRA NOBIS ADIUNGENDA EST, IN ALTERA FIDES
IMPLORANDA. NEMO EST ENIM QUI INVIDIAE SINE VESTRO AC SINE TALIUM
VIRORUM SUBSIDIO POSSIT RESISTERE.

80
0<.,?;:->
1*
2*
3<1ABCDEFGHIJKLMNOPQRSTUVWXYZ$>
4*
5*
6*
7*
W<1 24>
P<A0S0P1>(<3>)<ZZZ>100
C<A3S6P1L2>100/60C(A $/1 100)
+

```
                                         5    UT

CIC PRO CL 3  2              DE CRIMINIBUS SIC AUDIRE CONSUESTIS UT EORUM OMNIUM DISSOLUTIONEM AB
CIC PRO CL 3  3                       ORATORE QUAERATIS, UT NON EXISTIMETIS PLUS VOS AD SALUTEM REO LARGIRI
CIC PRO CL 3  6                                        UT NON QUID DICATUR A NOBIS SED QUID OPORTEAT DICI
CIC PRO CL 3  8       QUAM OB REM ALTERAM PARTEM CAUSAE SIC AGEMUS UT VOS DOCEAMUS, ALTERAM SIC UT
CIC PRO CL 3  8   TEM CAUSAE SIC AGEMUS UT VOS DOCEAMUS, ALTERAM SIC UT


                                         1    VESTRA

CIC PRO CL 3  9                    OREMUS: IN ALTERA DILIGENTIA VESTRA NOBIS ADIUNGENDA EST, IN ALTERA FIDES


                                         1    VESTRO

CIC PRO CL 3 10           IMPLORANDA. NEMO EST ENIM QUI INVIDIAE SINE VESTRO AC SINE TALIUM


                                         1    VIRORUM

CIC PRO CL 3 11                                        VIRORUM SUBSIDIO POSSIT RESISTERE.


                                         3    VOS

CIC PRO CL 3  1   ULTATE ILLA ME RES TAMEN, IUDICES, CONSOLATUR QUOD VOS
CIC PRO CL 3  3              ORATORE QUAERATIS, UT NON EXISTIMETIS PLUS VOS AD SALUTEM REO LARGIRI
CIC PRO CL 3  8       QUAM OB REM ALTERAM PARTEM CAUSAE SIC AGEMUS UT VOS DOCEAMUS, ALTERAM SIC UT


                                         1    $A

CIC PRO CL 3  7                   ENIM IN CRIMINIBUS $A.$CLUENTI PROPRIUM PERICULUM, IN INVIDIA CAUSA CO


                                         1    $CLUENTI

CIC PRO CL 3  7                   ENIM IN CRIMINIBUS $A.$CLUENTI PROPRIUM PERICULUM, IN INVIDIA CAUSA COMMU
```

EXAMPLE 18

GREEK :   Conventions used are = for crasis;
          * for rough breathing;   : for iota subscript.
          The sign $ indicates that the following letter
          is a capital; @ signifies a corruption in the
          text.   The diacritics are special characters
          of type 1.

<P 5>
KAI TEKMHRIOIV CRHTAI THV MEN TOU SWMATOV *RWMHV, *OTI EPI
TOUV *IPPOUV ANABAINW, THV D' EN TH: TECNH: EUPORIAV, *OTI
DUNAMAI SUNEINAI DUNAMENOIV ANQRWPOIV ANALISKEIN. THN MEN OUN
EK THV TECNHV EUPORIAN KAI TON ALLON TON EMON BION, O*IOV
TUGCANEI, PANTAV *UMAV OIOMAI GIGNWSKEIN. *OMWV DE K=AGW DIA
BRACEWN ERW.
<P 6>
EMOI GAR *O MEN PATHR KATELIPEN OUDEN, THN DE MHTERA TELEUTHSASAN
PEPAUMAI TREFWN TRITON ETOV TOUTI, PAIDEV DE MOI OUPW EISIN O*I
ME QERAPEUSOUSI. TECNHN DE KEKTHMAI BRACEA DUNAMENHN WFELEIN, *HN
AUTOV MEN HDH CALEPWV ERGAZOMAI, TON DIADEXOMENON D' AUTHN OUPW
DUNAMAI KTHSASQAI. PROSODOV DE MOI OUK ESTIN ALLH PLHN TAUTHV, *HN
AN AFELHSQE ME, KINDUNEUSAIM' AN *UPO TH: DUSCERESTATH: GENESQAI
TUCH:.
<P 7>
MH TOINUN, EPEIDH GE ESTIN, W BOULH, SWSAI ME DIKAIWV, APOLESHTE
ADIKWV. MHDE *A NEWTERW: KAI MALLON ERRWMENW: ONTI EDOTE,
PRESBUTERON KAI ASQENESTERON GIGNOMENON AFELHSQE. MHDE PROTERON
KAI PERI TOUV OUDEN ECONTAV KAKON ELEHMONESTATOI DOKOUNTEV EINAI
NUNI DIA TOUTON TOUV KAI TOIV ECQROIV ELEINOUV ONTAV AGRIWV
APODEXHSQE. MHD' EME TOLMHSANTEV ADIKHSAI KAI TOUV ALLOUV TOUV
*OMOIWV EMOI DIAKEIMENOUV AQUMHSAI POIHSHTE.
<P 8>
KAI GAR AN ATOPON EIH, W BOULH, EI *OTE MEN *APLH MOI HN *H SUMFORA,
TOTE MEN FAINOIMHN LAMBANWN TO ARGURION TOUTO, NUN D' EPEIDH
KAI GHRAV KAI NOSOI KAI TA TOUTOIV *EPOMENA KAKA PROSGIGNETAI MOI,
TOTE AFAIREQEIHN.
<P 9>
DOKEI DE MOI THV PENIAV THV EMHV TO MEGEQOV *O KATHGOROV AN
EPIDEIXAI SAFESTATA MONOV ANQRWPWN. EI GAR EGW KATASTAQEIV
CORHGOV TRAGW:DOIV PROKALESAIMHN AUTON EIV ANTIDOSIN, DEKAKIV
AN *ELOITO CORHGHSAI MALLON H ANTIDOUNAI *APAX. KAI PWV OU
DEINON ESTI NUN MEN KATHGOREIN *WV DIA POLLHN EUPORIAN EX
ISOU DUNAMAI SUNEINAI TOIV PLOUSIWTATOIV, EI DE *WN EGW LEGW
TUCOI TI GENOMENON, @TOIOUTON EINAI@ KAI ETI PONHROTERON?

72
0<.,?-@>
1<(=*:')>
2*
3<1ABGDEZHQIKLMNXOPRSVTUFCYW$>
4*
5*
6*
7*
W<0 24>
P<A3S2>(<LYS24>)<ZZZ>1000
C<A3S2P2>95.60C(A $/1 1000)
*

LYS 24 12 'BOULH, TOUTON AN, EI MEN EP' ASTRABHV OCOUMENON *EWRA ME, SIWPAN - TI GAR AN KAI ELEGEN? -, *OTI

LYS 24 4 AI TOIAUTHN *WSTE KAI ANEU TOU DIDOMENOU TOUTOU ZHN.

LYS 24 10 H, PANTAV OIMAI TOUV ECONTAV TI DUSTUCHMA TOUTO ZHTEIN KAI TOUTO FILOSOFEIN, *OPWV *WV ALUPOTATA

LYS 24 1 TA MECRI THSDE THV *HMERAV EPAINOU MALLON AXION H FQONOU.
LYS 24 1 OKEI PARASKEUASAI TONDE MOI TON KINDUNON O*UTOV H DIA FQONON,
LYS 24 9   ANTIDOSIN, DEKAKIV AN *ELOITO CORHGHSAI MALLON H ANTIDOUNAI *APAX.
LYS 24 14 ALLON PISTEUETE TOIV *UMETEROIV AUTWN OFQALMOIV H TOIV TOUTOU LOGOIV.
LYS 24 19 CNAV ECOUSIN, OUDE TWN *WV EME EISIONTWN MALLON H TWN *WV TOUV ALLOUV DHMIOURGOV.

LYS 24 8 N ATOPON EIH, W BOULH, EI *OTE MEN *APLH MOI HN *H SUMFORA, TOTE MEN FAINOIMHN LAMBANWN TO ARGUR
LYS 24 22   MHD' O*U MONON METALABEIN EDWKEN *H TUCH MOI TWN EN TH: PATRIDI, TOUTOU DIA TOUTO
LYS 24 22 MEGISTWN ((ARCWN)) *O DAIMWN APESTERHSEN *HMAV, *H POLIV *HMIN EYHFISATO TOUTO TO ARGURION, *HGO
LYS 24 23 STWN DIA THN SUMFORAN APESTERHMENOV EIHN, *A D' *H POLIV EDWKE PRONOHQEISA TWN O*UTWV DIAKEIMENW

LYS 24 22 AV, *H POLIV *HMIN EYHFISATO TOUTO TO ARGURION, *HGOUMENH KOINAV EINAI TAV TUCAV TOIV *APASI KAI

LYS 24 3   HDH TOINUN, W BOULH, DHLOV ESTI FQONWN, *OTI TOI
LYS 24 6 EKTHMAI BRACEA DUNAMENHN WFELEIN, *HN AUTOV MEN HDH CALEPWV ERGAZOMAI, TON DIADEXOMENON D' AUTHN
LYS 24 16   OUDE TOUV HDH PROBEBHKOTAV TH: *HLIKIA:, ALLA TOUV ETI NEO

LYS 24 26 DEN *HMARTHKWV *OMOIWV *UMWN TUCOIMI TOIV POLLA HDIKHKOSIN, ALLA THN AUTHN YHFON QESQE PERI EMOU

LYS 24 14 WSPER EPIKLHROU THV SUMFORAV OUSHV AMFISBHTHSWN *HKEI KAI PEIRATAI PEIQEIN *UMAV *WV OUK EIMI TO

LYS 24 16   OUDE TOUV HDH PROBEBHKOTAV TH: *HLIKIA:, ALLA TOUV ETI NEOUV KAI NEAIV TAIV DIA

LYS 24 26   MH TOINUN, W BOULH, MHDEN *HMARTHKWV *OMOIWV *UMWN TUCOIMI TOIV POLLA HDIK

LYS 24 22 H, TWN MEGISTWN ((ARCWN)) *O DAIMWN APESTERHSEN *HMAV, *H POLIV *HMIN EYHFISATO TOUTO TO ARGURIO

LYS 24 1 EUDOMENON, EMAUTON DE BEBIWKOTA MECRI THSDE THV *HMERAV EPAINOU MALLON AXION H FQONOU.

EXAMPLE 19

GREEK : As in the previous example, and showing a possible
         method of overcoming the problem of split lines.
         Output is also shown in Greek characters using the
         SD4020.


```
<P TH>
<S MN>
<V 1077>
WGAQ' EASON ME MONW:DHSAI,
<V 1078>
KAI CARIEI MOI. PAUSAI. (((SEU.) PAUSAI.))
<S EU>
<V 1078>
(((SMN.) KAI CARIEI MOI. PAUSAI. (SEU.))) PAUSAI.
<V 1079>
(((SMN.) BALL' EV KORAKAV. (SEU.))) BALL' EV KORAKAV.
<S MN>
<V 1079>
BALL' EV KORAKAV. (((SEU.) BALL' EV KORAKAV.))
<V 1080>
TI KAKON? (((SEU.) TI KAKON?))
<S EU>
<V 1080>
(((SMN.) TI KAKON? (SEU.))) TI KAKON?
<S MN>
<V 1081>
LHREIV. (((SEU.) LHREIV.))
<S EU>
<V 1081>
(((SMN.) LHREIV. (SEU.))) LHREIV.
<V 1082>
(((SMN.) OIMWZ'. (SEU.))) OIMWZ'. (((SMN.) OTOTUZ'. (SEU.))) OTOTUZ'.
<S MN>
<V 1082>
OIMWZ'. (((SEU.) OIMWZ'. (SMN.))) OTOTUZ'. (((SEU.) OTOTUZ'.))
<S TO>
<V 1083>
OUTOV SI LALIV? (((SEU.) OUTOV SI LALIV?))
<S EU>
<V 1083>
(((STO.) OUTOV SI LALIV? (SEU.))) OUTOV SI LALIV?
<V 1084>
(((STO.) PRUTANEIV KALESW? (SEU.))) PRUTANEIV KALESW?
<S TO>
<V 1084>
PRUTANEIV KALESW? (((SEU.) PRUTANEIV KALESW?))


72
0<.,?&>
1<(=*:')>
2*
3<1ABGDEZHQIKLMNXOPRSVTUFCYWS>
4*
5*
6*
7*
W<1 20>
P<P2>(<TH>)<Z>10000
C<P2V4S2>105/10C(A S/1 1000)
+
```

2   BALL

TH 1079 EU   (((SMN.) BALL' EV KORAKAV. (SEU.))) BALL' EV KORAKAV.
TH 1079 MN   BALL' EV KORAKAV. (((SEU.) BALL' EV KORAKAV.))

1   EASON

TH 1077 MN   WGAQ' EASON ME MONW':DHSAI,

2   EV

TH 1079 EU   (((SMN.) BALL' EV KORAKAV. (SEU.))) BALL' EV KORAKAV.
TH 1079 MN   BALL' EV KORAKAV. (((SEU.) BALL' EV KORAKAV.))

1   KAI

TH 1078 MN   KAI CARIEI MOI. PAUSAI. (((SEU.) PAUSAI.))

2   KAKON

TH 1080 EU   (((SMN.) TI KAKON? (SEU.))) TI KAKON?
TH 1080 MN   TI KAKON? (((SEU.) TI KAKON?))

2   KALESW

TH 1084 EU   (((STO.) PRUTANEIV KALESW? (SEU.))) PRUTANEIV KALESW?
TH 1084 TO   PRUTANEIV KALESW? (((SEU.) PRUTANEIV KALESW?))

2   KORAKAV

TH 1079 EU   (((SMN.) BALL' EV KORAKAV. (SEU.))) BALL' EV KORAKAV.
TH 1079 MN   BALL' EV KORAKAV. (((SEU.) BALL' EV KORAKAV.))

TH 1079 EU   [⟨Μν.⟩ βαλλ' ἐς κορακας. ⟨Εὐ.⟩] βαλλ' ἐς κορακας.,
TH 1079 MN   βαλλ'. ἐς κορακας. [⟨Εὐ.⟩ βαλλ' ἐς κορακας.]

1   ἐασον

TH 1077 MN   ὠγαθ' ἐασον με μονῳδησαι.

2   ἐς

TH 1079 EU   [⟨Μν.⟩ βαλλ' ἐς κορακας. ⟨Εὐ.⟩] βαλλ' ἐς κορακας.
TH 1079 MN   βαλλ' ἐς κορακας. [⟨Εὐ.⟩ βαλλ' ἐς κορακας.]

1   και

TH 1078 MN   και χαριει μοι. παυσαι. [⟨Εὐ.⟩ παυσαι.]

2   κακον

TH 1080 EU   [⟨Μν.⟩ τι κακον: ⟨Εὐ.⟩] τι κακον:
TH 1080 MN   τι κακον: [⟨Εὐ.⟩ τι κακον:]

2   καλεσω

TH 1084 EU   [⟨Το.⟩ πρυτανεις καλεσω: ⟨Εὐ.⟩] πρυτανεις καλεσω;
TH 1084 TO   πρυτανεις καλεσω: [⟨Εὐ.⟩ πρυτανεις καλεσω:]

2   κορακας

EXAMPLE 20

ARABIC : Combination of pre-editing and use of the exclusion
list to omit prefixes and suffixes which are separated
from the rest of the word by a hyphen.   Output is
also shown in Arabic script using the SD4020.

```
<       TWO POEMS BY ABU NUWAS       >
<N 101>
<V 1>
SUL-T UX-Y UB-A EYSY
W-JBRYL L-O EQL
<V 2>
F-QL-T AL-XMR T-EJB-NY
F-QAL K=YR-OA QTL
<V 3>
F-QL-T L-O F-QD:R L-Y
F-QAL W-QWL-O FCL
<V 4>
WJD-T VBA'E AL-INSAN
ARBE? OY AL-UCL
<V 5>
F-ARBE? L-ARBE?
L-KL: VBYE? RVL
<N 102>
<V 1>
AL-XMR TF:AH JRY *A'BA
K*LK AL-TF:AH XMR JMD
<V 2>
F-A$RB ELY JAMD *A *WB *A
W-LA T-DE L*:? YWM L-GD
```

```
72
0<->
1<:?A>
2*
3<1UIPI(')BT=JHXD*RZS$C@V&EGFQKLMNOWY>
4*
5*
6*
7*
W<1 20>
P<N3>(<101><102>)<ZZ>200
C<N3V3>65/10L>UN I* IN T TST TM ST F FL K KM L LL M MST MN N NST
O OM ON W WL WLL WN Y YST YN<
*
```

1   VBYE

101   5 L-KL: VBYE? RVL

                                        1   EJB

101   2 F-QL-T AL-XMR T-EJB-NY

                                        1   EQL

101   1 W-JBRYL L-O EQL

                                        1   ELY

102   2 F-A$RB ELY JAMD *A *WB *A

                                        1   EYSY

101   1 SUL-T UX-Y UB-A EYSY

                                        1   GD

102   2 W-LA T-DE L*:? YWM L-GD

                                        1   FCL

101   3 F-QAL W-QUL-O FCL

                                        1   QTL

101   2 F-QAL K=YR-OA QTL

EXAMPLE 21

SPANISH : Use of the two-character option to represent the
conventional Spanish alphabetic order.

        1 = acute accent
        * = tilde

<A LORCA>
<P LA AURORA>.
LA AURORA DE NUEVA YORK TIENE
CUATRO COLUMNAS DE CIENO
Y UN HURACA'N DE NEGRAS PALOMAS
QUE CHAPOTEAN LAS AQUAS PODRIDAS.
LA AURORA DE NUEVA YORK GIME
POR LAS INMENSAS ESCALERAS
BUSCANDO ENTRE LAS ARISTAS
NARDOS DE ANGUSTIA DIBUJADA.
LA AURORA LLEGA Y NADIE LA RECIBE EN SU BOCA
PORQUE ALLI' NO HAY MAN*ANA NI ESPERANZA POSIBLE.
A VECES LAS MONEDAS EN ENJAMBRES FURIOSOS
TALADRAN Y DEVORAN ABANDONADOS NIN*OS.
LOS PRIMEROS QUE SALEN COMPRENDEN CON SUS HUESCOS
QUE NO HABRA' PARAI'SO NI AMORES DESHOJADOS;
SABEN QUE VAN AL CIENO DE NU'MEROS Y LEYES,
A LOS JUEGOS SIN ARTE, A SUDORES SIN FRUTO.
LA LUZ ES SEPULTADA POR CADENAS Y RUIDOS
EN IMPU'DICO RETO DE CIENCIA SIN RAI'CES.
POR LOS BARRIOS HAY GENTES QUE VACILAN INSOMNES
COMO RECIE'N SALIDAS DE UN NAUFRAGIO DE SANGRE.

72
0<.,?:>
1<'->
2*
3<2A B C CHD E F G H I J K L LLM N N*O P Q R S T U V W X Y Z >
4*
5*
6*
7*
W<1 24>
P<A5P6>(<LORCALA AUR>)<ZZZZ>1000
C<A5P6L2>100/5C(A Z/1 100)
*

```
                                            2    CIENO

LORCA LA AUR  2                  CUATRO COLUMNAS DE CIENO
LORCA LA AUR 15          SABEN QUE VAN AL CIENO DE NU'MEROS Y LEYES,


                                            1    COLUMNAS

LORCA LA AUR  2                  CUATRO COLUMNAS DE CIENO


                                            1    COMO

LORCA LA AUR 20                  COMO RECIE'N SALIDAS DE UN NAUFRAGIO DE SANGRE.


                                            1    COMPRENDEN

LORCA LA AUR 13          LOS PRIMEROS QUE SALEN COMPRENDEN CON SUS HUESCOS


                                            1    CON

LORCA LA AUR 13    LOS PRIMEROS QUE SALEN COMPRENDEN CON SUS HUESCOS


                                            1    CUATRO

LORCA LA AUR  2                  CUATRO COLUMNAS DE CIENO


                                            1    CHAPOTEAN

LORCA LA AUR  4                  QUE CHAPOTEAN LAS AGUAS PODRIDAS.


                                            9    DE

LORCA LA AUR  1                  LA AURORA DE NUEVA YORK TIENE
LORCA LA AUR  2                  CUATRO COLUMNAS DE CIENO
LORCA LA AUR  3                  Y UN HURACA'N DE NEGRAS PALOMAS
LORCA LA AUR  5                  LA AURORA DE NUEVA YORK GIME
LORCA LA AUR  8                  NARDOS DE ANGUSTIA DIBUJADA.
LORCA LA AUR 15          SABEN QUE VAN AL CIENO DE NU'MEROS Y LEYES,
LORCA LA AUR 18          EN IMPU'DICO RETO DE CIENCIA SIN RAI'CES.
LORCA LA AUR 20    COMO RECIE'N SALIDAS DE UN NAUFRAGIO DE SANGRE.
LORCA LA AUR 20          COMO RECIE'N SALIDAS DE UN NAUFRAGIO DE SANGRE.
```

EXAMPLE 22

WELSH : Use of the two-character option to represent the
         conventional Welsh alphabetic order.   Diacritics
         declared as special characters of Type 1.

         1 = acute accent
         3 = circumflex
         5 = diaeresis

```
<A JONES>
<T RHOSOD>
RHOSOD YN TORRI / FEL GWAED WEDI EI BOERI / AC YN LLIFO O FRIW NEWYDD / YR HAF.
YN DIFERU YN ARAF / AC YN CEULO / YN YR ARDD FACH, / NES LLENWI Y LLE / EFO +·
RHYW BRYDFERTHWCH OD / SYDD YN DDARN O BOEN / WEDI EI LIWIO. / MAE'R OGLA. YN +·
LLENWI FY MHEN / FEL CIG NEWYDD EI LADD / I LEW. / MAE'R RHOSOD / YN CLEDU / I +·
GUDDIO Y BRIW DAN Y CROEN. / A CHYN BO HIR / FYDD YNA. DDIM BYD AR O3L / OND +·
CRAITH WEN / I DDANGOS / LLE BUO'R / HAF.
```

```
80
0<,.;:?!#&'>
1<-(135)>
2*
3<2A B C CHD DDE F FFG NGH I J K L LLM N O P PHQ R RHS T THU V W X Y Z >:
4*
5*
6*
7*
W<1 24>
P<A5>(<JONES>)<ZZZZZ>1000000
C<A5T6L2>80.80 C(A Z/1 99999)
+
```

-82-

```
                                              1    ARAF
JONES RHOSOD  5                    YN DIFERU YN ARAF  AC YN CEULO  YN YR ARDD FACH,  NES L


                                              1    ARDD
JONES RHOSOD  7         YN DIFERU YN ARAF  AC YN CEULO  YN YR ARDD FACH,  NES LLENWI Y LLE  EFO RHYW BRY


                                              1    BO
JONES RHOSOD 18                       A CHYN BO HIR  FYDD YNA DDIM BYD AR O3L  OND CRAI


                                              1    BOEN
JONES RHOSOD 10    EFO RHYW BRYDFERTHWCH OD  SYDD YN DDARN O BOEN  WEDI EI LIWIO.


                                              1    BOERI
JONES RHOSOD  2        RHOSOD YN TORRI  FEL GWAED WEDI EI BOERI  AC YN LLIFO D FRIW NEWYDD  YR HAF.


                                              1    BRIW
JONES RHOSOD 17       MAE'R RHOSOD  YN CLEDU  I GUDDIO Y BRIW DAN Y CROEN.


                                              1    BRYDFERTHWCH
JONES RHOSOD  9   YR ARDD FACH,  NES LLENWI Y LLE  EFO RHYW BRYDFERTHWCH OD  SYDD YN DDARN O BOEN  WED


                                              1    BUO
JONES RHOSOD 22   YD AR O3L  OND CRAITH WEN  I DDANGOS  LLE BUO'R  HAF.


                                              1    BYD
JONES RHOSOD 19          A CHYN BO HIR  FYDD YNA DDIM BYD AR O3L  OND CRAITH WEN  I DDANGOS  LLE


                                              1    CEULO
JONES RHOSOD  6          YN DIFERU YN ARAF  AC YN CEULO  YN YR ARDD FACH,  NES LLENWI Y LLE


                                              1    CIG
JONES RHOSOD 13       MAE'R OGLA YN LLENWI FY MHEN  FEL CIG NEWYDD EI LADD  I LEW.


                                              1    CLEDU
JONES RHOSOD 16            MAE'R RHOSOD  YN CLEDU  I GUDDIO Y BRIW DAN Y CROEN.


                                              1    CRAITH
JONES RHOSOD 20   HYN BO HIR  FYDD YNA DDIM BYD AR O3L  OND CRAITH WEN  I DDANGOS  LLE BUO'R  HAF.


                                              1    CROEN
JONES RHOSOD 17   R RHOSOD  YN CLEDU  I GUDDIO Y BRIW DAN Y CROEN.


                                              1    CHYN
JONES RHOSOD 18            A CHYN BO HIR  FYDD YNA DDIM BYD AR O3L  OND
```

EXAMPLE 23

RUSSIAN : Use of the two-character option to represent
the Cyrillic alphabet; "Q" used for "щ" and
"YE5" for " è ".

1   BRAT

TURG   9 ERZKO CHIRIKAYA, SLOVNO I CHORT YEMU NYE BRAT.

                                        1   BIJT'MOZHYET

TURG   11 OKO NA NYEBYE KRUZHIL YASTRYEB, KOTOROMU, BIJT'-MOZHYET, SUZHDYENO SOZHRAT' IMYENNO

                                        2   V

TURG   5   STRYELOYU UKHODILA V DAL' DOROGA.
TURG   5 ERYEZ NYEYES, CHYERYEZ ETU SAMUYU DOROGU, V DYESYATI SHAGAKH OT MYENYA.

                                        1   VOZ'MI

TURG   14   - MIJ YEQYES POVDYUYEM, CHORT VOZ'MI.

                                        1   VOROB'YEV

TURG   7 SYEM, PRIJGALA GUS'KOM TSYELAYA SYEMYEYKA VOROB'YESV.

                                        1   VSYEGO

TURG   1 NAYA MALOST' MOZHYET INOGDA PYERYESTROIT' VSYEGO CHYELOVYEKA.

                                        1   VSTRYAKHNULSYA

TURG   12   YA POGLYADYEL, RASSMYEYALSYA, VSTRYAKHNULSYA -- I GRUSTNIJYE DUMIJ TOTCHA

                                        1   VSYA

TURG   6   VSYA RAZZOLOCHYENNAYA YARKIM LYETNIM SOLNT

                                        1   VIJPUCHA

TURG   9 NIKH TAK I NADSAZHIVAL BOCHKOM, BOCHKOM, VIJPUCHA ZOB I DYERZKO CHIRIKAYA, SLOVNO I

                                        1   VIJSOKIKH

TURG   4   PRYEDO MNOYU, MYEZHDU DVUKH RYADOV VIJSOKIKH TOPOLYEY.

                                        1   VIJSOKO

TURG   10   A MYEZHDU TYEM, VIJSOKO NA NYEBYE KRUZHIL YASTRYEB, KOTORO

                                        1   GOLOVU

TURG   4   YA PODNYAL GOLOVU.

                                        1   GRUD'

TURG   3 TYAZHKIYE PRYEDCHUVSTVIYA STYESNYALI MOYU GRUD'; UNIJLOST' OVLADYEVALA MNOYU.

1   GRUSTNIJYE

TURG   12 YADYEL, RASSMYEYALSYA, VSTRYAKHNULSYA - I GRUSTNIJYE DUMIJ TOTCHAS OTLYETYELI PROCH':

                                        1   GUS'KOM

TURG   7 ENNAYA YARKIM LYETNIM SOLNTSYEM, PRIJGALA GUS'KOM TSYELAYA SYEMYEYKA VOROB'YESV.

                                        1   DAL'

TURG   5   STRYELOYU UKHODILA V DAL' DOROGA.

                                        1   DVUKH

TURG   4   PRYEDO MNOYU, MYEZHDU DVUKH RYADOV VIJSOKIKH TOPOLYEY.

                                        1   DYERZKO

TURG   9 SAZHIVAL BOCHKOM, BOCHKOM, VIJPUCHA ZOB I DYERZKO CHIRIKAYA, SLOVNO I CHORT YEMU NYE

                                        1   DYESYATI

TURG   6 YEZ NYEYES, CHYERYEZ ETU SAMUYU DOROGU, V DYESYATI SHAGAKH OT MYENYA.

                                        1   DOROGA

TURG   5   STRYELOYU UKHODILA V DAL' DOROGA.

                                        1   DOROGYE

TURG   2 AZDUM'YA, SHYESL YA ODNAZHDIJ PO BOL'SHOY DOROGYE.

                                        1   DOROGU

TURG   5   I CHYERYEZ NYEYES, CHYERYEZ ETU SAMUYU DOROGU, V DYESYATI SHAGAKH OT MYENYA.

                                        1   DUMIJ

TURG   12 SMYEYALSYA, VSTRYAKHNULSYA - I GRUSTNIJYE DUMIJ TOTCHAS OTLYETYELI PROCH': OTVAGU, U

                                        1   YEMU

TURG   9 ZOB I DYERZKO CHIRIKAYA, SLOVNO I CHORT YEMU NYE BRAT.

                                        1   YEQYE

TURG   14   - MIJ YEQYES POVOYUYEM, CHORT VOZ'MI.

                                        1   ZHIZNI

TURG   13 TLYETYELI PROCH': OTVAGU, UDAL', OKHOTU K ZHIZNI POCHUVSTVOVAL YA.

EXAMPLE 24

HUNGARIAN : Use of the three-character option to represent
             the conventional alphabetic order of the
             language.   W included because it appears in
             references.


```
<P WHITNEY>
<S 35>
A SZI*NPADON. EGY KOCSMA BELSEJE. MAJDNEM U=RES: CSAK KE*T +
FE*RFI U=L AZ EGYIK ASZTALNA*L. KOPOTT A RUHA*JUK, HOSSZU* A +
HAJUK, LYUKAS A ZOKNIJUK: NAGY FOLT AZ EGYIK FIATAL I*RO* +
NADRA*GJA*N. AZ ASZTALON KE*T SO=RO=S POHA*R E*S KE*T LEVESES +
TA*NYE*R. A FU=STO=S HA*TTE*RBEN JO=N-MEGY EGY VE*N PINCE*R. +
AZ EGYIK I*RO* SOVA*NY E*S SA*PADTARCU, ME*LY, REME*NYTELEN HANGJA +
VAN. KEZE*BEN TART EGY KE*ZIRATOT, AMELYET E*PPEN A*TOLVASOTT.
<P ZZZ>
```


```
72
0<.¸?:>
1<'→>
2*
3<3A  A*  B   C   CS CCSD  E   E*  F   G   GY GGYH  I   I*  J   K   L    LY LLYM   N   O'  O*  O=:
 O=*P   R   S   SZ SSZT   TY TTYU  U*  U=  U=*V   W   Z   ZS ZZS>
4*
5*
6*
7*
W<1 24>
P<P7>(<WHITNEY>)<ZZZ>200
C<P2S2>100/60C(A ZZS/1 999)
*
```


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```
WH 35                                        A SZI*NPADON. EGY KOCSMA BELSEJE. MAJDNEM U=RES: CS
WH 35 ALNA*L. KOPOTT A RUHA*JUK, HOSSZU* A HAJUK, LYUKAS A ZOKNIJUK: NAGY FOLT AZ EGYIK FIATAL I*RO* NADRA*G
WH 35 =L AZ EGYIK ASZTALNA*L. KOPOTT A RUHA*JUK, HOSSZU* A HAJUK, LYUKAS A ZOKNIJUK: NAGY FOLT AZ EGYIK FIAT
WH 35 LON KE*T SO=RO=S POHA*R E*S KE*T LEVESES TA*NYE*R. A FU=STO=S HA*TTE*ERBEN JO=N-MEGY EGY VE*N PINCE*R.
WH 35 : CSAK KE*T FE*RFI U=L AZ EGYIK ASZTALNA*L. KOPOTT A RUHA*JUK, HOSSZU* A HAJUK, LYUKAS A ZOKNIJUK: NAG
```

1   AMELYET

```
WH 35 *NYTELEN HANGJA VAN. KEZE*BEN TART EGY KE*ZIRATOT, AMELYET E*PPEN A*TOLVASOTT.
```

1   ASZTALNA*L

```
WH 35 SEJE. MAJDNEM U=RES: CSAK KE*T FE*RFI U=L AZ EGYIK ASZTALNA*L. KOPOTT A RUHA*JUK, HOSSZU* A HAJUK, LYU
```

1   ASZTALON

```
WH 35 K: NAGY FOLT AZ EGYIK FIATAL I*RO* NADRA*GJA*N. AZ ASZTALON KE*T SO=RO=S POHA*R E*S KE*T LEVESES TA*NY
```

4   AZ

```
WH 35 OCSMA BELSEJE. MAJDNEM U=RES: CSAK KE*T FE*RFI U=L AZ EGYIK ASZTALNA*L. KOPOTT A RUHA*JUK, HOSSZU* A H
WH 35  FU=STO=S HA*TTE*ERBEN JO=N-MEGY EGY VE*N PINCE*R. AZ EGYIK I*RO* SOVA*NY E*S SA*PADTARCU, ME*LY, REME
WH 35 JUK, HOSSZU* A HAJUK, LYUKAS A ZOKNIJUK: NAGY FOLT AZ EGYIK FIATAL I*RO* NADRA*GJA*N. AZ ASZTALON KE*T
WH 35 IJUK: NAGY FOLT AZ EGYIK FIATAL I*RO* NADRA*GJA*N. AZ ASZTALON KE*T SO=RO=S POHA*R E*S KE*T LEVESES TA
```

1   A*TOLVASOTT

```
WH 35  VAN. KEZE*BEN TART EGY KE*ZIRATOT, AMELYET E*PPEN A*TOLVASOTT.
```

1   BELSEJE

```
WH 35                    A SZI*NPADON. EGY KOCSMA BELSEJE. MAJDNEM U=RES: CSAK KE*T FE*RFI-U=L AZ EGY
```

```
                                1   CSAK

WH 35   A SZI*NPADON. EGY KOCSMA BELSEJE. MAJDNEM U=RES: CSAK KE*T FE*RFI U=L AZ EGYIK ASZTALNA*L. KOPOTT A


                                3   EGY

WH 35                                          A SZI*NPADON. EGY KOCSMA BELSEJE. MAJDNEM U=RES: CSAK KE*T FE*RFI
WH 35 EVESES TA*NYE*R. A FU=STO=S HA*TTE*ERBEN JO=N-MEGY EGY VE*N PINCE*R. AZ EGYIK I*RO* SOVA*NY E*S SA*PAD
WH 35 RCU, ME*LY, REME*NYTELEN HANGJA VAN. KEZE*BEN TART EGY KE*ZIRATOT, AMELYET E*PPEN A*TOLVASOTT.


                                3   EGYIK

WH 35 MA BELSEJE. MAJDNEM U=RES: CSAK KE*T FE*RFI U=L AZ EGYIK ASZTALNA*L. KOPOTT A RUHA*JUK, HOSSZU* A HAJU
WH 35 =STO=S HA*TTE*ERBEN JO=N-MEGY EGY VE*N PINCE*R. AZ EGYIK I*RO* SOVA*NY E*S SA*PADTARCU, ME*LY, REME*NY
WH 35 , HOSSZU* A HAJUK, LYUKAS A ZOKNIJUK: NAGY FOLT AZ EGYIK FIATAL I*RO* NADRA*GJA*N. AZ ASZTALON KE*T SO


                                1   E*PPEN

WH 35   HANGJA VAN. KEZE*BEN TART EGY KE*ZIRATOT, AMELYET E*PPEN A*TOLVASOTT.


                                2   E*S

WH 35 I*RO* NADRA*GJA*N. AZ ASZTALON KE*T SO=RO=S POHA*R E*S KE*T LEVESES TA*NYE*R. A FU=STO=S HA*TTE*ERBEN
WH 35 JO=N-MEGY EGY VE*N PINCE*R. AZ EGYIK I*RO* SOVA*NY E*S SA*PADTARCU, ME*LY, REME*NYTELEN HANGJA VAN. KE


                                1   FE*RFI

WH 35 ADON. EGY KOCSMA BELSEJE. MAJDNEM U=RES: CSAK KE*T FE*RFI U=L AZ EGYIK ASZTALNA*L. KOPOTT A RUHA*JUK,


                                1   FIATAL

WH 35 ZU* A HAJUK, LYUKAS A ZOKNIJUK: NAGY FOLT AZ EGYIK FIATAL I*RO* NADRA*GJA*N. AZ ASZTALON KE*T SO=RO=S
```

The following index to this manual was
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