

GUESSING¹ THE MEANINGS OF WORDS FROM CONTEXT: STRATEGY AND TECHNIQUES

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Although the skill of guessing word meanings from context is widely acknowledged as a useful skill there has been little research in this area and very little useful guidance for teachers or learners. This article describes a strategy for guessing meanings from context and suggests ways of practising this strategy. The strategy involves four steps: 1, determining the part of speech of the word; 2, looking at the immediate grammar; 3, studying the wider context (usually the conjunction relationships); 4, guessing the word and checking the guess. A basic list of conjunction relationships is given in the Appendix. The previous research, and value and applications of the skill are discussed and suggestions are made for future studies.

1. Previous studies

The few studies of guessing words from context indicate that a large proportion of the unknown words can be successfully dealt with in this way.

Seibert (1945) carried out two studies to show the effectiveness of guessing word meaning from context. In the first study, university teachers with a knowledge of French and Latin but with no previous knowledge of Spanish attempted to guess the meanings of the main words in Spanish reading texts by making use of etymology and context. 60% to 90% of the main words proved to be guessable. Because of the similarities between French and Spanish, etymology accounted for between 10% to 40% of the guesses. However, Seibert noted that 'without context to check the meaning of the words, etymology, when faulty, may be a dangerous tool.' (p. 300). The second study was a modified cloze test in English administered to Freshman university students whose mother-tongue was English. The test was pretested with university teachers to ensure that all blanks were guessable. On the average, 60% of the blanks were correctly filled by the university students. The acceptable alternative technique of marking was used.

Honeyfield (1977) also suggests the use of modified cloze as a way to practise guessing words from context. Evidence from Wainman (1979) suggests that standard cloze tests and modified cloze tests measure the same thing. If this is true, then guessing words from context is a central part of the reading process and may only differ slightly from the inference and prediction which characterizes intelligent reading.

¹ *Inferring* perhaps conveys the requirements of this skill better than the word *Guessing*. However in this study as in Seibert's (1945) we shall use the more widely accepted and less awkward term *Guessing*.

Selbert also tried to investigate the conditions where guessing is possible and the mental processes involved in guessing. This resulted in five categories of clues, namely word association, sentence structure, association of ideas, use of deduction, and clues found in the general meaning of a paragraph. Each of these categories was further sub-classified. Selbert suggested that this classification could be used as the basis for teaching.

Saragi *et al.* (1978) investigated the amount of new vocabulary that could be learnt incidentally by meeting it in context, and concluded that a large quantity of words could be learnt in this way without using a dictionary or glossary.

2. The present study

Our experience shows that learners with a vocabulary of around 3,000 words are capable of guessing, on average, 60—70% of the unknown words in a reading passage. Some learners regularly achieve around 80%. Secondly, practice with this skill results in remarkable improvement over as few as five passages. The range of achievement on the first passage used in one of our classes was 0—80%. After working on five passages in this way, each with 10 to 15 words to be guessed, the range was 50—85%. In theory at least, if one learner can find enough clues in a passage to guess 80% of the previously unknown words, then every learner can achieve a similar score with training. In any passage very few of the unknown words cannot be guessed from context. Let us look now at a strategy for doing this.

3. A strategy

The following strategy consists of four steps. They need not be taken in exactly the same order as is given here but it is worth making sure that each step is taken. The first step is to look at the word itself and its surroundings to decide on the part of speech. The second step is to look at the immediate grammar context of the word, usually within a clause or sentence. The third step is to look at the wider context of the word usually beyond the level of the clause and often over several sentences. The fourth step involves guessing the word and checking that the guess is correct. Let us now look at each step in detail.

1. Guessing the meaning of words from the immediate context can be approached from a number of directions but all of them benefit from the learner first establishing the part of speech of the item in question.
2. Knowing the part of speech of the word then allows one kind of analysis to take place along the lines of, 'Who does what to whom?' For example, in the following sentence, *Typhoon Vera killed or injured 218 people and crippled the seaport city of Keelung*, the verb *cripple* may be unfamiliar but can be adequately inferred according to the formula:

Typhoon Vera Verb Keelung

Typhoon Vera did something to Keelung. Although many verbs can be considered as 'neutral', many others can be assigned a positive or a negative value. Thus, *cripple* can be given a negative value since it is likely that a typhoon will have some kind of negative (or undesired) influence upon a city.

The precise meaning of *cripple* cannot of course be reached by this type of guessing, but learners should be able to produce such ideas as 'damage' or 'destroy'. Later sentences may help to show exactly how negative *crippled* is by telling about the amount of damage involved. However, the fact is that for a general understanding of a reading passage it is often sufficient to appreciate the general meaning of a word. Indeed, it is a useful technique to urge learners *not* to be over-concerned about exact meanings. Too often the search for a synonym in their own language or the language they are studying meets with no success and has a discouraging effect. In many cases, it is sufficient to establish that the unknown word has a positive or negative value for adequate comprehension to take place.

3. The idea of an unknown word having a positive or a negative value can be useful, also, when considering segments of language larger than the immediate environment of a word. The predictable patterns which accompany such areas of language as cause and effect, condition, contrast, classification or exemplification can be used as the basis for guessing meaning (see Appendix). To make learners aware of the connection between parts of sentences and between one sentence and another is both essential to the reading process itself on a broad scale and valuable in the guessing of individual words.

The following example of cause and effect and contrast in combination illustrates one way of teaching the guessing process. The sentence is from an article about the Loch Ness Monster:

Because of the *pear-laden* water, not even the powerful lights were sufficient for a clear picture but although the photographs were *hazy* and *indisinct*, they did show what appeared to be a diamond-shaped fin and snake-like neck. (Clarke, forthcoming).

The short passage contains a cause and effect unit in the first half and a contrast (or concession) unit in the second. The italicized words are taken to be unknown and the following type of analysis can provide a strategy for guessing them.

Since the effect or result depends on the cause, an understanding of one clause can be very useful in determining the meaning of the other. *pear-laden* (adjective) occurs in the cause and so a good guess at its meaning can be made if the effect is understood. 'In this case, the effect is that clear pictures could not be obtained, and so the question might be asked, 'What kind of water would prevent a clear picture being taken?' Once again, an exact determination of meaning is not possible, but it is also not necessary. *pear-laden* is clearly a negative type of adjective when applied to water in this context. What negative things can be said about water in connection with photographs? That it is cloudy, filled with particles, unclear in some way. All these are sufficiently close for adequate comprehension, since it is quite irrelevant to know the exact meaning of *pear*.

Guesswork is helped in cause and effect pairs if the learners are aware that a negative-type cause (in this instance, murky water) generally has a negative-type effect (poor photography). An awareness that a particular clause can be expected to have positive or negative value can often help in guessing the meaning of a particular word in that clause. Conditional pairs — sentences containing *if*, *unless*, *provided that* etc — can be handled in the same way as cause and effect.

The positive/negative concept can also be applied to the use of contrast or concession.

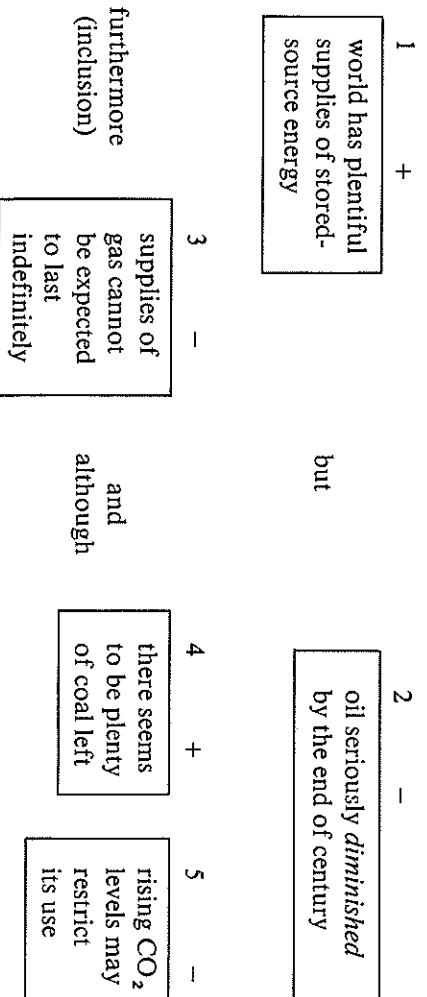
In this case, if one clause can be considered positive in meaning, the other one can be predicted to be negative. In the example of contrast from the Loch Ness Monster passage above, the second clause can be considered to be generally positive since at least some details were obtained on the photographs. The *although* clause can therefore be assumed to be negative and it is likely that the unknown adjectives *hazy* and *indistinct* are negative adjectives as applied to photographs. Questions such as, 'What can be negative (or bad) about a photograph?' can be asked if a more specific meaning is required. However, it is sufficient for general comprehension to know that the photographs are 'not good' in some way.

While not all Contrast pairs can be analyzed effectively in terms of positive or negative, a great many of them do allow such a guessing procedure, provided that the learners can recognize contrast when it occurs. As with Cause and Effect and other relationships, it is useful to teach a basic list of the words which mark such relationships.

The teaching of the idea of *inclusion* can further expand the framework for guessing. Inclusion is used to mean one idea is added to, or is supportive of, an initial idea. *And* (although this also has the function of marking sequence) is the commonest indication of inclusion. Ideas linked together by *and* or other inclusive words can be assumed to have the same value, either positive or negative. Consider the following short passage:

At the present time, the world has plentiful supplies of stored-source energy, but a natural resource such as oil will be seriously *diminished* by the end of the century. Furthermore, the supplies of natural gas cannot be expected to last indefinitely, and although there seems to be plenty of coal left, the rising carbon dioxide levels in the atmosphere will soon *restrict* its use.

In terms of contrast and inclusion, this passage can be broken down as follows:



(Clark, forthcoming)

Since the box before *furthermore* is negative, the box after it will also be negative, because Inclusion links similar values. The *and* before the fourth box might indicate that boxes three and four are the same value, but in fact box three relates to box five, because of the Contrast

marked by *although*. An awareness of the broad areas of meaning represented in this diagram will allow guessing of individual words in the way already described.

Diminished can be expected to have a negative value (particularly as linked with *seriously*) and so the question can be asked, 'What negative thing can happen to oil by the end of the century?' — reduce? run out? The general idea is clear enough. Similarly, *restrict* is expected to be a negative-value verb. Thus, 'What negative thing can happen to the use of coal?' — cut down? stop? Reference to other nearby words might help to clarify the degree of negativity. Thus 'stop' is an unlikely meaning for *restrict* (although it is very close) because *seriously stopped* is an impossible collocation.

Of course, many examples of cause and effect and contrast are not marked in an obvious way, but practice with marked examples leads to an ability to recognize unmarked types. Certainly, such a procedure encourages reading with a continual eye to context rather than approaching each clause as a separate item. The application of a definite strategy, such as that outlined here, gives learners new confidence that very many words can be intelligently guessed and it shows them that an approximation of meaning is all that is necessary in many instances.

4. After the learner has gone through the three previous steps of part of speech, immediate context, and wider context, he should attempt to guess the meaning and then check his guess. There are three ways of checking:

- 1) Check that the part of speech of the meaning that you have guessed is the same part of speech as the word in the passage;
- 2) See if the word has a prefix, root, or suffix that might give a clue to the meaning;
- 3) Substitute your guess for the word in the passage and see if it makes sense.

A notable feature of this strategy is the de-emphasis of prefixes and roots as means of guessing word meanings. There are several reasons for this. The most important is that analysis of the parts of a word leads to guessing too early. That is, guessing then occurs before the immediate grammar and the wider context have been looked at. As a result the initial guess determines the interpretation of the immediate and wider context instead of the context influencing the guess. Secondly, although 25%—30% of the vocabulary above the 3,000 word level can be broken into prefixes, roots, and suffixes, only a small proportion of these words can easily be guessed by word analysis. This is because some prefixes and most roots have several meanings, so the relationship between the meaning of the parts and the meaning of the whole is often not straightforward, and in some cases although words seem to have known roots and prefixes they in fact do not, and should not be analysed. There is no doubt that it is worthwhile for learners to master a list of twenty or so of the most useful prefixes. Beyond this, however, the advantages and disadvantages become more evenly matched. Thus it is best to use word analysis as a means of checking rather than as one of the steps for guessing.

The errors that learners make when guessing words from context give interesting insights into their grasp of the strategy and also into difficulties they encounter while reading. One of the commonest errors in using the strategy was to guess a meaning that was a different part of speech from the word in the passage. Faulty analysis of word parts also led to errors (*laterally* = coming after or later). Failure to understand the context produced some

errors. Most learners did not infer *sparse* correctly in the sentence *Desert areas owe their aridity to sparse rainfall*. After talking to some learners it was found that they did not interpret *owe* correctly. When it was explained to them that the sentence meant *The aridity of desert areas is caused by sparse rainfall*, most were able to find the meaning correctly.

Our experience coincides with that of Bright and McGregor (1970 : 31)

'Perhaps the most important thing of all is to remember that the ability to infer in this way is a skill that can only be acquired by practice. Every time we tell a pupil what a word means we are robbing him of a chance to practise this skill.'

In the next section we will look at techniques for practising the strategy.

4. Techniques

The various steps needed in the strategy, namely part of speech, immediate context, wider context, word parts, can be practised separately before being combined into a strategy (Long & Nation, forthcoming). So learners can practise recognizing the part of speech of various words in context. They can do the *What does what?* exercise with various nouns, verbs, adjectives, or adverbs in a text. In this exercise the teacher gives the learners a word and the line number of that word in the text. The learners must ask themselves questions like 'What does what? Who does what?' if the word is a noun or verb, or 'What is what?' if it is an adjective, or 'What does what how?' if it is an adverb. They answer these questions by reference to the text. The learners can also practise using the wider context as a separate exercise by analyzing sentences into boxes as in step 3 of the strategy above.

The guessing strategy can be used in co-operative class exercises or for individual work such as homework. When the strategy is being introduced the teacher can demonstrate the steps to the learners using a word from the passage. The steps are put up on the board. Then one word is chosen from the passage for the whole class to guess. The teacher then calls on different learners to do each step. So one learner has the task of saying what part of speech the word is, and then another looks at the immediate grammar of the word, and so on. After doing a few words like this the learners are ready to work on their own.

To guide the learners through the steps, some type of answer sheet or set exercise format can be used. Here is an example.

Word	Line	Part of speech	New	What does what? (immediate grammar)	Relationship (if any)	Guess
<i>ill-fated</i>	2					
<i>improvized</i>	4					
<i>canyon</i>	8					

In the column headed *New* the learners write *new* if they did not know this word before. If it is a known word they leave it blank. In the column headed *Relationship* the learners write *cause-effect*, or *contrast* etc., if the word is involved in a relationship which helps them to find its meaning. As a lead into dictionary work a final column can be added where the

learners write the meaning given in the dictionary and evaluate if their guess was correct or not. For other examples of guided exercises see Clarke (forthcoming) and Long and Nation (1980).

As the learners become more skillful, guessing words can be done as a class exercise with little preparation. The learners work in pairs. Each pair is given one word from the passage that they do not know. The pairs have a few minutes to discuss the steps and find the meaning and then each pair explains the steps to the class and the teacher awards them a score (100% correct, 80% etc.).

5. Further study

There are many things we do not know about the skill of guessing words from the context. Does the skill transfer from one language to another like the skill of speed reading? Will practice in guessing in the mother-tongue automatically result in improvement in guessing in the foreign language and vice versa? The relationship between cloze exercises and guessing meanings from context has not been fully investigated. Is a score on a cloze test a reliable measure of how well a learner can guess word meanings? How much does practice with cloze tests develop the skill of guessing word meanings? The conditions which lead to successful or unsuccessful guessing are still not clearly understood. Certain parts of speech are easier to guess than others. Is there an optimum density of news words to known words which will help guessing? The answers to these questions will help to increase our effectiveness in teaching this vital reading skill.

6. Value and applications

The skill of guessing meanings from context is a valuable one for several reasons, and is a useful prerequisite for other activities.

1. Honeyfield (1977) has shown that there is insufficient time in most second language courses to teach all the vocabulary needed for reading unsimplified material. The skill of guessing meanings from context allows the learners to learn vocabulary without the help of the teacher and coupled with large amounts of extensive reading can result in rapid vocabulary expansion.

2. Most words that have been dealt with in a course still need to be met in context several times for learners to appreciate their range of meaning. If the learners have the skill of interpreting the contextual meaning of a word, this will help increase their command of that word. When a word has been met several times, the class can spend time organizing their understanding of the word by discussing and classifying the concepts which lie behind the various uses.

3. The ability to guess the meaning of a word without referring to a dictionary saves time and allows the reader to continue reading without interruption. In this way it increases reading efficiency. At some stage it is worth giving learners practice in deciding which unguessable words should be looked up in the dictionary and which should be ignored.

4. In order to look up the meaning of a word in the dictionary, it is first necessary to have some idea of what that word means so that it is possible to choose between the various meanings given. The information gained from the dictionary in most cases will be a confirmation or an extension of what has already been guessed. A useful class exercise is to

get learners to summarize the information they can get about the word from its use in context before looking at the dictionary. For example, 'What is the stem of the word? What is its part of speech? What sentence pattern does it occur in? If it is a noun, is it countable or uncountable?'

5. To guess a meaning the reader must consider and interpret the available evidence, predict what should occur, and seek confirmation of the prediction. Thus developing the skill of guessing meanings is in many ways developing the skill of reading.

APPENDIX

A basic list of conjunction relationships

- | | | | |
|----|------------------------|---|--|
| 1 | Inclusion | and, furthermore, in addition, besides, also | A and B should be considered together. |
| 2 | Exclusion | or, nor, alternatively, else, instead, rather than | A and B represent alternatives. |
| 3 | Explanation | in other words, that is to say, I mean, namely | B restates or names A. |
| 4 | Exemplification | for example, such as, thus, for instance | B is an example of A. |
| 5 | Contrast | but, although, despite, yet, however, still, on the other hand | B is contrary to the expectation raised by A. |
| 6 | Cause-Effect | because, since, as a result, thus, so that, in order to, consequently | A is the cause of or reason for B. |
| 7 | Condition | if, provided that, supposing that, as long as, unless, otherwise | (a type of cause-effect relationship) Possibly A; if so, then B. |
| 8 | Time | when, before, after, while, subsequently, then | A and B actually occurred with this time or sequence relationship. |
| 9 | Arrangement | firstly, finally, in the first place | A and B are arranged in this sequence by the writer. |
| 10 | Summary/
Conclusion | to sum up, in short, in a word, to put it briefly | B summarizes A. |
| 11 | Classification | comprises, consists of, can be classified as, can be divided into | B and C are subclasses of A. |
| 12 | Comparison | —er, more — than, similarly, likewise, differently, equally | A or B are similar or different in some way. |

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