The change of individual guards at the royal residence, Copenhagen, Denmark

Reading Strategies and Test-Solving Techniques in an EFL-Reading Comprehension Test:

A Preliminary Report

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We developed "Sprogtest" after colleagues of ours from the natural sciences had asked us how they could check whether their students had problems understanding English textbooks. So it was thus to check on Danish freshmen's comprehension of written English texts at university level.[1] It is not compulsory, and it is not a prerequisite for admission to university that it be passed. It is offered free of charge-thanks to a grant from the 'Tuborg Foundation' - to teachers and individual students. The students' comprehension of English texts is tested objectively and anonymously on a voluntary basis. The main point is that students are informed as quickly as possible about weaknesses in their reading comprehension, since they are to read many English textbooks, and are thus enabled to take the appropriate steps towards an improvement.

As the test is to be generally applicable, we have consciously avoided specialist terminology, since

we are sure that students will pick up specialist terminology anyway. Our question is more crucial: *Do they understand an English text?* And for this reason we have chosen to use only complete, integrated (run-on) texts, rather than brief, selected passages.

We have chosen three different types of prose to get a reasonable coverage of non-specialist texts, namely, (a) a newspaper article, (b) a popularised science text, and (c) a section of fiction. From check tests on vocabulary as well as our teaching experiences, we have decided that a passive knowledge of the 5-7,000 most frequent English words is a prerequisite for a proper decoding of an English text. [See this homepage # 104 for more details] Virtually all words above that level have been substituted with more familiar ones, but this is the only type of editing we have made.

Our construction of the test has been pragmatic. We started out with a dozen suitable texts in each of the three groups, and set up multiple-choice questions in the four best ones in each group. These questions were posed either in the texts or at the end of the texts. They were tested out through various stages, and all distractors that attracted less than 10% of the readers at these stages were substituted with others. …// 94 … After 8-900 readings, and a number of alterations, we were left with one text in each group which seemed to work well. All three ”survivors” have the questions, or items, in the texts. This means that testees are forced to answer the questions while they are reading, and not afterwards. Furthermore, each item presents the readers with three alternatives.

We are now sure that the test, comprising the three texts, checks Danish freshmen's comprehension of English well, globally speaking, that is, in its totality. We have also consciously set up both very difficult and very easy questions: accordingly less than 2% of the readers answer a1145 items correctly. In our feedback to the students, they are graded by their performance, so that we take into account both the number of correct answers, as well as how difficult each question is.

Our pragmatic approach has, however, landed us with one problem: *Why do readers prefer one alternative instead of the two others?*

Of course we have continually been setting up hypotheses about what happened in the readers' minds and about reading process.[2] But we have also demanded that these hypotheses were supported by statistical evidence from our empirical data, that is the approximately 500 readings registered until now.

The introspection study is an attempt to furnish us with some empirical information for additional hypotheses that can be subjected to statistical analyses.

The participants were 7 students of English at the University of Copenhagen, and 21 ”gymnasiaster,” 18-year old pupils at senior high-school or A-level. The number of readers was determined by a rule which we have had to develop in order to get the information we need in manageable amounts, the +5 rule: when the interviewer in charge of the collecting of data feels the information is getting repetitive, and no new insights are gained, 5 additional interviews are undertaken. If they, too, add no essentially new information, the study is closed.

The participants were asked to read the test and explain where they would mark, and tell why they thought the alternative selected was the correct one. In some cases they were asked to expand on their

explanations, which were taken down in writing and simultaneously taped for control.

In this type of investigation, we do not expect to get information which is, in itself, valid for statistical analysis. But we do get information about why readers pick certain alternatives, and this should, in turn, make it possible to see if certain patterns emerged in their decoding of English texts, and in their test-solving techniques.

It was no surprise that the undergraduates were better at reporting than the "gymnasiaster," nor that their answers were so correct that we got virtually no coverage of readings leading to the wrong alternatives. On the other hand, they described techniques and strategies much better than did the gymnasiaster who, on an average, scored 22.3 wrong answers, that is, nearly half the test items.

The explanations made by the readers showed two details which we shall just mention briefly. The first is that few in our test elicit "clean" answers, by which we mean that only one reading strategy brought readers to one specific alternative. …// 95 … The second is that erroneous decoding will sometimes lead to the correct answer: in the first page of the test, shown here as Illustration 1, there is thus a reader who picks alternative 3 at item 24 because "they want to strike because of the poor conditions in the mines."

The first page of the test. The '×'s show the correct alternative at each item.
PLEASE TAKE NOTE: THE TEST IS CONSIDERED CONFIDENTIAL

Volunteer miners kept coal-mines safe.

(21)

           1. carried out ×

Voluntary safety work 2. obstructed   by miners during their strike in 1974 meant that all

           3. neglected

coal mines could resume production when the strike ended. After the previous strike 25 out of about 800 coal-mines were lost, but this time co-operation between miners and management ensured that the pits were

(22)

1. operating

2. kept safe ×   during the strike. In addition to deputies and inspectors, who reported for duty

3. closed

each day, many miners

(23)

1. were forced

2. refused   to help in taking safety measures with their union's approval. A Coal Board

3. volunteered ×

spokesman said: "The vast majority of coal mines was standing up well. Precautions were taken

(24)

1. in spite of

2. in disregard of   experience gained during the previous strike. Each pit has its own

3. in the light of ×

(25)

1. experts and administration

2. peculiarities and weaknesses ×   and it is the men who know them, at local level, who went

3. output and production

down to see what was happening, and

(26)

1. where necessary ×

2. not   to take action.

3. to discuss whether

(27)

      1. administrative problem

The main 2. trouble for them   × was that in some pits the

      3. reason for mining

ILLUSTRATION 1

The explanations the testees provide, however, furnish us with *information on two things* which overlap, namely,
(a) reading strategies in Danes' reading of English, and
(b) how people cope with this particular multiple-choice test. …// 96 …

The reading process seems to comprise two different types which are distinctly different, but overlap both in the readers, and in their way of answering specific questions: as yet, at least, we cannot set up any groups of readers leaning mostly on the one or the other? They also converge at certain questions,

and split up at others. For lack of better terms, we shall call them mainline reading versus fragmented reading.

In mainline reading, the reader quickly gets the main idea, and uses this as a point of reference. In the fragmented reading, the reader refers to words in the immediate vicinity of the question, or to some very strong concept in the text. In the excerpt shown (Illustration 1), the word "strike" is such a strong concept.

We can actually follow the two types of reading on this page: by item 21, mainline readers catch on to the fact that this deals with something unusual and positive and is about safety work and the possibility of going on after a strike. Fragment readers refer to the word "strike," or report that they guess, and choose mostly alternatives 2 or 3. At item 22 the words "strike" and "pit" are their points of reference, and accordingly they pick alternatives 1 or 3, while the mainline readers are aware that some coalmines were lost during the previous strike. When we jump down to item 25, however, both mainline readings and fragmented readings converge on 2: the fragment readers report that the word "miners" excludes 1 and 3 - or that "men" and "them" refer to 2.

It is tempting to believe that these two types of reading process are intimately connected with the way readers combine textual information, and assess the relationships between the elements correctly.

The best illustration of combinations is found in another text. This text starts "Floods in India and Bangla Desh. A prolonged dry period in Africa. These *1. floods/ 2. phenomena / 3 underdeveloped countries* all have something in common." Here a few readers refer to the names of the two countries and opt for alternative 3. Others point to the first word, "floods," and pick alternative 1. Only those who can tell that we are dealing with two different things, namely, drought and water, go in for 2.

Jumping down to a much lower level, we have got considerable information *on how readers decode unfamiliar words.*

In few cases, readers go by way of Latin.

In others, they are influenced by the mother tongue. The "floods" just mentioned, are thus sometimes interpreted as 'floder' in Danish, although this word means 'rivers' in Danish.

In some cases, the readers consciously use translation, based on, for example, the word picture. Thus one reader is led to believe that "he was *hesitant* about arranging the matter," means the same as 'haste' (i.e. "hasten") in Danish, and interprets the sentence as "he hastened to arrange the matter."

And then there are many words whose meaning the readers try to identify by means of the context. In Illustration 1, there is one problematic word in so far as ignorance of its real meaning is crucial to two readers. This is the word "pit." … // 97 … The first reader thinks it means "shop steward" - and sticks to this all through the text. The second reader identifies it, first, by item 22, as "the area where they work," but later, when we hear about water in the pits, she concludes that they must be water mains or hoses.

The first reader is poor anyway and scores badly in all texts. But the second reader is actually good, so to her this interpretation leads to a complete misunderstanding of the text.

Reading-test solving strategies and techniques do to some extent overlap with the reading process as such.

The most notable ones covered are the following:

Euphony in English. There is an example from the report on item 24: "24.3. I don't know what 'precautions' means. But it seems to me that ' in the light of sounds best here." This strategy is clearly based on insecurity and close to guess work.

Another is the *use of syntax.* At item 25, we thus find the report: "25.2. It must refer to ' them' in the next line."

We also meet with *translation into Danish* even though this is logically difficult to render as the original is in English. One example, from item 24 suffices: "24.3. I picked 3 because it means in the light of the experience they had got from the previous strike." The strategy works well, provided the reader knows the words.

Anticipation is found only in the fictional text, where one particular item seems to call for it. In the context of the present test, it is largely irrelevant, but we know this strategy from other reader-response studies in Denmark, and it is tempting to assume that this indicates, ever so slightly, that factual texts call for reading strategies than fiction.

Normally one would expect *common sense,* or a knowledge of the wheeling and dealing of the world to be a good strategy. But in the present test it leads to errors more often than not. We can follow one reading through the first three items in Illustration 1: "21.3.I pick three because they refuse to work during the strike."; "22.3 ' closed', because the mine must be closed during the strike. Nobody wants to work."; "23.2. They refuse to work. When the majority refuses to work, the individual worker does so, too."

Similarly, one would normally expect *background knowledge,* that is knowledge gained from other sources, to be of help. But in the present test, it seems to lead to both wrong and correct alternatives in equal measure. Our best illustration is from another text where we are told about the possibilities of soil conservation programmes in Africa, and reference is made to the US programme from the 1930s. The alternatives are *1. industrialisation,* which is chosen by readers who mention industrialisation in Africa; *2. soil conservation,* where one reader joyfully informs us that this is called "dry farming" - and thus picks the correct alternative; and *3. economic.where* one reader points out that industry means money.

It is tempting to believe that the texts we are left with survived our strict, pragmatic selection procedure, simply because they deal with unusual phenomena, and cannot be solved by reference to anything but the text. …// 98 …

When we analyse *the actual filling in of the test* most readers disregard the other alternatives than the one chosen without reporting why. This may indicate that they pick the alternative which immediately fits in with their overall interpretation of the text.

Readers who discuss two or three alternatives, do so in two radically different ways. One is a genuine discussion of the pros and cons of the alternatives, while the other one is a kind of retrospective analysis.[4]

A genuine discussion where we follow the reader's deliberations, goes like this: "I don't understand

this. It is most tempting to go in for 3. But this cannot be correct, as it is followed by an explanation. I do not understand 2. It can't be 2. This is precisely what happened in Greece 2 -3,000 years ago. I'll opt for 3, but none of the alternatives is good."

A retrospective analysis concerning item 23 in Illustration 1, runs as follows: "3. If they had been forced, they couldn't be so during a strike. And if I picked 2, they couldn't have helped."

After the reading, some readers reported that they had avoided *unfamiliar and unknown words.* But this is not borne out by the reports during the reading:

It is true that readers might avoid unknown words, like the reader who, at item 21 in the Illustration said "1. I do not know the direct translation of the other two."

But another reader thought differently: "21. l is the one I am sure it is not. It is the only word I know. It must be 3. It's mostly a guess."

As indicated by the latter statement there is a certain amount of guesswork involved. Real *guesses* where the readers could offer no reason were found in equal measure at all alternatives at all items. But in one item we have probed this, because the words were unfamiliar to many readers. The question ran "In Africa, a five-year *1. drought/ 2. inundation/ 3. precipitation* had dried out the savanna belt." Although this question does test vocabulary, it has been retained because of our pragmatic approach: it has worked well. And in the introspection study we see why: Each alternative gets 3 genuine guesses. But among the 10 readers who told us that they knew none of the words, 4 reported that they opted for "drought" because it reminded them of the Danish word for it, that is "tørke," or that they connected it with "dried out": so presumably guesses are not all that arbitrary.

We shall just finish by mentioning two features found by systematic questioning of most of the 'gymnasiaster' after the reading.

The first is that there seems to be some relationship between the amount of reading, no matter whether it is done in Danish or in English, and a correct decoding: it was possible to make up two small, but quite distinct groups, namely those who primarily mentioned that their contact with English was from the radio or television, and those who referred primarily to reading. It is, at least, suggestive that the ' non-readers' scored 26 wrong answers on an average, while the ' readers' scored only 17 wrong answers. But we cannot, at present, turn this into a universal law. …// 99 …

The other feature is the high number of different ways the readers reported they would use with a text like the test. They were:

(a) just plunging ahead.
(b) leafing through it to get the key ideas.
(c) skimming it - in various vaguely defined ways.
(d) reading it carefully, and then reading it in earnest.
(e) reading it over 2 or 3 times, and then reading it in earnest.

The above, then, is a brief glimpse of some of our findings, not an exhaustive report. If it can serve to help others who conduct studies of the reading process in a foreign language and in test-solving

techniques, we shall be pleased, because this will establish a basis for comparisons.

NOTES

Setting out on the round to relieve the individual guards, royal residence in Copenhagen