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A PSYCHOLINGUISTIC ANALYSIS OF THE CLOZE PROCEDURE
FOR JUSTIFYING ITS USE AS A TEACHING TECHNIQUE
IN AN ADVANCED ESL/EFL READING CLASS

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A PSYCHOLINGUISTIC ANALYSIS OF THE CLOZE PROCEDURE
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IN AN ADVANCED ESL/EFL READING CLASS

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INTRODUCTION

Purpose of the Research Paper

In this research paper, the processes involved in filling in Cloze items will be analyzed and compared with the psycholinguistic principles of reading in the belief that this will contribute to strengthening the virtues of the Cloze Procedure (CP). In addition, the previous analysis will serve to justify the use of the CP as a teaching technique to help the advanced ESL (English as a Second Language) or EFL (English as a Foreign Language) learner to improve her/his reading comprehension ability.

The Cloze Procedure, a technique invented by Taylor (1953), has been used for various purposes, notably for investigating the readability of materials, for testing purposes, and as an instructional technique, both in the first and the second language.

Oller conducted several experiments during the 70's using the CP and concluded that it can be used as an integrative test of proficiency in a foreign language. In spite of the positive results obtained by Oller and other researchers, results which motivated them to consolidate the CP as a measure of reading comprehension and overall language proficiency, there have been other researchers and practitioners who have questioned its use for such purposes. This fact has served to challenge the claims for the effectiveness of the CP which were made during the 70's. For example, Alderson (1979) concluded:

The finding in Alderson (1978) that closure seems to be based on a small amount of context, on average, suggests that the cloze is sentence —or indeed clause— bound, in which case one would expect a cloze test to be capable, of measuring, not higher-order skills, but rather much lower-order skills.

More recently, Shanahan, Kamil, and Tobin (1982:250) summarized the results of three experiments designed to measure the use of intersentential information in the Cloze test as follows:

What they /the studies/do suggest is that cloze as now recommended for classroom use, does not usually measure intersentential information integration. It might be possible to design cloze tests to measure this ability, as is already possible with question and answer tests (Bormuth, Carr, Manning, & Pearson, 1974-75). However, until valid guidelines are developed which indicate how this is to be done, it seems to be unreasonable to use and interpret cloze in classroom practice as a global measure of reading comprehension.

The previous assertions, and other arguments to be cited throughout this paper, disfavoring the use of the CP as a measure of reading comprehension have motivated me to pursue a detailed analysis of the demands that Cloze items impose on the examinees. To provide a perspective from different readers, I will report on the answers given by a selected group of subjects who participated in an informal experiment involving taking a Cloze test and then stating brief descriptions of the clues they used to answer each Cloze item. In addition, the psycholinguistic principles of reading will be discussed in order to demonstrate that the CP can be used as a technique to fulfill such principles. I feel that such an undertaking will contribute to our understanding of how and why the CP serves to measure overall reading comprehension.

Assuming the justification of the CP has been strengthened through recourse to its theoretical background, practical applications are proposed for incorporating this technique in advanced ESL/EFL classes aimed at developing reading comprehension skills. These applications should also be useful for classes which use English, or any other language, as the native tongue.

Origin and Definition of Cloze Procedure

Many native speakers of English and particularly typesetters and editors are surprised at the spelling of the word CLOZE. According to Oller (1979), this is a spelling corruption of the word 'close' as in the sentence 'close the door.' Taylor (1953), the creator of the Cloze technique, coined the word CLOZE. His idea was derived from the idea of 'closure' which is a term that

gestalt psychology applies to the human tendency to complete a familiar but not-quite-finished pattern -to "see" a broken circle as a whole one, for example, by mentally closing up the gaps (Taylor 1953).

According to Taylor, one can complete a broken circle because the pattern, although incomplete, is very familiar to the subject. The same principle can be applied to a written or oral text where some words are missing. The subject's task is to fill in the blanks based on the familiar surrounding words or ideas.

The CP, as originally conceived, is a process of deleting every n^{th} word (5th, 6th, 7th, ...) from a message (either written or spoken) and replacing it with a blank to be filled in by the reader or the listener.

Uses of Cloze Procedure

The CP has been used for a variety of purposes. Originally, it was concerned with English as a mother tongue, then it was used with other native languages, and later it was tested in foreign or second languages. Among the various uses of the CP both in first (L₁) and second (L₂) or foreign (FL) languages, the following can be cited.*

Readability assessment

To measure the readability of printed prose. In other words, to identify how difficult a text may be for a reader (e.g., Taylor 1953, Bormuth 1968, Anderson 1971).

To determine appropriate levels of instructional materials for children (e.g., Bormuth 1968).

Testing

To measure reading comprehension ability (e.g., Culhane 1970)

*Only some names of researchers are provided in each use of CP. For a more detailed list of researchers, the reader is referred to the bibliography which includes additional studies.

To measure overall proficiency in an L₂ or a FL (Oller 1972, Alderson 1980).

To measure listening comprehension (e.g., Spolsky 1968, Templeton 1977).

To measure reader intelligence (Oller 1978, Streiff 1978).

To assess the knowledge of vocabulary (Porter 1976).

To diagnose reading ability (Allen 1968), and place subjects in a reading program (Schoelles 1971).

To investigate certain characteristics of the learners based on their errors in taking CP, e.g., as a tool in error analysis (Oller 1975, Pacheco 1979).

To measure achievement in a subject matter (Anderson 1974), e.g., in arithmetic (Rayburn 1974).

To investigate the inferencing capacity using this technique (Bialystok and Joan 1979).

To compare native and non-native performance on a cloze passage (Alderson 1978)

To assess the relative proficiency of bilingual persons in their two languages (Osgood and Sebeok 1965).

To study audience response to films (Lynch 1972).

To predict speaking proficiency (Shohamy 1982).

Teaching

To develop reading comprehension skills in the classroom (Jongsma 1971, Bortnick and Lopardo 1974, Plaister 1973).

To train persons auditorially and visually using the CP in order to improve listening and/or reading comprehension skills (Kennedy 1974)

To focus attention on certain syntactic or semantic aspects of a language (Quattrini 1980).

To wean advanced ESL learners from excessive use of the dictionary

(Sherwood 1975).

To teach vocabulary enrichment (Blackwell, Thompson, and Dziubium 1971-72).

To serve as a tool for remediation of reading difficulties (Rankin 1959)

To increase student's language ability by using musical cloze (a technique that uses a song with target deletions for teaching purposes) (Mateja 1982).

Textual constraints

To investigate textual constraints within or across sentences (Carroll 1972; Chihara, Oller, Weaver, and Chavez 1977; Shanahan, Kamil, and Tobin 1982).

Composition

To investigate the composition process (Breneman 1975).

Psychological factors

To investigate the psychological process involved in taking cloze tests (Mackena and Robinson 1980; Babcock 1975; Holmes 1972).

To investigate the relationship of Cloze processing to other cognitive abilities such as closure, intelligence, associational fluency, and semantic memory (Mckenna and Robinson 1980).

Other uses

To discriminate between groups of people who do not agree with the contents of given passages of prose (Manis and Dawes 1961).

To measure the quality of translation of technical training manuals used by the military (Klare, Sinaiko, and Stolurow 1971).

The variety of uses presented above represents the results of the intensive research carried out with CP for thirty years (1953-1983). The

findings have suggested that CP has been successfully used in three major areas: readability, reading comprehension testing, and reading comprehension teaching. However, not all favor its use in the above areas. On the contrary, some studies have led researchers to caution or to advise against its use for any of these three purposes. Unfortunately, sometimes, the research reports on CP are not always complete (Jongsma 1980, Pacheco 1979). At other other times, some factors are not controlled well enough, so that the results and conclusions are questionable.

A careful review of the literature on CP reveals that the various researchers attempt to uncover the weaknesses of the previous studies. However, most of the researchers seem optimistic, and instead of discouraging its use, invite other investigators to continue testing the CP in every area. It is hoped that future theoretical and practical findings will help clarify and perhaps corroborate its qualities as a research, testing, and teaching tool both in the native and the second or foreign language.

CHAPTER I

ANALYSIS OF THE PROCESSES INVOLVED IN ANSWERING CLOZE ITEMS

Background

This section of the paper includes an analysis of the strategies involved in filling in the Cloze gaps of a passage used by Oller and Conrad (1971). Before giving this analysis, I will discuss some studies related to textual constraints involved in Cloze, however.

On the one hand, some researchers have questioned the use of the CP as a tool to measure reading comprehension either in the L₁ or in the L₂. Carroll (1972) corroborated the assertions made by MacGinitie (1961) and Miller and Coleman (1967). According to them, the Cloze task requires very limited context including four or five words on either side of the deleted word. Consequently, the CP cannot be considered an effective measure of comprehension of ideas in a mutilated passage.

Similarly, Smith-Burke et al (1978) investigated the influence of context on Cloze performance. Subjects were asked to read four passages under three prior contextual conditions; they were given a) the Cloze passage (CPge) only, b) the CPge preceded by 250 words of text, and c) the CPge preceded by two pages of text. It was found that there were no statistically significant effects of prior context on Cloze performance. From a discourse analysis perspective, they interpreted these results to mean that the demands of the Cloze test may be interfering with the subject's ability to utilize the strong cueing system of connected discourse. In this way, the subjects are forced to concentrate on syntactic and semantic information at the sentence level. If this is really the case, then the Cloze task cannot be considered a good measure of the reading process (Hoffman 1979). More recently, Alderson (1980) has strongly questioned the use of the CP to measure overall language proficiency and reading comprehension, specifically, in an L₂. Based on his studies with CP, he restates the view that the increase of context on either side of a cloze gap beyond five words had no effect on the ease of filling in the

blanks. Consequently, the CP seems to be sentence or closure bound. In addition, he states that his results show that the Cloze in general relates more to tests of grammar and vocabulary than to reading comprehension tests. According to Alderson (1979), this shows that Cloze measures lower-order skills only.

On the other hand, other investigators continue to support the use of the CP as a good measure of proficiency and reading comprehension. Oller (1979) has been one of the strongest supporters of CP as a testing technique in an L₂. In addition, he has conducted various studies in order to show that the CP is not clause or sentence bound. In 1975, in an attempt to prove that CP is sensitive to discourse constraints, he used a cut and scramble procedure almost similar to the one used by Carroll et al (1959). Five prose passages, each of 100 words or more were selected. Then, they were successively cut into fifty, twenty-five, ten and five word segments. The results indicated that the items inserted in the five word segments were much more difficult than the very same items that were embedded in ten words, twenty-five words, etc. This finding indicated that the larger the surrounding context the easier the Cloze task. In 1977, Chihara, Oller, Weaver, and Chavez conducted another experiment in order to demonstrate that Cloze items are sensitive to constraints ranging beyond the boundaries of a single sentence. They selected two passages, A and B. For text A every sixth word was deleted and for text B every seventh word was eliminated. Then both texts were cut into sentences. Afterwards, the sentences were scrambled for each passage. In this way, four tests were produced: two passages with scrambled sentences and two sequential passages. The tests were given to forty-two native speakers of English and 201 Japanese EFL SUBJECTS. The results indicated that the scrambled sentence versions were considerably more difficult.

The controversial studies previously stated have motivated the author of this research paper to do a detailed analysis of each Cloze item in Oller and Conrad's passage used to test proficiency in ESL. This analysis will be supported by the introspective analysis made by a selected group of participants. The purposes of this analysis are the following: 1) to

clarify the previous and other controversies in Cloze research, 2) to specify the processes involved in filling in Cloze items, and 3) to examine the internal structure of Cloze passages with random deletions, a suggestion given by Bachman (1982).

It is important to state that it was not possible to find many sample Cloze passages for this purpose, since most of the articles in journals, books, and ERIC did not include the passages used in the experiments. This corroborates one of the criticisms of Cloze research made by authors such as Jongsma (1971, 1980) and Pacheco (1979). The passage, which is represented below, was taken from a book by McCall and Crabbs (1961). The passage had a Flesch readability index of 45, which "rates it as appropriate reading material for college freshmen and sophomores." The deletion frequency is every seventh word. The passage was given to 102 foreign students entering UCLA in the Spring Quarter of 1970 and to 40 native speakers of English (Oller and Conrad 1971).

WHAT IS A COLLEGE?

Confusion exists concerning the real purposes, aims, and goals of a college. What are these? What should a college be?

Some believe that the chief function 1. _____ even a liberal arts college is 2. _____ vocational one. I feel that the 3. _____ function of a college, while important, 4. _____ nonetheless secondary. Others profess that the 5. _____ purpose of a college is to 6. _____ paragons of moral, mental, and spiritual 7. _____ -Bernarr McFaddens with halos. If they 8. _____ that the college should include students 9. _____ the highest moral, ethical, and religious 10. _____ by precept and example, I 11. _____ willing to accept the thesis.

I 12. _____ in attention to both social amenities 13. _____ regulations, but I prefer to see 14. _____ colleges get down to more basic 15. _____ and ethical considerations instead of standing in loco parentis 16. _____ four years when 17. _____ student is attempting

in his youthful 18. _____ awkward ways, to grow up. It 19. _____ been said that it was not 20. _____ duty to prolong adolescences. We are 21. _____ adept at it.

There are those 22. _____ maintain that the chief purpose of 23. _____ college is to develop "responsible citizens." 24. _____ is good if responsible citizenship is 25. _____ by-product of all the factors which 26. _____ to make up a college education 27. _____ life itself. The difficulty arises from 28, _____ confusion about the meaning of responsible 29. _____. I know of one college which 30. _____ mainly to produce, in a kind 31. _____ academic assembly line, outstanding exponents of 32. _____ system of free enterprise.

Likewise, I 33. _____ to praise the kind of education 34. _____ extols one kind of economic system 35. _____ the exclusion of the good portions 36. _____ other kinds of economic systems. It 37. _____ to me therefore, that a college 38. _____ represent a combination of all 39. _____ above aims, and should be something 40. _____ besides-first and foremost an educational 41. _____ exchange between teachers and students.

I 43. _____ read entirely too many statements such 44. _____ this one on admissions application papers: "45. _____ want a college education because I 46 _____ that this will help to support 47. _____ and my family." I suspect that 48. _____ job as a bricklayer would help this 49. _____ to support himself and his family 50. _____ better than a college education.*

Subjects and Procedure

The above passage was given to 14 native speakers of English and to eight foreign students of different language backgrounds, both graduate students in linguistics and TESOL at Ohio University

*The exact answers for the CPge are given in Table No. I..

The testing situation was informal and without time constraints since the main purpose of the task was to elicit an introspective analysis of the strategies used in performing the Cloze exercise. To do this, the CP completion was followed by instructions on how to do the introspective analysis, including a list of types of contextual cues that might be found in a passage (the list was adapted from Ames 1966). The respondents were asked to write a brief description of the procedural steps they went through in deciding on each word.

Analysis and Discussion

According to Oller and Conrad (1971) the passage has an every seventh word deletion pattern. However, after a careful analysis the reader can see that there are some exceptions, as follows:

1. Between Cloze items 10 and 11 there are 5 words (as opposed to 6 words)
2. Between Cloze items 15 and 16 there are 9 words.
3. Between Cloze items 16 and 17 there are 3 words.
4. Between Cloze items 38 and 39 there are 5 words.
5. Between Cloze items 48 and 49 there are 7 words.

These exceptions seem to be supported by the suggestions given by some researchers that extremely difficult Cloze items or items that require content knowledge out of the text, such as dates, proper names, quantities, etc., be avoided. However, Oller and Conrad do not provide any explanation for such changes of deletion frequency. This seems to be an important factor, since with such changes the author is incorporating some subjective decisions which are against one of the principles of systematic deletion frequency: to keep objectivity in the test (Porter 1976). In addition, when there is such inconsistency of frequency of deletions, then different words are deleted. Alderson (1979) points out correctly that every time one changes the frequency of deletions, the words tested are different and consequently a different Cloze test is produced. To clarify the previous assertions, the grammatical categories of the Cloze items from Oller and Conrad's CPge are provided below.

TABLE 1

Grammatical Categories of each Cloze item

No.	Cloze item	Gram. Cat.	No.	Cloze item	Gram. Cat.
1.	of	Preposition	26.	go	Verb
2.	a	Indefinite artic.	27.	and	Conjunction
3.	vocational	Adjective	28.	a	Indefinite article
4.	is	Copula	29.	citizenship	Noun
5.	chief	Adjective	30.	aims	Verb
6.	produce	Verb	31.	of	Preposition
7.	stamina	Noun	32.	our	Determiner
8.	mean	Verb	33.	hesitate	Verb
9.	with	Preposition	34.	which	RElative pronoun
10.	standards	Noun	35.	to	REposition
11.	am	Auxiliary verb	36.	of	Preposition
12.	believe	Verb	37.	seems	Verb
13.	and	Conjunction	38.	should	Auxiliary verb
14.	our	Determiner	39.	the	Definite article
15.	moral	Adjective	40.	else	Adverb
16.	for	Preposition	41.	experience	Noun
17.	the	Definite article	42.	intellectual	Adjective
18.	and	Conjunction	43.	have	Auxiliary verb
19.	has	Auxiliary verb	44.	as	Preposition
20.	our	Determiner	45.	I	Personal pronoun
21.	singularly	Adverb of manner	46.	feel	Verb
22.	who	Relative pronoun	47.	me	Object pronoun
23.	a	Indef. article	48.	a	Indef. article
24.	This	Demonst. pronoun	49.	student	Noun
25.	a	Indef. article	50.	much	Determiner

The list of words given in Table 1 can be classified into 'content words' and 'function words' as follows:

TABLE 2

Classification of Cloze items

Content words		Function words	
Nouns	5	Prepositions	7
Verbs	9	Pronouns	5
Adjectives	4	Determiners (Art.)	11
Adverbs	2	Auxiliaries	4
total	20 (40%)	Conjunctions	3
		total	30 (60%)

This classification is useful as it will provide an important clue for the ease or difficulty of the passage. According to Taylor (1956), Rankin (1957), and Ohnmacht, Weaver, and Kohler (1970) research has shown that a CPge is easier when function words predominate over content words. The percentages specified in Table 2 would suggest that the CPge could be easy. Presumably, Oller and Conrad had in mind this kind of balance when they varied the deletion pattern. Otherwise, the result might hypothetically have been as follows:

TABLE 3

Classification of Cloze Items Following a Strict Every 6th Word Deletion Pattern.

Content Words		Function Words	
Nouns	11	Prepositions	8
Verbs	9	Pronouns	3
Adjectives	8	Determiners(Art.)	6
Adverbs	2	Auxiliaries	1
total	30 (60%)	Conjunctions	2
		total	20 (40%)

This result would indicate that the CPge loaded with content words, as it is, would be more difficult than the original CPge.

If the experimenter reserves the right to vary the deletion pattern frequency, it seems to support the suggestion given by such researchers as Weaver and Kingston (1963); Ohnmacht, Weaver, and Kohler (1970); Alderson (1980); and Bachman (1982). That is, using a rational deletion procedure in order to select items that measure specific skills of reading comprehension representing higher order skills is justifiable. Obviously, this will introduce subjective decisions which would be supported by the fact that in virtually every test some amount of subjectivity is present.

In the detailed analysis of the Cloze items which follows, we will attempt to discover what it is that readers do in order to reconstruct a mutilated passage. For the sake of expediency, the analysis will focus

on groups of Cloze items. In this way, important generalizations will be captured. In addition, the Cloze items will be classified under five headings that indicate the type of context clues needed to fill in the blanks:

Syntactic clues

Since syntax is that part of the grammar of a language that organizes the words into sentences, one can see that all of the words in a CPge can be predicted syntactically, in a partial way. Speakers of a language have internalized a series of rules, Phrase Structure Rules (PSR), according to the transformational grammarians (Chomsky 1965). Therefore, what the reader will need to do in order to provide the missing words in a CPge will be to apply the rules and look for the missing elements. The following are some of the rules (Soemarmo 1982):

TABLE 4

List of Phrase Structure Rules

1. S → NP (AUX) (not) VP (PP)
2. AUX → T M
3. VP → (Perf.) (Prog.) VP' (PP)
4. VP' → (not) V $\left\{ \begin{array}{l} \text{AP} \\ \text{NP} \\ \text{PP} \\ \text{S} \end{array} \right\}$
5. AP → ADJ (PP)
6. PP → P NP
7. NP → $\left\{ \begin{array}{l} (\text{DET}) \text{ N} \\ \text{S} \end{array} \right\} \left\{ \begin{array}{l} \text{PP} \\ \text{S} \end{array} \right\}$
8. DET → $\left\{ \begin{array}{l} \text{WH} \\ \text{DEM} \end{array} \right\} \left\{ \begin{array}{l} \text{QUANT} \\ \text{ART} \end{array} \right\}$
9. N → $\left\{ \begin{array}{l} \text{ADJ} \\ \text{N} \end{array} \right\} \left\{ \begin{array}{l} \text{N} \\ \text{S} \end{array} \right\}$

S = Sentence
 NP = Noun Phrase
 AUX= Auxiliary
 not= not
 VP = Verb Phrase
 VP'= Verb Phrase'
 PP = Prepositional phrase
 T = Tense

M = Modal
 AP = Adjective Phrase
 ADJ= Adjective
 P = Preposition
 DET= Determiner
 N = Nouns
 QUANT= Quantifier
 ART= Article

It is assumed that because of the reader's knowledge of these rules, she/he can predict the missing words in a CPge. However, it is important to point out that some of the Cloze items are more predictable than others because of their role in the specific rule. For example, Cloze items 2, 17, 23, 25, 28, 39, and 48 can be predicted more quickly because the words that follow the space are ADJ + N. Consequently, the word that is missing must be a DET as part of the NP rule (except the nouns that do not accept a preceding determiner); but the reader has to realize that what is predicted is the grammatical category (DET) only. In order to provide the exact determiner, the reader will have to consult other cues in the semantic component and also look at the sequence of the story (as we shall see later).

Cloze items 1, 9, 16, 31, 35, 36, and 44 can be predicted from the rule of PP which is under the labels NP or VP. However, the reader should notice that some of these items seem to be predicted not from syntactical rules but from idiomatic or common expressions, e.g., 31, 35, and 44.

Words 22, 24, 34, 45, and 47 appear to be predictable from the traditional parts of the sentence that refers to the grammatical function of a word or groups of words within a sentence (e.g., subject, direct object, indirect object, etc.). Nos. 22 and 34 are related to the function of a relative pronoun, which seems to be predictable from the main and the subordinate sentences as parts of the whole clause. Nos. 24 and 45 refer to words that function as subjects of those sentences where they are included. No. 46 refers to a word that must function as the object of the verb "support". Once again, however, it is clear that in spite of the fact that syntactical information is very useful to identify the missing words, there are other sources of information that are needed in order to provide the exact pronoun in this case. Cloze items 11, 19, 38 and 43 seem to be very predictable from the surrounding words. They need to make use of the VP rule which contains the information about aspects (progressive and perfect). Also, the AUX label will help provide the information about modality. No. 11 can be predicted from the subject "I" and especially from the -ING ending of the verb "will" which follows this Cloze item. Nos. 19

and 43 are predicted from the subjects and the verb forms that follow them, too. No. 38 will need to have additional information clues different from the syntactical ones in order to provide the exact modal.

Items 13, 18, and 27 relate to the role of "and" in coordinate sentences in which case its function is to link a series of words or sentences. It seems that the predictability of these words is not an easy task. Again, there are other factors that could influence the selection of the specific conjunction.

In summary, the reader can see from the previous analysis that the so called 'function words' can be very predictable syntactically. In addition, they are predictable because of the limited choices among these categories. Nonetheless, the syntactic information is not enough to get the specific Cloze items.

Rather than providing a detailed analysis of the rest of the Cloze items representing 'content words' (adjectives, nouns, verbs, and adverbs), I will present the following summary. Nouns and adjectives can be predicted from the rules NP DET + N and N ADJ + N, which have the following tree configuration, according to the transformational model:



In both cases, the determiner is present. The adjectives will be predicted from the surrounding elements, DET ___ N, and the nouns from the preceding word ADJ ___ or words DET + ADJ + _____. The Cloze items included in these categories are Nos. 3, 5, 7, 10, 15, 29, 41, 42, and 48.

The verbs are cued from the general rule for S where S lacks the V as part of the VP. However, most of the items in the passage are cued by the preceding words, usually pronouns, e.g., Nos. 8, 12, 33, 37, and 46; by relative pronouns, e.g., Nos. 26 and 30; and by the infinitive marker "to" before or after the blank, e.g., Nos. 6, 26, 30, 33, and 37.

The adverbs seem to be cued by the words that surround them, as in the case of No. 21, where the form of the verb "BE" is given and the ADJ "adept" is also given. What is needed is a word that modifies the adjective, and this word is an adverb. In No. 40, the words "something" and "besides" seem to cue the adverb "else".

The previous analysis continues to corroborate the fact that syntactic clues help identify the categories of words for each Cloze item, but also more information is needed in order to provide the correct words. In addition, the reader can see that the possibilities of providing content words are not limited because of the great number of nouns, adjectives, verbs, and adverbs in every language. The only limit that the reader has in working with a CPge is the topic and the sequence of ideas, which are not always in the context surrounding the Cloze items. For many Cloze items, the clues are provided in the main idea, in the conclusion or in sentences far from the neighboring words, as some researchers have pointed out (e.g. Oller 1975)..

To conclude one can safely say that syntactical clues are very useful for the identification of every Cloze gap in a CPge, but they are not the only ones needed, contrary to what some investigators have suggested (e.g., Rousch 1972).

Semantic clues

Another important clue is semantic information, which is demonstrated below. In order to fill in items 2, 17, 23, 25, 28, 39, and 47, which are articles, the reader needs to take into consideration the semantic specification in terms of definiteness or indefiniteness. The reader needs to discover from the text that the definite article (the) indicates that both the reader and the writer or the speaker and the listener know what is being talked about. This does not hold true for the indefinite article (a, an) (Leech and Svartvik 1975:52). In addition, the reader has to refer back or ahead in the story in order to see if there has been some identification mentioned earlier or a postmodification has followed a noun. In such a case, the word needed is the definite article. From this

explanation, it seems that the choice of article is easy, but this is not the case. Even native speakers of English are not always able to provide exact articles. This was proved in the informal testing situation referred to above, the results of which appear in Table 5.

Concerning the pronouns (items 22, 24, 34, 45, and 47), the additional information needed comes from various semantic sources. Item 24 needs a demonstrative pronoun that functions as a 'head'. When this happens, the demonstrative is more like a personal pronoun (Halliday and Hasan 1976:58). It refers to something within the content of a situation. In this case, it refers to the idea expressed in the previous sentence, "to develop 'responsible citizens!'" Words 45 and 47 are personal pronouns which are reference items that specify something in terms of function or role in the speech situation. However, in order to identify the correct personal pronoun in 45 and the object pronoun in 47, the reader has to grasp the general idea of the neighboring sentence. Then, where the word "I" is stated as part of the quotation, the reader needs to refer six words ahead for 45 and seven words back for 47. In order to fill in the Cloze items 22 and 34 one needs to refer back to the text and identify the specific referent. For the first item, the idea of persons involved is not directly specified but the words "those", "some", "others" as pronouns from the first and the fourth paragraph are enough clues to convey this idea. In the second case, the reader needs to recognize that the writer is referring to a specific kind of education, hence the word "which". However, the word "that" is acceptable, too.

The importance of semantic clues for providing the eliminated words in a CP is essential for content words. Since the possibilities of providing nouns, verbs, adjectives, and adverbs are more plentiful, the reader has to work closely with the main and supporting ideas in the passage in order to limit the choices. There must be a continual analysis of each idea in relation to all the others found in the text. Knowledge of the topic of the passage and world knowledge are essential ingredients for the semantic task. Examples of these abilities can be shown in Nos. 3, 5, 7, 8, 10, 12, 15, 21, 26, 29, 30, 33, 37, 41, 42, 46, and 49, where

the examinee has to look for clues in the surrounding context. Sometimes, the cues are provided by way of repetition from previous sentences (e.g., Nos. 3, 5, 15, 29, and 30). But still, the examinee has to make some inferences in order to match the information needed to the previous or the following ideas. Other times, the examinee has to follow the ideas developed by the writer and make the necessary inferences from the tone of the passage, as in Nos. 49, 42, 41, 37, 33, 30, 21, 12, 10, 8, and 7.

Another semantic clue for content words comes from the words provided in a series within one sentence, i.e., 7, 10, and 15. This organization of words together with the necessary inferences is a good clue to guessing the deleted items.

Finally, it is important to add that the tense and aspect of the verbs are given by the general tone and use of other tenses and aspects throughout the text. In this particular passage, the author uses the present tense. This information, together with the syntactic information in terms of pronouns or nouns, helps provide the verbal endings.

Clues from knowledge of the topic and world knowledge

There are some cues that not only depend on the syntactic and semantic information included in the text, and shared by the reader, but also draw upon knowledge of the topic and of the world. In item 6, for example, the reader has to resort to her/his knowledge of the topic of the passage: College and Education. She/He must answer the question, "What does a college do with paragons of moral, mental, and spiritual _____?. From her/his knowledge of education, she/he will think of such words as: "build", "develop", "create", or "produce". The last one is the word used by the writer. Item 42 requires the examinee to review her/his knowledge of the topic and the world again, in order to get an adjective that provides the kind of exchange between teachers and students. To provide the answer for 45, 46, and 47, the reader will also be helped by his knowledge and familiarity with admission application papers. Item 49 requires the reader to draw upon her/his knowledge of the topic, also; but it mainly requires an inference from the content of

of the last paragraph in order to understand that the person involved in the idea is a "student".

Clues from familiar or idiomatic expressions

These expressions constitute a clue for guessing words in a CP in a very quick way. This is because the examinee already knows the words of those idiomatic or common expressions and is able to provide the missing words even without understanding the sentence. In the passage under study, the following items can be included, No. 16 = "for", in the expression 'for four years' (duration of time); No. 31 = "seems" in the expression 'it seems to me,...'; No. 44 = "as" in the expression 'such as'.

Clues from associations with other words

Another way to fill in the blanks in a CP is to associate the missing words with other words or ideas in the neighboring sentences or throughout the text. In this passage, the following items can be deduced in this way. For item 3, the adjective is provided in the previous sentence. In addition, the determiner "the" which is before the blank is also a clue to indicate that the word was expressed before. The clue for item 5 is also expressed in a previous sentence. Item 20 needs to be associated with the word "we" in the next sentence. No. 29 is cued by the main idea of the fourth paragraph where the same word is expressed. No. 38 appears to be associated with the next coordinate sentence, which has the same modal as the one needed for the blank. Items 45 and 47 are cued by the pronoun "I" which is found in between them.

Conclusions

From the previous analysis the reader can see that when the examinee answers a Cloze test, she/he has to work actively in order to provide the exact or even approximate answers. There is an interaction between the reader and the text in order to reproduce the writer's ideas, which requires the application of both receptive and productive processes. Contrary to the conclusions reached in previous studies, the Cloze task does require subjects to make use of higher-order skills, which include

using inferences (Bialystock and Joan 1979), semantic interpretation in addition to syntactic analysis, reasoning (which parallels the idea of reading as a reasoning process' proposed by Thorndike, E. L. (1917) and Thorndike, R. L. (1973-74)), and the ability to grasp the clues from the context. This context includes not only the neighboring words (about five words near the blank) but also the words or ideas expressed within the whole passage, from the main idea expressed, most likely, in the first paragraph, to the supporting ideas and the conclusion. In addition, the cumulative and logical build-up of the topic in the passage (Cambourne 1977) and the ability to predict or guess intelligently constitute higher-order skills.

Concerning deletion frequency in this passage, this analysis shows that some subjective decisions were made in advance by the test designers, as indicated in the irregularity of the frequency of deletion pattern in five Cloze items. If these subjective decisions are introduced for certain blanks even in every n^{th} word Cloze passages in order to keep an approximate balance between content words and function words, then this supports the suggestion of many researchers that CP should be constructed with rational deletion patterns. In this type of deletion pattern, the Cloze writer will analyze the text very carefully and will delete words that represent a measure of reading comprehension ability without following a random deletion frequency. On the other hand, if the deletion pattern had been kept uniform in Oller and Conrad's Cloze passage (as it was shown in Table 3), then the CPge would be more difficult and loaded with content words. According to Rankin and Thomas (1980), this type of CPge requires a greater amount of intersentence integration and can be considered a good measure of reading comprehension. These facts demonstrate that different deletion frequency procedures within the n^{th} deletion pattern (Alderson 1980) or the rational deletion pattern (Bachman 1982) produce different CPges that in terms of testing devices need to be validated individually. Consequently, we can say that the preference of a particular deletion frequency in CPges cannot be definitely supported. The favored ultimate decision to select a particular deletion frequency will depend on the topic of the passage, its organization, its use of

simple or complex sentences and the stylistic aspects of the passage. The reader has to realize that no passage is written at the same level of complexity and with the same type of organization.

From the analysis of the Cloze gaps given in this section of the paper, we have seen that there were clearly some items which were very predictable from the immediate surrounding words or from familiar expressions; these represent a measure of lower-order skills, as Alderson (1978) suggests. This predictability was corroborated by the answers provided by the 22 participants in the informal experiment conducted at O.U. The results are shown in the following tables.

TABLE 5
Scores of Subjects on the Cloze Test Using Exact Word Scores

Group	N	Range total possible = 50
Non-native TESOL graduates	8	14 - 28
Native English Speakers TESOL graduates	14	17 - 34
total	22	

TABLE 6
No. of Exact Responses (out of 22 possible) for each Cloze Item

Cloze Item No.	Exact Responses	Cloze Item No.	Exact Responses
1	20	26	5
2	13	27	5
3	15	28	1
4	21	29	8
5	2	30	3
6	2	31	20
7	0	32	3
8	1	33	7
9	5	34	9
10	5	35	11

11	21	36	22
12	6	37	20
13	21	38	14
14	1	39	20
15	3	40	11
16	20	41	0
17	12	42	2
18	12	43	19
19	20	44	22
20	10	45	22
21	0	46	4
22	21	47	14
23	13	48	19
24	9	49	3
25	16	50	12

From these results we can make the following generalizations that will corroborate the analysis given above. Items 36, 44, and 45 were answered correctly by all the participants, but these items represent words used in common expressions, as was shown in the analysis. The second highest degree of predictability was for items 4, 11, 13, and 22 which represent the copula (BE), as part of the main sentence (item 4); the auxiliary verb BE as part of the present progressive (item 11); the conjunction "and" (13) cued by the word "both" and the relative pronoun representing the personalization of the pronouns "some", "I", "others" and "those" referring to the previous paragraphs in the CPge under analysis.

The next items in terms of ease of predictability were 1, 16, and 31 which represent prepositions; 19, representing the auxiliary for the present perfect; and 37 and 39 as elements of common expressions. This gives a total of 13 words that in terms of percentage, the 13 words represent 26% of the total score. This could be considered an advantage for the examinees, but the fact is that the remaining 74% of the words was not easy to predict exactly; most of them demanded various complex tasks that can be considered higher-order skills for reading comprehension. Nonetheless, the participants did provide other answers that were acceptable semantically and syntactically. This fact suggests that for diagnostic, testing, and teaching purposes the acceptable word scoring reveals more accurately the subjects' level of language proficiency.

A disturbing result is the way Cloze discriminates among native speakers of English. Both in Oller and Conrad's study and the present study the results showed discrimination among them. This tends to corroborate Alderson's doubts concerning the use of Cloze tests to measure ESL proficiency. If Cloze tests, as measures of overall language proficiency discriminate among native speakers of English, then the criteria for validating standardized proficiency tests such as TOEFL and MICHIGAN is questionable due to the fact that various studies (e.g., Angoff and Sharon 1971, Johnson 1977) have proved that such exams fail to discriminate among native speakers of English who perform uniformly well on the tests. Consequently, he suggests that the notion of language proficiency needs to be revised if we accept Cloze as another standardized test of ESL proficiency. The last suggestion has been recommended by researchers such as Oller (1972), Stubbs and Tucker (1974), and more recently by Hinofotis (1980).

To conclude this section, it is important to add that the processes involved in answering Cloze items show an active participation on the part of the readers. They first sample the information, always having in mind meaningful units that range from the phrase and clause level to the whole passage; then they formulate hypotheses about possible words based on the context clues; next they test those hypotheses in order to confirm or disconfirm them; and finally they revise their selections if their expectations are not confirmed (Oller 1973).

CHAPTER II

CLOZE PROCEDURE AND THE PSYCHOLINGUISTIC PRINCIPLES OF READING

The analysis provided in Chapter I served to identify and clarify the processes involved in answering Cloze tasks. At the same time, the reader could observe the complexity of those tasks, which involved some lower-order skills and also more importantly higher-order skills.

In this section, I will build upon the previous analysis and provide insights that show support for the Cloze technique as congruent with the psycholinguistic principles of reading proposed by Goodman (1967) and Smith (1978).*

Goodman has referred to reading as a "psycholinguistic guessing game." The reader is always making guesses, which could be correct or incorrect. The efficient reader is the one that guesses correctly. With the use of the CP, the readers are supposed to guess from the context. They are encouraged to take risks, to take a chance, even if this means that sometimes the guesses are wrong. "Reading can be a risky business", Smith says. It is also known that many times one gets useful information when errors appear, since they can constitute a good opportunity to learn.

Another important concept relating to guessing is that of prediction. When we read, we make predictions about the coming meanings, and the predictions are essential for comprehension, since they facilitate the "prior elimination of unlikely alternatives" (Smith 1978). The CP encourages the learner to make predictions. The systematic blanks provided in a CPge demand that the student ask specific questions about the possible words. And in order to answer these questions and to find the missing words, the student is required to sample the graphic display, to make educated guesses (predictions), to test and confirm hypotheses. This process constitutes the act of reconstructing the writer's message (Goodman 1971).

* My proposal was also suggested in brief by Plaister (1973).

One way to successfully reconstruct the writer's message is to take advantage of the redundancy of language, which is a process of providing information by means of more than one source. The redundancy of language can be realized through various types of contexts, i.e., repetitions, synonyms, antonyms, metaphors, examples, definitions, details, comparisons, facts, interpretations, etc. These contexts constitute alternatives that are available to the reader in order to provide the meaning of an unfamiliar word. To complete a passage with systematic deletions, the reader is trained to use all his background knowledge as well as the redundancy of language, which help him eliminate alternatives and fill in the blanks with the appropriate words. According to Smith, the comprehension of the whole can contribute to the comprehension of the parts, and many times unfamiliar words are deciphered and even learned in this context.

When using the CP, the students are guided to see the passage as a whole and to refer back or ahead into the text in order to find a clue to meaning. The same process is done in reading, according to Smith, since when we read, our eyes move in saccades (rapid, irregular, spasmodic, but surprisingly accurate eye movement from one position to another) which progress in a forward direction and also, when necessary, in regressions in order to get the visual information that goes to the brain.

In addition, and most importantly, the reader must have a knowledge of the language (semantic, syntactic, and graphonemic systems), a knowledge of the story or topic being read and an understanding of what has happened previously in the story (Goodman 1973). These previously stated factors, plus the knowledge of how to read, are referred to by Smith (1978) as the nonvisual information, which is essential in order to reduce uncertainty in advance and to make decisions with less visual information. In filling in the blanks in a CP, the student will be more successful if she/he has this nonvisual information available. ESL/EFL teachers must encourage their students to do more extensive reading both in their native language and in English at home, since this will increase their world knowledge, an indispensable factor in becoming better readers.

The CP can be effectively used to develop letter identification, word identification, and meaning identification. Since the purpose here is to demonstrate the use of the CP to develop reading comprehension, meaning identification is emphasized because it is necessary for the process of comprehension. When working with a CPge with systematic deletions -deletions occurring every 5th, 6th, 7th, ... or 10th word-, the students are to predict the meaning of a phrase in order to identify the missing word or words in each phrase. This meaning identification is immediate in the sense that it does not require individual word and letter identification. The student is working with the contextual cues, which according to Bornick and Lopardo (1974) are "a powerful word recognition strategy and basic to the extension of a meaningful vocabulary."

With the use of the CP, one can see that reading is not a passive activity, but a very active one where students must make a lot of predictions or ask specific questions for each deletion. Every time they answer these questions correctly, the process of successful comprehension is taking place.

CHAPTER III

APPLICATION OF THE CLOZE PROCEDURE IN AN ADVANCED ESL/EFL CLASS TO IMPROVE
READING COMPREHENSION

In the previous chapters, it was demonstrated that the CP involves active and complex processes which, in addition, are congruent with many important principles of the psycholinguistic approach to reading. In this way, the virtues of the Cloze technique have been strengthened. Furthermore, the previous arguments put the CP in a very favorable position among other techniques used to increase reading comprehension.

Below the CP will be discussed as a teaching technique for improving reading comprehension in an advanced ESL/EFL class. This proposal should also be applicable to other classes which include English, or any other language, as a mother tongue.

The CP as a teaching technique has been used since 1962 (Rossinck and also Bloomer); since then many studies have been conducted to demonstrate its effectiveness. Jongasma (1980), for example, reviews 36 studies and contrasts them with nine studies he had reviewed earlier (1971). The results were not very promising at the beginning, but after eighteen years of research and use of the CP in the classroom, they were much more positive. Richardson (1980), for example, concluded: "The cloze procedure provides both the teacher and the pupil with a new and stimulating way to acquire and apply skills. The myriad uses of the cloze procedure coupled with the simplicity of construction makes it a very useful tool for the classroom."

I hope that the arguments discussed in the first two chapters of this paper and the brief introduction of the CP as a teaching technique presented above might motivate the ESL/EFL teacher to include it in his teaching repertoire. In addition, some ESL proficiency tests used in the U.S., such as the UCLA ESL Placement Examination (UCLA ESLPE), CESL Reading Test developed by the Center of English as a Second Language at Southern Illinois University, Carbondale, and by the English Language Testing Service

(ELTS) operated by the British Council in regional offices all over the world are already including the Cloze or modified CP as part of the reading comprehension section. This suggests that ESL/EFL teachers should incorporate this technique as an essential ingredient of their methods for teaching English. In the teaching and learning process our students should practice the material before being tested on it. If this has not been done in our ESL/EFL classes, our students will do poorly when they face proficiency tests that include the Cloze variety, for example.

Below are some suggestions on the selection of materials and the construction of modified versions of the Cloze technique, as well as a sample lesson plan using the CP in the classroom.

Selection of Materials

Sources of passages used for the teaching of the CP are varied. The selection depends on the objectives you have stated in advance. Following are some useful suggestions made by Richardson (1980) and also by Plaister (1973):

1. Choose passages that have a high interest level and are at the reading level of your students.
2. Select interesting stories.
3. Prepare your own materials. They are excellent resources. Write them with specific purposes and students in mind.
4. Use the students' written compositions from the previous courses. They are generally written with an unsophisticated vocabulary, simple structures and concrete meaning.
5. Prepare word cards to complete the meaning of a short sentence or paragraph.
6. Transfer the passage to a transparency for use with an overhead projector (if available). Once the transparency has been prepared, select words and mark out with masking tape.
7. Select familiar rhymes, jingles, and short stories.

In addition, the following are also good suggestions:

1. Adapt your materials to the level of difficulty of your students. You can begin by using short sentences, then long sentences, next paragraphs, and finally whole passages or texts.
2. Choose popular songs, comic strips, jokes, sayings, interesting dramas, and poems. However, the reader is cautioned to be very careful in selecting such materials, since they contain a special language, that of literature or irony, for example.
3. Select passages with pictures at the top or match pictures and passages, so that the former can help the students to understand the latter.

Construction of Modified Versions of Cloze Procedure

When you construct your materials, do not forget to adapt them to your specific students, purposes, content areas, vocabulary or concepts; and carefullu sequence them according to difficulty and length. The following are good suggestions for such for such versions of modified CP (MCP); they are ranked in order of difficulty.

1. Using a sentence as a resource for the modified cloze passage and taking into account the context clues:
 - a. Delete systematically every n^{th} word but leave either the consonants or the vowels of the missing words.
 - b. Delete systematically every n^{th} word but leave the initial and last letters of the Cloze items.
 - c. Delete every n^{th} word but leave either the initial letter or the last letter of the word.
 - d. Delete every n^{th} word and provide three or four choices.
 - e. Delete systematically one, two or three words if the sentence is long.

The n^{th} deletion used will depend on the length of the sentence. If the sentence is very short, then just one word can be deleted.

All these procedures can be modified again, in order to make the exercise easier, if you use different underlinings, as follows:

1) Incomplete underlining (using a dash for each letter), e.g.,

_____ , u _____ ,
 _____ s , u _____ s ,
 u _ _ e _ _ a _ _ , _ n d _ r s t _ n d s , for the
 word "understands".

2) Solid underlining, e.g., _____ , u _____ ,
 _____ s , etc.

2. Using a long passage, and keeping the context, semantics, and syntax in mind:

- Delete every n^{th} word systematically and provide three or four choices for each blank (adapted from Porter 1976).
- Delete every n^{th} word systematically, but leave some letters (apply the procedure used for sentences above and you will have yet another MCP) (Adapted from Richardson 1980).
- Delete every n^{th} word systematically (Richardson 1980).

In addition, one can use the following modifications:

- Systematically delete the words and put them randomly at the bottom, top or sides of the passage.
- Systematically delete every n^{th} word and put these and other words (distractors) in the same positions stated above.
- Systematically delete every n^{th} word and provide a picture closely related to the content of the passage.
- Delete every n^{th} word and write them on word cards to be used individually or in groups during the class.

If one uses one of the two types of underlinings mentioned above in conjunction with these, one will have other modifications. Notice that all the suggestions have emphasized the use of systematic deletion in order to fulfill one of the purposes of the CP: 'to test a variety of language items.' This will also help to "enhance the pupils' ability to comprehend details or relationships" (Richardson 1980).

In order to emphasize content words (nouns, adjectives, adverbs, and verbs) or function words (prepositions, articles, conjunction, etc) and thereby to enhance the pupils' ability to understand the main idea or factual information or cohesive devices (Richardson 1980) you can also use the gamut of MCP suggestions listed above.

Stating Directions

Finally, state briefly and clearly the directions on how to fill in the blanks on the top of the passage. You can also add a short example. This is particularly essential when the CP is used as a test. e.g.,

DIRECTIONS: Read the following passage. In the passage there are blanks where words have been left out. Read the entire passage before filling in the blanks because you may get help from the next sentence or from a sentence further along in the passage. Write in the word you think goes best in the blank (Remember: only one word in each blank!!!), if you change your mind, erase and write in a new word. Do not be afraid to guess.

EXAMPLE: The doctor said that John _____ swim if he wanted _____, but that he should _____ careful. John said, "Well, _____ you think I should _____ go swimming, I won't."

ANSWER: The doctor said that John could swim if he wanted to, but that he should be careful. John said, "Well, if you think I should not go swimming, I won't."

A Sample Lesson Plan Using the Cloze Procedure

The CP can be presented to students in many different ways, depending on the objectives, level, students' age, size of group, etc. The purpose of this section is to share with the reader a procedure to present the Cloze technique with systematic ⁿth deletions in an advanced ESL/EFL class. But before attempting the procedure, the teacher must be well prepared in advance. The teacher must analyze the Cloze passage very carefully and predict the possible alternative words for each blank. These words can be predicted based on her/his own ability to recognize syntactic and semantic

clues for the Cloze replacements. In addition, the teacher should decide on the best way to guide her/his students to find the missing words (Jongsma 1980). Finally, the teacher should sequence the Cloze passages in such a way that they become progressively more difficult and are based on previously studied materials. This process permits the students to make use of prior knowledge in every new Cloze exercise. Another important point to emphasize is that the CP may be manipulated in order to reveal a reader's use of semantic, syntactic, and graphonemic cueing systems (Cambourne 1977).

Now let's state the procedure:

1. The teacher begins the class by stating the objective of the activity and announcing the title of the passage. Before distributing the CPge, she/he asks questions about the title. In this way, the students begin to build up some predictions.
2. If the students are not familiarized with the CP, the teacher should devote some time to give instruction about its purpose and how to guess the missing words based on context. The teacher should emphasize that they must not be afraid to take risks and that wrong guesses also lead to learning.
3. Then, the teacher hands out the CPge and tells the students to read quickly and silently the first and last sentences, which do not have any deletions. Again, questions are asked in order to enhance the number of predictions about the passage and to elicit suggestions about the main idea of the passage.
4. The teacher now reads the passage aloud, trying to maintain a correct intonation and making the necessary pauses. This will give the students some aural cues for understanding. During the reading, the teacher can say the missing words mentally in order not to lose the intonation and rhythm, or she/he can say "blank" orally at the deletions, as Neuwirth (1980) suggests. Meanwhile, the students are silently reading the cloze passage along with the teacher.
5. The teacher tells the students to silently read the first paragraph again.

Now a directed discussion with the whole group begins. The teacher reminds the students to look at the preceding and following ideas that surround the missing words, as well as those that appear at the beginning, the middle, or the end of the paragraph. Then, the teacher asks them to say aloud the possible words for each deletion. The teacher writes on the board these words, given for each Cloze item. The teacher should encourage the students to state those words without any fear of being wrong. However, she/he should ask them to justify their choices. This is a very important aspect of the instruction because it involves an analysis of the structure of the language and it helps the teacher to gather essential information about her/his students' level of processing language (Bortnick and Lopardo 1973).

6. The teacher gives some clues in order to help students find the correct or acceptable words. At this stage, the teacher has an excellent opportunity to provide information about syntactic and semantic clues (knowledge of how the language works) that will help the students to discover the missing words.
7. If after doing the previous step, there are still some doubtful choices, the teacher can give the first letter of the correct word (Neuwirth 1980).
8. After finishing the first paragraph, the teacher asks one student to read it aloud in order to see if it makes sense,
9. The teacher shows the original paragraph, using an overhead projector (if available) and tells the students to compare it with the one that they have just completed. This will give them a sense of achievement and a sense of the wholeness of the writer's message.
10. In order to offer variety, the teacher divides the class into small groups (three or four students each), and tells them to read the next paragraph and to provide possible words for each blank. The teacher should emphasize that they must work cooperatively in each group and let their peers voice their answers. However, she/he must encourage them to give reasons to one another for their choices. At this stage, if the teacher realizes that some groups are having problems in doing the exercise, she/he can give them some extra handouts, prepared ahead of time,

containing the initial letters of the missing words, for example. Or alternatively, the teacher can dictate these initials aloud and have the students copy them. In this way, the teacher avoids frustration and boredom in using the CP (Johns 1977).

11. While the students are working in groups, the teacher should interact with each group and work as a facilitator.
12. Then, the teacher can ask each group to report their findings along with reasons. The teacher must be ready to clarify any doubts.
13. Finally, the teacher can again show the original passage and compare it with the students' answers.

If the teacher wants, she/he can select a short CPge to be given at the end of the lesson as a homework assignment. But she/he must be cautious not to overuse the CP and to remember that the CP should be utilized judiciously and in combination with other methods (Jongsma 1980) in order to develop ESL/EFL reading comprehension abilities.

CONCLUSIONS

A detailed analysis of Cloze items reveals the different strategies that readers might use consciously or unconsciously in order to provide the missing words in a CPge. From the analysis presented in Chapter I, we can conclude that Cloze items require a variety of tasks in terms of exploiting the context that surrounds them. Among them, the following were identified: syntactic clues, semantic clues, clues from world knowledge or knowledge of the topic, clues from familiar expressions, and clues from associations with other words or sentences. Furthermore, in using these context clues, the readers are assumed to be making use of very higher-order skills such as inferencing, not only from the immediate context but also from the sequence of the whole passage.

In addition, from the analysis of the tasks involved in filling in Cloze gaps and the characterization of the reading process made by Goodman and Smith, the reader can see that reading is an active process which involves sampling, predicting, testing, and confirming in order to reproduce the writer's message.

In spite of the fact that the psycholinguistic principles of reading have contributed to an understanding of the reading process, the reader is reminded that they do not constitute a "psycholinguistic method" for the teaching of reading (Clarke and Silberstein 1977). However, ESL/EFL teachers can take advantage of these principles and draw inferences which are very important in the preparation and application of materials. The CP appears to be a good example of a technique that can effectively contribute to the realization of the psycholinguistic principles of reading in an advanced ESL/EFL class.

It is also advisable to use the CP to increase reading comprehension in an advanced ESL/EFL class, since its use as a testing technique for proficiency in English is becoming popular. Students will then be ready to deal with it in a testing situation.

Materials prepared for this technique draw on the language itself, and the teaching does not deal with language structures in isolation but always in meaningful context. Furthermore, sequencing the materials according to difficulty, length, and purpose provides better results than do undifferentiated exercises.

The CP cannot do all the work, however. It necessitates active participation on the part of the teacher as a facilitator and the student as a learner who is going to be more successful if he/she has a great deal of nonvisual information stored in her/his brain already.

The CP must be considered as a supplement to other techniques for improving reading comprehension, and it must not be overused since this will lead to students' frustration and boredom (Jongsma 1980).

The flexibility of the CP used as a teaching technique for reading comprehension in the ESL/EFL classroom offers an excellent challenge for teachers and students. It provides the teachers continual training in elaborating CP tests and gives students enough familiarity and confidence to take them.

It is hoped that future research and application will combine the theoretical basis I have mentioned with practical studies in the EFL/ESL classroom in order to make the CP a more powerful testing and teaching technique for increasing reading comprehension. In this way, the usefulness and attractiveness of the CP as both a teaching and a testing technique will be strengthened and it will become an effective tool in the teacher's methodology.

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