Implications of Lexical Repetition Patterns for Language Teaching

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Received: June 12, 2014   Accepted: June 21, 2014    Published: August 10, 2014
doi:10.5296/ijl.v6i4.6115    URL: http://dx.doi.org/10.5296/ijl.v6i4.6115

Abstract
Lexical repetition is a type of cohesive device in the cohesion system of Systemic Functional Linguistics. The relationship between a repetition item and its antecedent is textual rather than structural. The lexical repetition pattern proposed by Halliday & Hasan (1976) and that by Hoey (1991) can give us many implications for language teaching. Taking vocabulary and reading teaching as examples, this paper discussed the use of lexical repetition patterns in language teaching, finding that it is instructive to apply the lexical repetition patterns in the selection of new words in vocabulary teaching and in the summarization and comprehension of text in reading teaching.

Keywords: Lexical repetition, Cohesion, Language teaching
1. Introduction

Cohesion “refers to the grammatical and lexical elements on the surface of a text which can form connections between parts of the text” (Tanskanen, 2006, p. 7). In discussing the cohesive patterns in English, Halliday and Hasan (1976) divide cohesion into grammatical cohesion and lexical cohesion. The former includes such devices as reference, substitution, ellipsis and conjunction, while the latter, reiteration (repetition, synonymy, antonymy, hyponymy, meronymy and general nouns, etc) and collocation (co-occurrence of lexical items). They define reiteration as a form of lexical cohesion which involves “the repetition of a lexical item, or the occurrence of a synonym of some kind, in the context of reference; that is, where the two occurrences have the same referent” (Halliday and Hasan, 1976, pp. 318-319). This means that the notion of reiteration is much broader than that of repetition. However, repetition defined by Hoey (1991) is even broader than reiteration defined by Halliday and Hasan (1976), including simple repetition, complex repetition, simple paraphrase, complex paraphrase, superordinate, hyponymy, co-reference, substitution and ellipsis, etc. Reference, substitution and ellipsis represent semantic relations through grammar, and hence are grammatical cohesive devices. The referred, substituted and elided part in the text can be found from the context and can form links in the construction of text to help form connections between sentences. In text analysis, they can all be regarded as lexical repetition. Therefore, Hoey’s (1991) repetition consists of Halliday and Hasan’s (1976) reiteration, reference, substitution and ellipsis.

Based on relevant theories on lexical repetition as cohesive devices, this research intends to analyze the implications of lexical repetition patterns for language teaching, especially the teaching of vocabulary and reading. For this purpose, we will first offer a sketch of Halliday and Hasan’s (1976) and Hoey’s (1991) lexical repetition patterns in Section two, and then in Section three we will give a demonstration analysis on the use of these repetition patterns in language teaching.

2. Lexical Repetition

2.1 Halliday and Hasan’s Pattern

Of the three metafunctions in the Hallidayan sense (Halliday, 1985; 1994; Halliday and Matthiessen, 2004; 2014), i.e., ideational, interpersonal and textual functions, textual function is a “relevant” function, or namely, “the integrity, consistency and cohesiveness” (Hu et al., 1989, p. 135). The textual function consists of three systems, i.e. the thematic system, the information system and the cohesion system. “The concept of cohesion is a semantic one; it refers to relations of meaning that exist within the text, and that define it as a text” (Halliday and Hasan, 1976, p. 4), as “the way certain words or grammatical features of a sentence can connect that sentence to its predecessors (and successors) in a text” (Hoey, 1991, p. 3). It “occurs where the interpretation of some element in the discourse is dependent on that of another” (Halliday and Hasan, 1976, p. 4). Lexical cohesion means the co-occurrence of words and expressions closely related in meaning in a text and thus making the sections of the text semantically related. Cohesion arises when the interpretation of one language element depends on that of another. The system of cohesion can be shown in Figure 1:
Repetition is an important cohesive device. A paragraph can be integrally and coherently a whole in meaning by using repetition. For example:

[1] ① Liberty, then, is not license. ② License is the opportunity to act regardless of other people; ③ liberty is the opportunity to act in such a way as not to interfere with the opportunity of others. ④ When license increases, ⑤ liberty decreases.

There are five clauses in [1]. The thematic progress can be shown as:

```
Theme 1  →  Rheme 1
       ↓
Theme 3  →  Rheme 3  Theme 2  →  Rheme 2
       ↓
Theme 5  →  Rheme 5  Theme 4  →  Rheme 4
```

*License*, Theme of clause ② and clause ⑤, is Given information and is the repetition of the Rheme of clause ①. Clause ① and clause ⑤ share one Theme, “liberty” which is the repetition of the Theme of clause ① and is Given information. And “liberty” and “license” are antonyms, so the Rhemes of the clauses with “liberty” and “license” as Themes respectively are also antonymous in meaning. Hence, “the opportunity to act regardless of other people” is antonymous with “the opportunity to act in such a way as not to interfere with the opportunity of others”, and “increase” and “decrease” are antonyms. That is:

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Rheme 2  →  Rheme 3
Rheme 4  →  Rheme 5
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Through this kind of lexical repetition, [1] becomes a coherent text in meaning. However, the viewpoint presented by Halliday and Hasan (1976) has been most severely criticized over the years because they insist on seeing cohesion as a necessary property for the creation of unity in text. (e.g. Enkvist, 1978; de Beaugrande and Dressler, 1980; Brown and Yule, 1983; Lundquist, 1985; Ellis, 1992; Hellman, 1995; Sanford and Moxey, 1995). It is maintained
that “overt markers of cohesion were not enough to make a text connected” (Tanskanen, 2006, p. 16). Here is an example given by Erkvist (1978):

[2] I bought a Ford. The car in which President Wilson rode down the Champs Elysees was black. Black English has been widely discussed. The discussions between the presidents ended last week. A week has seven days. Every day I feed my cat. Cats have four legs. The cat is on the mat. Mat has three letters.

This paragraph is apparently cohesive, but there are no internal relations in meaning between sentences. Example [2] shows that despite abundant cohesive ties, a group of sentences do not necessarily form a unified whole.

2.2 Hoey’s Pattern

Since example [2] is not a connected text, then what kind of a language segment is internally relative in meaning, or can be a text? According to Hoey (1991; 1994; 1995), simple lexical repetition occurs when a lexical item that has already occurred in a text is repeated with no greater alternation than is entirely explicable in terms of a closed grammatical paradigm. This is the most basic repetition pattern. Complex repetition occurs either when two lexical items share a lexical morpheme, but are not formally identical, or when they are formally identical, but have different grammatical functions. Simple paraphrase occurs whenever a lexical item may substitute for another in context without loss or gain in specificity and with no discernible change in meaning. Hoey’s simple paraphrase is quite the same as Halliday and Hasan’s (1976) synonymy and near-synonymy. If the interpretation of one of two words with no shared morphemes is dependent on that of the other, they are complex paraphrase of each other. For example, “writer” and “writing” are complex repetition, and “writing” and “author” are complex paraphrase. This relation can be shown in Figure 2:

![Figure 2. Relations between types of repetition](image)

Hoey’s (1991) repetition pattern includes also such grammatical cohesive devices as reference, substitution and ellipsis in the Hallidayan sense. He refers to them as textual items, which are members of the closed system. They have no specific meanings themselves. The meanings they refer to depend on those of other items in context, so they are grammatical rather than lexical items. On the other hand, they do function as repetition of the lexical items occurred in text to make the text cohesive. Therefore, Hoey (1991) gives it a special status in text analysis. They are treated as if they were lexical, and thus, on the second and subsequent occurrence, are analyzed as entering into lexical links.
Hoey (1991) assumes that in non-narrative texts any two sentences are connected as packages of information if they share at least three points of reference. The reason is very clear. If two sentences sharing less than three points of reference were treated as being a significant connection, then nearly every sentence would be connected to every other. That is to say, two sentences can establish a significant connection, or repetition link, only when there are at least three connection points of repetition. The following is an example given by Hoey (1991, p. 35):

[3] 1 A drug known to produce violent reactions in humans has been used for sedating grizzly bears Ursus arctos in Montana, USA, according to a report in The New York Times. 2 After one bear, known to be a peaceable animal, killed and ate a camper in an unprovoked attack, scientists discovered it had been tranquilized 11 times with phencyclidine, or ‘angel dust’, which causes hallucinations and sometimes gives the user an irrational feeling of destructive power. 3 Many wild bears have become ‘garbage junkies’, feeding from dumps around human developments. 4 To avoid potentially dangerous clashes between them and humans, scientists are trying to rehabilitate the animals by drugging them and releasing them in uninhabited areas. 5 Although some biologists deny that the mind-altering drug was responsible for uncharacteristic behavior of this particular bear, no research has been done into the effects of giving grizzly bears or other mammals repeated doses of phencyclidine.

The following are the repetition links that each sentence shares with others: Sentence 1 with sentence 2: produce, causes; used, user; sedating, tranquilized; bears, bear (four repetition links, connected); with sentence 3: bears, bears; humans, human (two repetition links, unconnected); with sentence 4: drug, sedating, drugging; humans, humans; bears, them, animals (three repetition links, connected); with sentence 5: drug, drug; produce, was responsible for; grizzly, grizzly; bears, bears, bear (four repetition links, connected). Therefore, the connection between sentence 1 and sentences 2, 3 and 5 can be represented diagrammatically as the following:

```
   1
   |
   2
   |
   4
   |
   5
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Using the same procedure, we can conclude that sentence 2 is in connection with sentences 1, 3 and 5, sentence 3 with no one, sentence 3 with sentences 1 and 2, sentence 5 with sentences 1 and 2. They can be represented as the following:
If we put these figures for each sentence together, we will get a general cohesion profile for the text shown as the following:

![Diagram showing cohesion profile]

According to the linking theory, none of the sentences in the above example [2] shares three repetition links with others, i.e., there is no connection between the sentences, so [2] is not a semantically coherent text.

If sentences are regarded as interrelated packages of information, those germane to the development of the theme of a text make a number of connections with other sentences, while those contributing less to the development of its theme show fewer signs of connection with the rest of the text. Hoey (1991) refers to the two kinds of sentences as central and marginal sentences respectively. We would expect a marginal sentence to have lower information value, to be metalinguistic in nature or to offer information that is not directly needed or made much use of within the text.

If we examine example [3] in this way, we arrive at the following co-ordinates for each of the sentences, the figures representing the number of sentences, before and after, with which the sentence in question shares three or more items:

<table>
<thead>
<tr>
<th>Sentence</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
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<td>1</td>
</tr>
</tbody>
</table>

Even if this text is very short, there are still two sentences that have three connections with the remainder of the text. The two sentences are ① and ②. If the two are extracted from the text, we will get a reasonable summary of what the text is about. The other sentences seem to function as the annotation of this summary. So sentences ① and ② are treated as central sentences. Sentence ③ is marginal because it is not in connection with any other sentences.
3. Implications for Language Teaching

Lexical repetition plays an important part in establishing textual relevancy. The relationship between a repetition item and its antecedent is textual rather than structural. In this section, we will discuss the implications of the lexical repetition patterns for language teaching, including vocabulary teaching and reading teaching.

3.1 Vocabulary Teaching

The understanding of a text should to a great extent be based on the cohesion force of lexical repetitions in the construction of text. Therefore, the lexical repetition patterns introduce the vocabulary teaching into the text level, to make the vocabulary study in connection with text from the very beginning.

Take English as an example. English vocabulary is rich in inflections, especially verbs which are rarely seen in their original or infinitive forms. A verb occurs in different forms in different circumstances. For example, the word *write* has four morphological changes, i.e. *writes, writing, wrote* and *written*. It is not the same in Chinese. A Chinese character has only one form in all circumstances. Therefore, for a Chinese learner of English, the morphological changes of verbs are marked. A marked item is difficult to manage, so it should be paid special attention to. In English teaching, especially in the process of English vocabulary teaching, the teacher should remind the students of the morphological changes of a word in different contexts. In this way, the teacher teaches the students not only a new word, but also the usage of the word. This is more persuasive in French and certain other languages. For example, to learn a French verb without a relevant context is almost impossible because the infinitive form of French verbs seldom occurs. It is very common for a French learner not to know the infinitive form of a French verb.

There is no need to give so many unnecessary details on synonymy, antonymy, hyponymy and meronymy, etc. because they are largely identical in Chinese and English. What should be pointed out here is which words are to be learned in an integral text. At the beginning stage of English learning, there is always a list of new words attached to a text. The teacher explains first the new words and then the text to the students. The purpose of learning is to expand the students’ vocabulary and to learn grammatical items. However, at the later stages, there are no new word lists attached to the text, which does not mean that there are no new words for the students. The purpose of learning is now to understand the text, not simply to remember new words. This can give the teacher such an inspiration that the words directly needed for the construction of text are those which should be learned by the students. In the explanation of text, the teacher should focus on these words, which can not only provide more chances for the students to recognize the practicable words and to learn their typical usages, but also guide them to select out the sentences attributed to the understanding of the text, and to enter into the content of the text accordingly. Taking [3] as an example, the words the teacher should require the students to learn are *drug, drugging, bear, bears, animals, human, humans, produce, causes, used, user, sedating, tranquilized, ate, feeding, scientists, biologists*, etc. As for the words irrelevant to the construction of text, the teacher should keep
silent or give only a mention of their meanings if they are not vital for the understanding of the text.

3.2 Reading Teaching

Reading can be generally divided into two types, intensive reading and extensive reading. The patterns of reading include the top-down pattern and the bottom-up pattern. The top-down pattern focuses on the function of the background knowledge of the readers in the comprehension of reading, and the bottom-up pattern on the function of the text itself. The top-down pattern appraises reading as a process of selecting, forecasting, checking and confirming. The bottom-up pattern holds that reading is a process of information processing from the basic decoding of words to the final obtaining of information. Generally speaking, the top-down pattern is used in extensive or speed reading to ensure the reading speed, and the bottom-up pattern in intensive or careful reading to ensure the preciseness of reading comprehension. Both the two patterns have their own advantages and disadvantages as well. If the preciseness is emphasized but the speed is neglected, the reading will be in a low efficiency. The blind pursuance of speed will influence the absorption of information. A good reader should be able to deal with the relation between intensive reading and speed reading, not only to obtain the precise information, but to ensure the reading speed. Intensive reading is applied in language teaching, but in reading comprehension tests, speed reading takes the priority. The repetition link theory provides an effective method for the teaching of reading, because relevant sentences should be identified and dealt with selectively in speed reading. It should be apparent that bonding may provide an appropriate clue in the identification of the potentially relevant sentences. If two sentences make a bonded pair, they must have some shared information and be connected. In reading training, the teacher should adopt the top-down reading pattern, asking the students to read the questions first and then find the relevant sentences in the text to arrive at the correct answer according to the linking theory. The more repeated lexical items two sentences of a text have, the more germane they are. By arranging some central sentences of a text according to their original order in the text, we will get a group of sentences containing the main content of the original text. The sentence which makes the most connections with other sentences can be regarded as the topic sentence. In practical reading teaching, the teacher can find out in advance a central sentence contributing more to the bonding of the text as the topic control sentence, and then guide the students to find out the sentences with which it has three or more repetition links (this figure can be properly increased according to the requirement of text) and to understand the main content of the text accordingly. The training of the students’ reading ability is not always dependent on their language levels or on their vocabulary. Higher-level students of English with a larger vocabulary don’t always have a higher level of reading comprehension ability. The teacher should consciously guide the students to find out the relevant sentences quickly in the teaching of reading. The relevant sentences can always show the general meaning of the text. The following is a French text, which is unfamiliar to most Chinese learners of the English language. From this
text, one can experience how a beginner of a language acquires the main idea of a text using repetition link theory.

1. Le Dictionnaire Du Français Langue Etrangère correspond au premier niveau des methods d’apprentissage du français. 2. Son but est d’assurer la connaissance du lexique et de la syntaxe de base et de permettre le passage à la maîtrise de l’expression parlée et écrite.

3. Ce dictionnaire décrit la langue réelle, celle qui sert effectivement de moyen de communication. 4. C’est un dictionnaire des situations courantes et un dictionnaire des phrases usuelles, construites avec un vocabulaire limité et des structures syntaxiques simples. 5. Il répond ainsi à l’objectif fondamental de la pédagogie des langues vivantes: apprendre la langue parlée et écrite à travers les situations de la vie quotidienne.

6. Le but de ce dictionnaire est encore d’approfondir et d’enrichir les connaissances de base. 7. C’est un dictionnaire de synonymes, de contraires, d’équivalents sémantiques, permettant de construire des phrases nouvelles et de préciser ou de nuancer les énoncés. 8. Partant d’un vocabulaire de base de 2581 mots, il va, dans ses parties lexicale et sémantique, vers un ensemble plus riche et plus complexe de 7700 termes. 9. C’est un dictionnaire analogique et sémantique: il permet de trouver le terme juste dans un ensemble lexical parfois complexe, le mot qui dénomme tel ou tel objet, telle ou telle attitude, tel ou tel sentiment; il conduit des mots de base à un vocabulaire plus entendant.

10. L’approfondissement de la syntaxe se fait parallèlement par un commentaire grammatical sur les constructions des verbes, les employs des determinants dans les groupes du nom, la place des adjectifs et des adverbes, ainsi que par les transformations de phrases, qui définissent les derives et les composes. 11. C’est un dictionnaire de grammaire permettant la connaissance intelligente des règles syntaxiques ou morphologiques et des points essentiels de l’orthographe et de la prononciation; il est complete par une brève annexe grammaticale qui récapitule les règles de base de la morphologie et de la syntaxe du français et par un tableau des conjugaisons.

Ce dictionnaire fait aussi une large place à la pratique sociale du langage, c’est-à-dire aux niveaux ou registres de langue. Le type de communication depend des circonstances dans lesquelles les énoncés sont formés; langue familière des conversations quotidiennes, langue écrite courante des journaux à grand triage, langue soutenue des articles de revues, des films ou des feuilletons élévisés, langue littérale des romans. La connaissance et la maîtrise des niveaux de langue sont essentielles pour l’apprentissage du français.

Le Dictionnaire du Français Langue Étrangère est un instrument actif dans le cadre de la pédagogie du français; il lie la pratique écrite et la pratique orale de la langue; il associe les moyens linguistiques et les moyens visuals; il est profondément inséré dans la vie moderne et il hierarchies les difficultés en facilitant un apprentissage progressif et une maîtrise intelligente du français vivant.

Before reading, the teacher should choose a sentence, for example, sentence 2, in connection with relatively more other sentences as the topic sentence, and then guide the students to find out sentences having three or more repetition links with the topic sentence. The teacher can give the meanings of the main words in sentence 2, for example, but – aim, assurer – ensure, connaissance – understanding, lexique – vocabulary, syntaxe – syntax, base – base, permettre – permit, passage – access, maîtrise – mastery, expression – expression, parlée – spoken, écrite – written. This sentence can be translated into English as:

Its aim is to ensure the understanding of the vocabulary and the basic syntax and to permit the access to the mastery of the spoken and written expressions.

Except for the synonyms, antonyms and hyponyms that the students cannot recognize because they are totally unfamiliar with French, the students will find out such sentences having three or more repetition links with sentence 2 as 4, 5, 6, 8, 9, 11 and 26.

If the sentences are put together in their original order, they form a small text. Their connections can be represented as:
In this small text, there are five sentences in connection with three or more other sentences. They are sentence 2, 6, 8, 11 and 26 respectively. The five sentences can form the summary of the whole text.

Son but est d’assurer la connaissance du lexique et de la syntaxe de base et de permettre le passage à la maîtrise de l’expression parlée et écrite. Le but de ce dictionnaire est encore d’approfondir et d’enrichir les connaissances de base. Partant d’un vocabulaire de base de 2581 mots, il va, dans ses parties lexicale et sémantique, vers un ensemble plus riche et plus complexe de 7700 termes. C’est un dictionnaire de grammaire permettant la connaissance intelligente des règles syntaxiques ou morphologiques et des points essentiels de l’orthographe et de la prononciation; il est complété par une brève annexe grammaticale qui récapitule les règles de base de la morphologie et de la syntaxe du français et par un tableau des conjugaisons. Le Dictionnaire du Français Langue Étrangère est un instrument actif dans le cadre de la pédagogie du français; il lie la pratique écrite et la pratique orale de la langue; il associe les moyens linguistiques et les moyens visuels; il est profondément inséré dans la vie moderne et il hierarchies les difficultés en facilitant un apprentissage progressif et une maîtrise intelligente du français vivant.

The students can get the general meaning of this text according to the teacher’s explanation to sentence 2. In this way, this French text, quite difficult for students who are beginners or have never learned French, is condensed and generally understood using the repetition link theory. The English translation of this condensed summary is also coherent in meaning:

The aim of the dictionary is to ensure the understanding of the vocabulary and basic syntax, and to permit access to the mastery of the spoken and written expressions. It is also to deepen and enrich basic understanding. From the basic vocabulary of 2581 words, there are nearly 7700 terms in their lexical and semantic parts, richer and more complex. It is a dictionary of grammar, permitting the intelligent understanding of the syntactic or morphological rules and the main points of orthography and pronunciation; it is completed by a brief grammatical appendix which summarizes the basic French morphological and syntactic rules, and by a table of conjugation. This dictionary is an active instrument in the field of French didactics; it links the written and oral practices; it associates the linguistic and visual methods together; it goes deeply into the modern life and it hierarchizes the difficulties of facilitating progress in French leaning and the intelligent mastery of current French.

4. Conclusion

Lexical repetition is an important cohesive device in the textual function of Systemic Functional Linguistics. It is different from other cohesive devices such as reference, substitution, ellipsis and conjunctions in that it is normally to cohesively tie distant sentences together, while other cohesive devices are adopted in relatively close sentences or in the same sentence. The lexical repetition patterns given by Halliday and Hasan (1976) and Hoey (1991)
can give us many instructive implications in language teaching. In this article, we mainly discussed the implications in vocabulary and reading teaching. It is certain that the lexical repetition patterns can also be used in teaching grammar, translation and writing as well.

References


