

Traversing the lexical cohesion minefield

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When teachers hear the word 'cohesion', they usually think of grammatical cohesion—an aspect of cohesion reasonably well covered in student books and teacher materials. However, occupying an area that straddles both lexis 'proper' and cohesion lies 'lexical cohesion'. In what follows, it is argued that the teaching and learning of certain aspects of lexical cohesion is problematic, and that this state of affairs may be behind the current neglect of this subject in EFL materials and classrooms. The paper begins with a brief overview of Halliday and Hasan's (1976) classification of lexical cohesion, and then looks, in turn, at four types of cohesive device. Learners' uses of these different cohesive ties are discussed, the obstacles to correct usage are noted, and suggestions are made as to how teachers can help students to develop this aspect of their writing.

Definition and overview

While the terms 'cohesion' and 'coherence' tend to crop up together in the literature, the relationship between the two is a contested one: for example, Carrell (1982: 486) argues that coherence leads to cohesion, whereas Halliday and Hasan (1976: 2) suggest that cohesion brings about coherence. One thing that all writers would agree on, however, is that the use of lexical cohesive ties does not, necessarily, make a text more coherent, or 'better' than another. As Connor (1984: 308, 311) points out, a text lacking in lexical cohesive ties may be better organized, or the points may have better support than a text with more lexical ties. Having made this important qualification—putting lexical cohesion in its place—we can now look in more detail at the subject.

In Halliday and Hasan's (1976: 4) influential work *Cohesion in English*, the authors explain that cohesion is a semantic concept, referring to meaning relations in text.¹ They divide cohesion into two broad areas: grammatical cohesion and lexical cohesion. The former includes reference (for example *three blind mice . . . they*), substitution (for example *My axe is too blunt. I must get a sharper one.*), ellipsis (for example *Which hat will you wear? This is the best.*), and conjunction (for example use of the words *but, yet, so*, etc.). The bulk of Halliday and Hasan's book concerns itself with discussing these types of cohesive ties, and books aimed at developing academic reading and writing skills have given considerable attention to reference and conjunction and their roles in helping texts hang together.² Even though lexical cohesion is the more pervasive in creating textual cohesion, it is

neglected in ELT (as noted, for example by Flowerdew 2006: 209). Halliday and Hasan classify lexical cohesion in the following way:

- 1 Reiteration
 - a same word repetition
 - b synonym or near synonym
 - c superordinate
 - d general word.
- 2 Collocation

Regarding the first of these two classes—reiteration—Halliday and Hasan provide the following examples of how reiterative inter-sentential cohesive ties can be made (Figure 1).

| | | |
|-------------------------------|--------------------------|--------------------|
| | The ascent (repetition) | |
| I turned to the ascent of the | The climb (synonym) | |
| peak | The task (superordinate) | is perfectly easy. |
| | The thing (general word) | |

FIGURE 1
From Halliday and Hasan (1976: 279)

Regarding the second means of achieving lexical cohesion (collocation), Halliday and Hasan (*op.cit.*: 284) define this as ‘cohesion that is achieved through the association of lexical items that regularly co-occur’. As Tanskanen (2006: 12) notes, collocation is not always considered to be a type of lexical cohesion (*cf.* McCarthy 1991: 65), and it will not be considered as playing a role in creating lexical cohesion in this paper. However, collocation knowledge will be referred to as a specific type of knowledge which students need to have to enable them to use reiterative lexical cohesive devices correctly.

In the sections that follow, I look in more detail at the four reiteration devices noted above in the context of developing EFL learners’ writing skills.

Repetition

While repetition is a standard way of achieving lexical cohesion, particularly in science texts, the fact remains that there can be a lot of, what Ting (2003: 6) calls, ‘redundant repetition’ in students’ writing. From a marking point of view, it may be that teachers are hesitant to draw attention to redundant repetition in student writing: repeating a word does not impede understanding, and neither is overuse necessarily misuse. However, the effect of such repetition on the reader can be quite negative. To illustrate this point, I reproduce below a paragraph written by a Saudi intermediate user of English, studying at a Saudi university, answering a question about student preparation for exams. The text has not been edited.

Text 1

In order for a student to have a good, healthy studying is having **breaks**. **Breaks** are very benefical thou they are short. A studant ought to have a five minutes **break** every one hour. He can spend it watching TV, eating, drinking, relax or even taking a bath to stress out. Why having a **break**? Simply because the maind’s effitioncy goes down after a constent study. To sum up, having regular **breaks** is an important method for a succesful study.

The student's use of **break/breaks** five times in the above extract certainly does give the text a rather tedious and monotonous feel to it, detracting from the otherwise well organized, though simply written paragraph. So, why is it that students 'overdo' repetition in their writing?

Firstly, it has been argued that the L1 may play a role in L2 repetition (McCarthy op.cit.: 67, 68). Typical text structure patterns and style preferences in the L1 may well transfer to L2 usage, and Mohamed and Omer (2000) have noted the prevalence of repetition as an Arabic cohesive device in text.

Secondly, it may be that students do not appreciate the importance of variety in academic writing. Repetition is particularly common in speech, and Shaw and Liu (1998) have noted the tendency of EFL learners to write in a spoken register. Clearly, students need to be made aware about academic writing norms in English, which eschew, to a large extent, repetition.

An additional reason may be found in the texts that EFL students typically read. Edited and simplified texts are not rich in their lexical cohesive ties and Cox, Shanahan, and Sulzby (1990: 60) argue that exposure to 'contrived' texts has a negative effect on the development of a learner's use of lexical cohesive ties in writing. Ironically, while texts are simplified to help students, such texts are, implicitly at least, also training the readers in 'sub-standard' lexical cohesive device usage.

Fourthly, and finally, it may be that a student only knows of one way of referring to a concept. This is a typical explanation for the lack of variety in student writing (see for example Ting op.cit.: 6); however, it may well be that this factor plays a more significant role in elementary students' writing than in intermediate/advanced students', as argued below.

The student who wrote Text 1, above, was given some grammatical feedback on his text, and he then attended a class in which the writer of this paper talked about and exemplified the importance of the use of synonyms to add lexical variety to academic writing. The students were asked to rewrite their first draft paragraphs, paying particular attention to the avoidance of repetition and the use of synonyms. The student's second draft is reproduced below. Grammar and spelling mistakes are retained.

Text 2

In order for a student to have good and healthy studing is having healthy **breaks**. **Breaks** are very benefical even though they are short. A student ought to have a five minutes **break** at least every one hour. He can spend [it] his **leisure time** waching Television, eating, drinking, relaxing or even taking a bath to destress. Why should you have a **time out**? Simply because the mind's efficiency goes down after constant study. To sum up, having **continuous rests** is an important method for seccessful study.

Even though the student has the same **break** 'cluster' towards the beginning of the paragraph, it is noteworthy that he attempted to reduce its use. He makes three changes in this regard. Firstly, he substitutes 'it', present in the first draft, and included in square brackets in the above (originally referring to 'break') with 'his leisure time'.³ Further on he substitutes 'break' directly for 'time out' and 'continuous rests'. It should be stressed that the student

rewrote the second draft within a day or two of producing the first text: the real problem, therefore, seems to have been one of awareness (the second point noted above).

The next point to consider with regards to repetition is complex repetition—the use of a derivational form of a word, rather than an exact repetition—in a text to effect lexical cohesion. Examples in the student text above would be ‘studant’ (used twice), ‘studying’ used once (incorrectly), and ‘study’ (twice) as a noun. While word tables showing derivational forms are still fairly standard items found in EFL books, they are typically used in exercises to highlight the grammar of the language, rather than highlighting how different word forms may be used as cohesive ties in a text. However, tables of this kind can easily be adapted to such usage. It is important to include information about the frequent or strong collocates of different word forms because if this information is not provided, it is quite likely that student attempts to use certain word forms may produce unidiomatic combinations. The two examples below, from the same class of intermediate students referred to earlier, illustrate this problem.

Example 1: They need to **catch some rest** while they are reviewing . . .

Example 2: . . . it also helps if he arranges a schedule so that he could **get some breaks** in between studying.

The collocations ‘catch some rest’ and ‘get some breaks’ are both untypical in native speaker usage. According to the *Oxford Collocations Dictionary* (2002), ‘get’, ‘have’, and ‘take’ are typical collocates of ‘rest’, and ‘have’ and ‘take’ typically collocate with ‘break’. Not only, therefore, do students need to know different word forms to engage in complex repetition, they also need to know the typical collocates of the different word forms, and this is a heavy learning burden.

Synonyms

Inkpen and Hirst (2006: 224, 225) note three types of differences between synonyms/near synonyms: denotational differences (i.e. where there is a difference in meaning, for example ‘lie’ is deliberate, ‘misrepresent’ indirect), attitudinal differences (for example ‘thin’ is neutral, ‘skinny’ pejorative), and stylistic differences (for example in formality: ‘cops’ and ‘police’). True synonyms are few and far between, and research, particularly in corpus linguistics, has helped us discover the different distributions of ‘apparent’ synonyms in different genres, the semantic prosodies that these words have (for example ‘bring about’ tends to be used in positive contexts, ‘cause’ when the consequence is negative), and the different collocation patterns in which synonyms occur. Given such a state of affairs, simply encouraging students to use synonyms for key words in their writing, rather than repeating them, is, in effect, an invitation to commit semantic suicide. We would not usually expect our students to be sensitive to the above noted points, and yet such knowledge is required to use synonyms successfully.

The following examples, from the same class of Saudi intermediate level students noted above, are from essays looking at what society can do to reduce road traffic deaths. Before the students embarked on this task, it was stressed that they should try to use synonyms, rather than repeat key words

in their writing. At that stage in the course, they were not warned about the potential dangers in trying to use synonyms as cohesive ties.

Example 3: . . . In the last year, my school made that day to introduce us the **laws** and to respect the **regulations** . . .

Example 4: . . . **accidents** . . . To decrease the rate of **bad events**.

Example 5: When you become an **adult** or have a permission to drive you should behave as **big guy** with good thinking.

Example 6: (In talking about people who die in car accidents)

A huge number of souls . . . Many innocent human . . .

Example 3 is a successful use of synonyms: ‘laws’ (of the road) and (traffic) ‘regulations’ work well as synonyms within this sentence. Turning to the fourth example, while ‘accidents’ are ‘bad events’ we can recognize that the student’s attempt at synonymy is not idiomatic. The fifth example is a good illustration of stylistic insensitivity. While women cannot drive in Saudi Arabia, i.e. adults in the Saudi driving context are all male, ‘big guy’ would be much better substituted with ‘grown up’—‘big guy’ is too informal for this type of writing. With regards to the sixth example, the use of ‘souls’ in this context is untypical in current English language usage. A human is not usually referred to as a soul, except within a religious context (for example ‘Have you ever thought about your soul?’). When it is used in other contexts, its typical collocates (for example ‘brave’, ‘hardy’) give the word a ‘tough’ aura which is not appropriate for a victim, as in the context of the essay. In addition, while we could speak of ‘innocent humans’, the more typical collocations of ‘innocent’ are ‘people’ and ‘victims’.

The above commentary is by no means meant to belittle the student efforts: they are trying, as encouraged by their teacher, to use different vocabulary, rather than simply repeating words or using more ‘run of the mill’ frequent vocabulary items. However, the task is not an easy one. It may be that teachers and teacher materials are partially to blame in at least two areas here: the use of synonym lists for example, may give students the false impression that certain words are (always) interchangeable. In addition, simplistic answers to student vocabulary questions can easily suppress synonym sensitivity appreciation, rather than enhance it.

Superordinates

Other than their use in definitions, superordinates (i.e. words which ‘contain’ other words, for example ‘vehicle’ is a superordinate of ‘car’) receive very little attention in the classroom. While many students have heard of the word ‘synonym’, ‘superordinates’ (also called hypernyms) and ‘subordinates’ (hyponyms) are not words typically heard in the EFL writing classroom.

It is usually the case that the more specific word is used first in a sentence or text, and then superordinates are used later on, as they contain less information. This being so, as Salkie (1995) points out, subordinates and superordinates cannot be simply switched round in a text. For example, in the text below, Example 7, where ‘Brazil’ and ‘country’ have been switched around from the original text, Brazil seems to refer to a different country to that referred to in the opening words.

Example 7: The country, with her two-crop economy, was even more severely hit by the Depression than other Latin American states and Brazil was on the verge of complete collapse.

(Salkie 1995: 16)

One useful teacher resource available from the internet is WordNet 2.1 (available from <http://wordnet.princeton.edu>) which is a lexical database developed at Princeton University. This program provides a wealth of information about words and their typical hyponyms and hypernyms.

To encourage the same class of intermediate students referred to earlier to use superordinates in writing a paragraph about the Titanic disaster, the following figure (Figure 2) was provided. The students were given no further help about how to use the words, just encouraged to use them.

| More general ----- | | ----- More specific | |
|--------------------|---------|---------------------|---------|
| Vessel | Ship | Ocean liner | Titanic |
| Event | Impact | Strike | |
| Travel | Journey | Voyage | |
| | Descend | Sink | |

FIGURE 2
General and specific
vocabulary

Below I provide two examples of the students' writing. The lexical chain usage is noted below the student text, followed by a short commentary. The texts have not been edited.

Example 8: Titanic was one of disastrous stories. It was a nice and most beautiful vessel in its century. It travelled to America but when it was in its voyage, a dire event was waited the ship. Actually, the ocean liner struck by a mountain of ice and then it sunk.

Chains

Titanic–vessel–ship–ocean liner
Travel–voyage
Event–struck

It is interesting to note here how the student uses 'travel' before 'voyage' where 'travel', as a verb, is a complex superordinate of 'voyage' (noun), i.e. the more general word is used before the more specific. The student follows the same pattern (i.e. more general word used before the more specific) in his use of 'event' before 'struck'. As such, these uses, while not wrong, are not so typical, and it may be that this particular student would have benefited from some more input on typical superordinate usage, and the usual pattern in ordering.

Example 9: In 1912, one of man made disaster, which was the great vessel in that time, called titanic. titanic was a voyage from Southampton in England to New York City .the ship had prominent people from American, British and European families .titanic began the travel and it impact with an iceberg. That event was responsible for sinking ocean liner.

Chains

(the great) Vessel–titanic–titanic–the ship–titanic–ocean liner

(a) Voyage–(the) travel

(It) Impact–(that) event

Of particular note here is the omission of ‘the’ before ‘ocean liner’ in the last sentence, which, if interpreted uncharitably, could be seen as referring to a different ship, i.e. Titanic’s impact with an iceberg led to the sinking of an(others) ocean liner. Students must be made aware that the omission of the definite article (or a determiner) before the superordinate can lead to ‘unfortunate’ ambiguity.

Overall, the student attempts to use the hypernyms/hyponyms were quite successful, despite the limited input from the teacher. It would seem that superordinate usage is less of a minefield than synonym usage: the Titanic is always an ocean liner and an ocean liner is always a ship; however, ‘slim’ is not always ‘thin’ or ‘skinny’ (as noted above in the Synonyms section).

General words

The ‘general word’ class of Halliday and Hasan overlaps, to a certain extent, with more recent research on nouns, for example Flowerdew’s (op.cit.) signalling nouns. These nouns (for example ‘achievement’, ‘problem’, ‘situation’) can be used in a number of ways and they are a useful way for students to refer back to a particular event/state of affairs referred to earlier on (i.e. anaphorically) in their writing. I have exposed more advanced level students to the use of such words in corpus data, and analysed their abilities to use these nouns. In one such exercise, the students were asked to use a number of general nouns anaphorically in a third draft of a report, and to highlight their presence by underlining them to enable me to check on their usage. The students’ use of the nouns was, by and large, successful. However, one of the nouns in particular (‘situation’) was quite regularly misused. Two student extracts are provided below.

Example 10: Mass transit is very uncommon in Saudi Arabia; only private automobiles cruise the streets, most of which are air-conditioned. **All of these situations** are dependant on burning of fuel which produces more carbon dioxide lead . . .

In this example, ‘All of these situations’ refers back to the lack of mass transit, the use of private cars, and the use of air conditioning. This phrase is not a particularly common one in standard English: it is interesting that the student felt that he had to use the plural (‘situations’) to refer to the preceding information. An additional concern in this text is that ‘situations’ does not seem to be the best noun to use: ‘uses’ or ‘means of transport’ would seem to be more appropriate.

Example 11: (Referring to reports about the confiscation of certain passenger items by Saudi Arabia airlines staff)

Because of that, many items were taken away by Saudi Airlines and people change their thought and prefer not to go to KSA. **These unhelpful situations happens in** a bad time, especially when SCT wanted to increase the number of foreign tourists.

The collocation ‘situations happens’ is not typical in native speaker corpora—more frequent collocates of ‘situation’ would be ‘arise’ and ‘occur’, and the plural ‘situations’, as already noted, is not very common. As with the previous example, the choice of the word ‘situation’ seems inappropriate—‘developments’ would seem to fit better in the text. Finally, it should be noted that the student has used an inappropriate colligate, i.e. grammatical partner, in the phrase—‘in’ rather than ‘at’. In his study of a learner corpus, Flowerdew (op.cit.) found colligation errors to be by far the most common mistake made by learners, in their use of signalling nouns. This being so, it is probably worthwhile introducing these general nouns to students in some typical phrases, for example the noun ‘situation’ could be provided in the frame ‘this situation has arisen at a . . . time’.

The next step

Having noted the above issues, there follow a number of brief suggestions for teachers to consider when thinking about the teaching of lexical cohesion to their students in their reading and writing classes.

- 1 Raise awareness of the role of lexical reiterative devices in creating textual cohesion. Texts can be analysed for different reiterative devices and comparisons made between published texts and students’ writing. Salkie’s (op.cit.) workbook contains some exercises specifically aimed at encouraging students to identify reiterative cohesion in texts. Though a useful resource, it should be noted that this is not a book aimed at EFL learners, and the texts used contain some rather difficult vocabulary.
- 2 Warn students against adopting a simplistic attitude towards the use of synonyms. Altered texts can be given to students asking them to identify inappropriate uses of near synonyms, and students can also be challenged to choose from a variety of options which word (from a list of ‘synonyms’) is missing from a stretch of discourse. Such exercises will highlight the point that synonymy is a slippery concept.
- 3 Give students practice in using hyponyms and hypernyms of key words in their writing. Students are sometimes asked by teachers to use certain specific words in their writing, and it is not too difficult to develop this kind of exercise to work on this specific skill. Wordnet 2.1, as noted earlier, is a useful resource for teachers to refer to.
- 4 Be aware of the problem of collocation. As noted above, collocation errors are pervasive in student attempts to vary their lexis. As much as possible collocation knowledge must be developed alongside reiteration skill development. Collocation dictionaries or corpus data can be used by teachers to help give students the most typical or strongest collocates of important words.
- 5 Increase student awareness of redundant repetition in their writing. Highlighting overuse may well provide the required stimulus for students to begin thinking about lexical ties in their writing. It is important to encourage effort here, otherwise students may well just revert to ‘default’ repetition in the face of difficulties.

Conclusion

The use of lexical cohesive ties has been found to be a significant differentiating factor between native speaker and non-native speaker writing (Connor op.cit.: 307), and while it is tempting to postpone a focus on good writing style in the classroom to advanced level classes, this is probably not the best course of action to take. While lexical cohesion is a complex area, and fraught with difficulty, it has been suggested in this paper that there are certain exercise types and awareness-raising activities that can make the subject a rewarding one for students and teachers to explore together in class: there are ways to traverse the minefield of lexical cohesion—indeed, some quite interesting ways.

Final version received April 2008

Notes

- 1 The writer is aware of further work by these authors in which they refine this taxonomy, for example Hasan 1984, 1985, and Halliday 1985. However, the basic types of lexical reiteration, while renamed or reclassified, remain.
- 2 As Connor (1984: 302) points out, substitution and ellipsis are not as common in written discourse as in conversation.
- 3 It should be noted here that 'leisure time'—typically referring to a long period of time—is not a particularly appropriate synonym for 'break' (a short period of time) in the text.

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