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Academic text: The importance of the use and comprehension of hedges

Tony Dudley-Evans

- 1 In my paper I wish to take an aspect of the research in ESP in what Ann Johns (this volume) refers to as the 'high culture' of LSP, the academic article and examine how it works and then explore some teaching material that attempts to de-mystify it for students. The topic is hedging, which refers to the process by which the writer or writers distance themselves from the knowledge claim that they wish to make. This is the normal explanation of why writers use hedging which I shall come to later, but let us be clear how we recognise hedging in academic text.

The linguistic features are:

1. The use of modal verbs, e.g., *may, might, can, could, would*
 2. The use of semi-auxiliary verbs such as *seem to* and *appear to*
 3. The use of adverbs such as *probably, possibly*, and adjectives such as *likely, plausible, possible, feasible*, etc.
 4. The use of non-factive verbs to report claims, i.e., verbs such as *suggest, indicate, speculate, imply*.
 5. Giving a statement personal attribution as in *I would like to argue that*
 6. Attribution of claims to an impersonal agency such as *the results, the study, the observations* as in phrases like *The results suggest that...*
 7. When criticising, invoking a general rule or category, as in *The idea that cells would do so to increase their potential for future evolution is not a Darwinian one*. Given the canonical status of Darwin in microbiology, to state that something is 'not Darwinian' is to criticise the idea politely (Myers 1989).
- 2 The above are frequently referred to as 'shields' (Rounds 1982) by means of which writers adopt a defensive position. Rounds also suggests the category of 'approximators'. These are expressions of quantity, frequency, degree that render a statement less precise and therefore more cautious. So our 8th category is: The use of approximators such as *approximately, roughly, quite, somewhat, considerably*, etc.

- 3 Of course these types of hedge frequently come together in compound hedges as, for example, in *The results appear to suggest*.
- 4 How often do writers of academic papers use hedging devices? The evidence is that they are heavily used, especially in certain sections. Salager-Meyer (1994) found that 5.5% of the words in the introduction were hedges, 9% in Method and Materials section, 9.5% in the Results section and as many as 16% in the Discussion section.
- 5 Why do writers use such hedging devices? Is it just convention? It is often stated that scientists learn to write in a cautious fashion as part of the process of socialisation into the academic community. This is undoubtedly true, but it begs the question of where the convention came from and what role hedging plays in the institutions of the academic world. It also fails to explain why in certain circumstances writers do not hedge their claims or criticisms.
- 6 Another explanation is that given by Selinker (1979). He states:
- The well known practice of hedging in scientific writing is due to the fact that every attempt to explain a given phenomenon in a particular manner is open to an alternative explanation —generally introduced by the phrase ‘but may be...’. There is a basic distinction between observed facts and interpretation. Observed facts are said strongly (e.g., *we have found that*)... Interpretations are invariably subject to ‘may be’.
- 7 A number of researchers have also argued that hedges are in fact an appropriate use of vagueness in situations where precision may not be warranted. Skelton (1985: 41) observed that “it is important for students to learn to be confidently uncertain” and that hedges “are a resource, not a problem.”
- 8 Swales (1990: 175) relates the notion to the expectations of the discourse community, describing hedges as devices for “projecting honesty, modesty and proper caution in self-reports and for diplomatically creating space in areas heavily populated by other researchers.” Myers has developed the latter ideas and suggests that the use of hedging is in fact a politeness technique (Brown & Levinson 1987) designed to show the proper respect for fellow researchers. Myers (1989: 5) states:
- Scientific discourse consists of interactions among scientists in which the maintenance of face is crucial. We can see scientists as building alliances that define what knowledge is: the statement of the individual becomes a fact when it is accepted and used by a consensus of the community. In these interactions certain FTAs (Face Threatening Acts) are unavoidable and must be redressed with various politeness devices. Every scientific report makes a claim: in other words, it makes a statement that is to be taken as the article's contribution to knowledge. This is the statement that is implied when one cites the article. Most reports, in stating a claim, deny or supersede the claims of others... The making of a claim threatens the general scientific audience because it is a demand for communally granted credit... The claim also threatens the negative face of other researchers... because it implies a restriction on what they can do now.
- 9 So we have two varying views of the role of hedging, one is that they are a device for showing caution and for making appropriately guarded statements, the other is that they are used for reasons of politeness to show the appropriate deference to fellow researchers and similarly to show the general academic community that one has the necessary humility in making claims. Essentially, I do not see these views as being in contrast with one another, and a synthesis of the two approaches captures the phenomenon of hedging. In both cases hedging is seen as a resource.

- 10 I would now like to move on to show a few exercises that deal with the question of hedging. In the teaching of academic writing I argue that there are essentially three types of exercise:
1. Raising rhetorical awareness
 2. Manipulating relevant grammatical and lexical forms
 3. Extension (Practice).
- 11 A good exercise will usually combine elements of at least two of these.
- 12 The first example is from a textbook in academic writing entitled *Academic Writing for Graduate Students: Essential tasks and skills* (Swales & Feak 1994). This introduces the concept of strength of claim and then moves on to show in detail how strength of claim can be modified. It thus combines Type 1 and 2.

Example 1

TASK ONE

STRENGTH OF CLAIM.
In pairs order the following variations a sentence from 1 (Strongest claim) to 6 (Weakest Claim). Some disagreement is reasonable!

Deregulation of the U.S banking industry...

- ___ a) contributed to ...
- ___ b) caused ...
- ___ c) may have contributed to ...
- ___ d) was probably a major cause of ...
- ___ e) was one of the causes of ...
- ___ f) might have been a small factor in ...

the 1989-91 banking crisis.

Often, of course, several types of qualification are combined in order to construct a defensible Highlighting Statement. Here is an example.

We start with a BIG claim!

The use of seat belts prevents physical injuries in car accidents.

Now see what happens when the following are added:

prevents --> reduces	(weaker verb)
reduces --> may reduce	(adding probability)
+ In some circumstances	(weakening the generalization)
+ certain types of injury	(weakening the generalization)
+ According to simulation studies	(adding distance, i.e. not the real thing)

So we now get:

According to simulation studies, in some circumstances the use of seat belts may reduce certain types of physical injuries in car accidents.

This sentence is a nice example of the writer being "confidently uncertain".

TASK FIVE
Now, see what you can do with any four of the following. Make the sentences academically respectable and defensible.

1. Physical attraction is important for marital happiness.
2. Economic sanctions are ineffective.
3. Alcohol causes people to be violent.
4. Passive smoking causes cancer.
5. Recycling is the best solution to the waste disposal problem.
6. Physical exercise lessens the severity of depression.
7. Great novels do not make great movies.
8. Private schools provide a better education than do public schools.

- 13 The second example presents the modal verbs and alternative expressions with possible and probable in the context of a section about explanations. This is taken from my own writing materials at the University of Birmingham. Here we have exercises Type 2 and 3.

Example 2

2. **Explanation of Error**

Some ways of explaining errors are given in the tables below:

The error	may be due to can be attributed to could be accounted for by	incorrect calibration of instruments. inaccurate measurements. failure to control the variable humidity. the inexperience of the interviewers. insufficient data on health standards. the small size of the sample. the long delay in the replication of the experiment.
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The difference between the two sets of figures

Note that the **fact that** or the **possibility that** is required if the sentence ends with **... cause** e.g.
The error may be due to incorrect calibration of instruments...
The error may be due to the fact that the instruments were incorrectly calibrated.

Now transfer the other six explanations in the same way.
The following patterns may also be used:

A possible/probable	explanation of this error	is.....
An alternative		lies in the fact that.....

Notice that when we explain an error we are rarely completely certain about the cause. So we use expressions like the following:

This error { may be
might be
is probably
is possibly
is likely to be } due to ...

Here are some test-retest results (ie the same test was given again and all variables were the same except those listed below). Offer **guarded** explanations.

Test (85% correct answers)	Re-test (62%)
1. given on Monday morning	1. given on Friday afternoon
2. 75 subjects	2. 15 subjects
3. administered by experimenter	3. administered by experimenter's secretary
4. examples gone through	4. examples thought not to be necessary
5. ?	5. ?

- 14 The third example, also from my writing materials, deals with the question of the relationship between the reporting verb and the strength of claim made.

Example 3

How does the choice of verbs in the following statements change the meaning:

- Smith (suggests/shows) that Englishmen prefer animals to human beings.
- A recent report (claims/proves) that alcohol is bad for your health.
- The article (stresses/examines) the importance of increasing government expenditure on education.
- The investigation (revealed/reported) great gaps in the medical provision for old people in Britain.
- Jones (reported/found) that a high level of cholesterol leads to an increase in the risk of heart disease.

- 15 The final example is also from the Michigan materials. The student is presented with the table showing the differences between American and international students in the time taken to complete a PhD in the various departments at the University of Michigan. They then read a text analysis bearing on the data which they imagine that they have written and four comments on the student's text made by an imaginary supervisor. They have to decide whether each comment is valid. This goes to the heart of the question of what a research student writing up research has to do and also what the appropriate relationship is between the student and supervisor. Does the student have to accept everything that s/he says?
- 16 This exercise combines elements of 2 and 3.

Example 4

Figure 1
Years to Doctorate for Doctoral Programs at
University of Michigan, Ann Arbor
for Students Entering in 1981-1983

Division	U.S. Citizens/Permanent Residents			International		
	N	% Ph.D.	Median Years to Ph.D.	N	% Ph.D.	Median Years to Ph.D.
Biological and Health Sciences	335	54	5.7	88	61	5.3
Physical Sciences and Engineering	469	44	5.3	430	55	5.0
Science	409	35	6.0	80	59	5.3
Business and Arts	373	33	5.3	91	53	5.0
Education	141	30	5.7	12	50	4.0
Individual Departmental	16	38	6.5	4	50	3.7
Overall	1743	41	5.3	705	56	5.0

1) Figure 1 shows the number of years to complete a Doctoral Program for both U.S. and international students at a major research university. 2) As can be seen, international students on average complete Doctoral Programs in less time than U.S. students in all Divisions. 3) The difference in years to completion ranges from a relatively low 0.3 years in Physical Sciences/Engineering and Humanities/Arts to a high of 2.8 years in Individual Departmental Programs. 4) The consistent difference in time to degree is not fully understood at present. 5) However, one key factor may be motivation. 6) Many international students have considerable external pressures, including sponsorship/scholarship restrictions, family obligations, and employer demands, which could influence the length of time it takes to earn a Doctorate.

Here are the instructor's comments on the above commentary. The instructor is a professor of Comparative Higher Education. Discuss in pairs whether you think the comments are Reasonable (R) or Unreasonable (U). If you find some reasonable, how would you edit the passage?

- a) In sentences 2, 3 and 4 you throw away the key finding that more rapid progress to degree and higher completion rates is consistently in favor of international students across all six divisions. You need to highlight this more.
- b) You need to stress that on present knowledge we can only speculate about the explanations. As it stands I find 55 hard to interpret. Is it just your idea, or do you have any evidence for this claim?
- c) It is strange that you don't mention the English language factor. At least, at first sight, this would seem to suggest that international students ought to be taking longer.
- d) Don't you think you ought to finish by suggesting ways of getting at the real causes of this striking phenomenon? Case studies! Interviews with faculty and students?

Conclusion

- 17 Hedging is a very interesting aspect of academic writing that lends itself to both linguistic and sociological investigation. The various definitions of hedging that have been presented in this short paper relate to the role of hedging for both individuals in choosing the appropriate stance for the knowledge claim that they wish to make and for discourse communities which expect certain behaviour on the part of writers. The definitions have also made use of the linguistic realisations of hedging. Both the linguistic and sociological aspects are concepts that are relatively easy to grasp and thus lend themselves to pedagogic treatment through the various exercise types that have been presented in the second half of this paper.

BIBLIOGRAPHY

Brown, P. and S. Levinson. 1987. "Universals in language usage: Politeness phenomena". In Goody, E. (ed.), *Questions and Politeness: Strategies in social interaction*. Cambridge: Cambridge University Press.

Lakoff, G. 1972. "Hedges: A study in meaning criteria and logic of fuzzy concepts". *Journal of Philosophical Logic* 2, 458-508.

Myers, G. 1989. "The pragmatics of politeness in scientific articles". *Applied Linguistics* 10, 1-35.

- Prince, E.F., R.J. Frader and C.Bosk. 1982. "On hedging in physician-physician discourse". In Di Prieto, J. (ed.), *Linguistics and the Professions*. Norwood, NJ: Ablex Publishing Corporation, 83 - 97.
- Rounds, P. 1982. "Hedging in written academic discourse: Precision and flexibility". Mimeo: The University of Michigan.
- Salager-Meyer, F. 1994. "Hedges and textual communicative function in medical English written discourse". *English For Specific Purposes* 13/2.
- Selinker, L. 1979. "On the use of informants in discourse analysis and language for specialized purposes". *Iral* 17, 189 - 215.
- Skelton, J. 1988. "The care and maintenance of hedges". *ELT Journal* 42: 37-44.
- Swales, J.M. 1990. *Genre Analysis*. Cambridge: Cambridge University Press.
- Swales, J.M. and C.B. Feak. 2004. *Academic Writing For Graduate Students: Essential tasks and skills*. Ann Arbor, MI: The University of Michigan Press.

ABSTRACTS

Writers of scientific articles often resort to hedging: the process by which they distance themselves from the knowledge claim that they wish to make. The reason for this may be the caution that is natural in academic writing. But there are a number of sociologically interesting alternative explanations. A number of exercises used to teach ESP students how to recognise and use the linguistic, psychological and sociological aspects of hedging are demonstrated.

Les auteurs d'articles scientifiques recourent fréquemment à la « précaution oratoire » (*hedging*), grâce à laquelle ils se distancient des affirmations qu'ils avancent. La raison d'être de cette pratique est la prudence inhérente à tout écrit scientifique. Il existe d'autres explications sociologiquement intéressantes. Plusieurs types d'exercices sont passés en revue, qui permettent à des étudiants d'anglais de spécialité de maîtriser les différents aspects linguistiques, psychologiques et sociologiques de la précaution oratoire.

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Mots-clés: article de revue scientifique, discours universitaire, précaution oratoire

Keywords: academic discourse, hedging, scientific journal article

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