After noting that the revisions made by corporate writers contained significant modifications in the original propositions, to the extent that they may have changed the meaning of the proposition, a study was undertaken to see if the same phenomenon occurred among students and teachers. Subjects were Hong Kong secondary school students and a graduate student. Comparison of the students' original writing and revisions showed evidence of both modification and elaboration of propositions in the process of rewriting. A number of excerpts from the writings are presented and analyzed. It is proposed that establishing and maintaining coherence in a text be taught to students, and that the issue of propositional modification be used for this purpose. Contains 17 references.

(MSE)
HOW STUDENTS REVISE PROPOSITIONS:
AN EXPLORATORY STUDY OF PROPOSITIONAL MODIFICATION

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This paper describes an exploratory study of a linguistic phenomenon which will be referred to, in the course of the paper, as propositional modification. The phenomenon was discovered initially during an analysis of the revised texts of corporate writers (Falvey 1993). Having noted this phenomenon, the writers of this article decided to investigate the revised texts of other types of writers such as teachers and students. This article discusses the results of an initial exploration of the texts of Hong Kong secondary school students to ascertain whether the same phenomenon occurred in their texts.

The paper is divided into six parts:

- The first part describes the theoretical underpinning to studies of propositional meaning.
- The second part discusses studies of propositional meaning in previous work and shows how they differ from the phenomenon discussed in this paper.
- The third part briefly charts the process of the discovery.
- The fourth part presents data arising from the analysis of secondary student texts.
- The fifth part discusses pedagogical and research implications arising from the study.
- The final section concludes the article.

Propositional meaning

The word proposition is often used synonymously with the word statement. Propositions occur as declarative sentences. They do not occur in questions, exclamation, or commands. Bell describes a proposition as:

the unit of meaning which constitutes the subject-matter of a sentence (and, once realized in actual use, that of the utterance as well) (Bell 1991:107)

An earlier definition from Hurford and Heasly is:

that part of the meaning of the utterance of a declarative sentence which describes some state of affairs (Hurford and Heasley 1990:19).
In creating a proposition a writer/utterer makes an assertion. Each assertion has a truth value. This means that the assertion can be proven or disproven as a matter of fact. However, if the assertion is considered to be not a declaration of a fact but an opinion, that opinion can be challenged or confirmed. For example, the assertion 'It is cold today' is a proposition which can be proven or disproven if the temperature outside is 32 degrees centigrade. Also an assertion such as 'This ice cream is not as creamy as yours' can be agreed with, in which case the utterer's opinion of the truth value of the assertion is confirmed, or it can be disagreed with, in which case the truth value of the assertion is challenged. The challenges to or confirmations of the original proposition can be either those of opinion (what the respondent asserts as a belief based on experience or intuition), or of fact (knowledge of the cream content of each type of ice cream as stated on the contents package).

The standard way of representing a proposition in Logic, from which the notion is derived, is

\[ P \]

However, in research literature, rarely is this representation of a proposition seen as a lone representation. It is more often seen as follows:

\[ P = Q \]

This means that one proposition \( P \) equals another proposition \( Q \). As an example let us take the following propositions:

1. James likes Mary
2. Mary is liked by James

In this case proposition 1 and proposition 2 can be said to have the same truth value. Thus \( P = Q \). The truth value of the two propositions remains the same even though the syntax of each is different. Copi and Cohen (1990:5) state, in reference to propositions such as the two above:

We use the term "proposition" to refer to what such sentences as these are typically uttered to assert.

In similar ways, propositions can have the same truth value even if the language in which they are uttered changes, for example:

3. It is raining (English)
4. Il pleut (French)
5. Está lloviendo (Spanish)

In each case the truth value of the utterance 'it is raining', though expressed in three different languages, remains the same.

Propositions are central to meaning in discourse. However, they cannot be interpreted as clauses or sentences (Bell 1991:106-127). Linguists often see a proposition as the smallest conceptual unit of communication, as 'the cognitive counterpart of a clause' (Callow and Callow 1992:6). It is through the relationships which are built up between propositions that the coherence in a text or message is established. Frederickson, (cited in Cooper and Greenbaum 1986:227-267) in describing how readers and writers construct 'representations' (p. 227) of the meaning and language structures in text, distinguishes between textual structures by which meanings are encoded and communicated and conceptual structures by which knowledge from texts is represented in memory and subsequently realised as utterances. Conceptual structures, he believes, are represented as propositions and frames while clauses and sentences encode meaning at textual level.

Propositional modification in writing research

Some research in composition writing has focused on the nature of propositional development in which a proposition (or an idea-unit) (Sato 1990) is expanded, elaborated or justified by the addition of extra text to the original proposition. Text linguists too have concerned themselves with the ways in which propositions are developed and elaborated (Mann and Thompson 1986, 1987). Researchers, such as Philipson (1991), have shown that assertions followed by specification (i.e. a proposition followed by relational propositions) improve the coherence of a text.

However, in recent work (see for example, Falvey 1993), it has become evident, in a study of the revision strategies of corporate writers, that propositional modification is an important phenomenon in revision which deserves special attention. By propositional modification we mean:

the change(s) made to a proposition expressed in an original text such that the modified proposition:

(a) no longer contains the same truth value as the original proposition

(b) must be considered as a new proposition.

Falvey's study examines consecutive texts written for the same intended audience by two different writers or by the same writer who, at a later date, revised the original text. In comparing these texts, he notes changes in the communicative
intent of the revisers which were made explicit by the modification of propositions in the original text.

In the following example (Falvey 1993:453-454), we can see how the original main proposition of Example 1a (in bold) is modified by the reviser (the original writer's Line Manager) in Example 1b. The original writer, working once more on the text in Example 1c, demonstrates that as far as she is concerned, the modification does not contain the truth value that she considers appropriate to this part of the text and modifies it once again to match the original proposition. In doing so, the original writer also adds an elaboration to the proposition in order to justify the assertion which it contains viz.

Example 1a    Being an independent organisation separate from the government, every aspect of our work....

Example 1b    Being an organization independent from most aspects of Government, much of our work ....

Example 1c    Being an organization independent from most aspects of Government, and as suggested by Sir Alistair Blair-Kerr, every aspect of our work ....

The original writer (Examples 1a and 1c) has made it clear, that for her, the truth value of the proposition asserted in Examples 1a and 1c is that, as a consequence of being largely independent of government, every aspect of its work is affected. This assertion stresses the wholeness of the work, not the partial definition which the reviser was attempting to assert in Example 1b. The propositional weakening suggested by the reviser is rejected.

In many cases cited in Falvey, the analysis revealed that the reviser (whether it be the original writer or a new reviser) had decided that the original proposition was either too strong or too weak and that it needed to be either strengthened or weakened in order to match the communicative intent of the reviser. When this occurred, modifications were made to the original proposition which changed it so that meaning in the modified proposition was then construed differently.

A modified proposition can differ from an original proposition minimally in surface morpho-syntactic terms. A change of modal, the addition or deletion of one word can suffice to modify the original proposition. (Further examples from authentic texts are given in the section on student writing.)

The process of discovery

Having noted the phenomenon of propositional modification in corporate text revision, it was felt that an exploratory investigation of whether this phenomenon
occurs in revisions performed by students at secondary schools was worthwhile. Such an investigation would reveal whether this phenomenon was associated only with the revisions of mature, proficient, second language writers who were the subjects of Falvey’s study or whether it would be apparent in the revised texts of secondary school students.

An examination of the revised texts of secondary school students, who were learning revision strategies as part of an intervention study (Sengupta, ongoing) provided evidence of this phenomenon of propositional modification being used by students, sometimes in response to teacher or peer questions, and at other times as a strategy for making logical connections.

In typical student composition, a proposition is often asserted and then either left as it is alone without any back-up, or it is backed up with justification or exemplified with elaboration. In the section that follows it will be seen that in the revisions of students, they, just like the more mature and proficient, adult, corporate writer/revisers in Falvey’s study, are also capable of making strategic revisions which change the truth value of their original proposition through a process of propositional modification in an attempt to match the text more adequately or appropriately to their communicative intent.

Data from student writing

This section presents data from two sources, the texts of Hong Kong secondary school students in S4-5 (Grades 10-11) and the text revisions of a graduate student. In both sources there is evidence of both propositional modification and elaboration in their revisions. The data from Hong Kong secondary school students provides the major source for description in this section. The data from the graduate student is used to demonstrate that the phenomenon occurs across ages.

Secondary school writing

The students in this secondary four classroom were revising their first draft of an article for the school magazine, which was entitled: "Are schools responsible for student suicides?"

Text 1. (addition: in bold in the revised version)

Original: It is undeniable that schools are responsible for student suicides

Revised: It is undeniable that schools are largely responsible for student suicides.

NB: The syntactic errors have been deleted.
In text 1 the reviser has added one word, an adverbial, to the original proposition. With this addition the original proposition has changed since in the original proposition the writer was situating the blame for student suicides on the schools alone, while in the revised proposition the writer is only partly blaming the school. Therefore, the truth value of the proposition \( P \) of the original text 1 is not equal to the truth value of the proposition \( Q \) in the revised text 1. Hence the writer has modified the original proposition.

When comparing Text 1 with Text 2 below, it is interesting to note that in Text 2 the truth value of the original proposition is the same as in the revised version i.e., 'schools should be blamed.' We can thus say that in the original and revised versions of Text 2 that \( P=Q \). No propositional modification has taken place. The addition of a clause (in bold type) is an elaboration of the original proposition with an explicit relational clause. Here the writer has not changed his intended meaning but has made the proposition more explicit, more accessible to the reader.

Text 2.

Original: I personally believe that schools should be blamed for student suicides.

Revised: I personally believe that schools should be blamed for student suicides because as a student I feel pressure all the time.

If we look at the next example in Text 3 below, we can see that the writer has revised the original proposition by substituting 'cannot' with 'may not', thereby changing the meaning of the original proposition. Here, the proposition has been modified with the introduction of a more tentative tone by replacing the negative of the modal 'can' which denotes a high degree of certainty with the negative of the modal 'may' which denotes a lesser degree of certainty. Therefore, the writer has toned down or weakened the original proposition in the revised text. This is an example of propositional modification.

Text 3.

Original: Schools in foreign countries take you to an educational level that cannot be reached in Hongkong.

Revised: Schools in foreign countries take you to an educational level that may not be reached in Hongkong.
The next example is from a letter applying for a scholarship. Here again the writer has substituted 'very' with 'quite' and thus, by changing the degree of intensification, has modified the proposition.

Text 4. (substitution: crossed out in the original text and given in bold in the revised text)

Original: Moreover, I am very good at art and interested in it.
Revised: Moreover, I am quite good at art and am interested in it.

The next example, in Text 5 below, reveals a more complex propositional modification. The task was to write a letter to the editor expressing views about a new policy proposal. Here the writer begins by expressing agreement with the policy and then moves on to the problems she perceives with the policy together with possible solutions. One problem, according to the writer, is the price of the ticket. She has said so in the original. However, in the revised version the writer has modified the statement by using a modifier 'rather' and a prepositional phrase 'for students and poor families.' Here the writer has again modified the original proposition and the truth value of the revised proposition has changed. The truth value of the original version is that tickets are expensive for all categories of people. It is a generic statement with an absolute truth value. This means that it is applicable in all cases. The revised version, however, modifies the original proposition by weakening it. Now, instead of the proposition being applicable to everyone, it has been modified to apply only to the poor and to students. The truth values of the two propositions are not the same.

Text 5. (addition: in bold in the revised version)

Original: I think this is a very good method to keep the beaches clean. But...And also the ticket is expensive. We can reduce the amount to HK$30 not HK$50.
Revised: I think this is a good method to keep the beaches clean. But...And also the ticket is rather expensive for students and poor families. We can reduce the amount to HK$30 not HK$50.

Writing on the same topic, we can see the writer of Text 6 has strengthened the original proposition by adding an adverbial to the sentence, the effect of which is to change the truth value of the original proposition.
Text 6.  (addition: in bold in the revised version)

Original:  I disagree with this proposal for the following reasons.

Revised:  I strongly disagree with the proposal for the following reasons.

Examples from a graduate student

The following example is from a graduate student's thesis. The revisions were performed by the writer in response to her supervisor's comment.

In Text 7, the writer was advised by the supervisor to tone down the argumentation in order to match the genre of higher degrees academic theses where generalisations are presented in a non-assertive, cautious manner. This resulted in the writer revising her original propositions by weakening them considerably.

Text 7.

Original:  As teachers of writing our aim is to help the writer find this power and the teaching of revision which will generate an awareness of audience, purpose and communicative intent is certainly one way of inculcating this voice.

Revised:  As teachers of writing our aim is to help the writer find this power and the teaching of revision as an attempt to generate an awareness of audience, purpose and communicative intent may be one way of...

In the original text the truth values of the propositions are contained in two assertions. The first is that the teaching of revision will generate an awareness of audience, purpose and communicative intent. The second is that this teaching will certainly inculcate voice. In the revised version, the truth value of both of these propositions is modified. The first weakening occurs when 'will' is substituted by 'as an attempt to'. The revision is much more tentative and less assertive than the original. The truth value has been weakened; the P has been modified by a hedge. In the second revision, further hedging takes place when the strong assertion of 'will certainly' is much weakened by the substitution of the modal 'may be'. The Proposition P of the original is no longer same as the proposition Q of the revision. The strong assertion is not an assertion but a suggestion of a possible outcome. The function of the communicative intent has been changed. The truth values have changed.
Pedagogical and research implications

Propositional modification can be taught as a strategy for establishing and maintaining coherence in a text. As can be seen in Text 1, the student has modified her main proposition in the composition in order to match it to the existing content of the essay because in the body of the original composition a number of possible reasons for suicide were cited while in the main proposition only the schools were blamed (one cause only). The student has thus modified the original proposition in order to establish textual unity. She did not want to delete all the other causes of student suicide because they were valid reasons. She had to change the proposition, therefore, in order to make the text consistent throughout.

Problems of both understanding and teaching concepts of coherence are experienced by teachers and textbook writers. Some writers have tried to address the problem. Lauer et al. (1991:44-46) suggest that coherence is established by using the appropriate connectives, by maintaining the same reader role and by grammatical consistency. Lauer et al.'s suggestions, we feel, can be supplemented, along with other strategies, by teaching students how an original proposition can be modified in order to maintain consistency in a text.

Students are often taught ways of conveying moods, attitudes and feelings (White and Arndt 1991:157) by finding words which have the requisite association and implications, by using modal verbs indicating a sense of doubt, uncertainty, and levels of commitment by the use of expressions such as, unfortunately, and luckily, which signal writer attitudes. These writers are, in effect, suggesting that student writers modify their propositions. However, doing so in the creation of single texts is difficult. It is suggested that the opportunity to revise texts makes the application of these suggestions easier to implement.

This phenomenon of propositional modification also has implications for research into writing and revision. It is currently being used as a tool for revision analysis in research which investigates coherence in student writing (Sengupta, ongoing).

A final application of this phenomenon could be to increase the awareness of teachers of how discourse works, how coherence is created and how students can be helped to develop the cognitive and writing skills necessary for the development of meaning in writing.

Conclusion

The writers intend to continue exploring the nature and use of this phenomenon in student and adult writing in order to determine how widely this cognitive strategy is used and whether the findings of further research can be applied in the pedagogy of writing and in the area of text analysis.
Note.

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