

# Grammatical Implicatures in Singaporean English

Debra Ziegeler  
Monash University,  
Victoria, Australia.

## 1. Introduction

A recent study, Langacker (1988: 15) uses the term 'compositional value' to refer to the constituents of a 'usage event' which, as a combined semantic unit, cannot derive algorithmically the individual meanings of its constituents (ibid: 18). Although the term was originally devised to describe the component meaning of entire expressions, *it would be useful to extend its usage to refer to the inherent senses contained within a single grammatical feature.* Many of these inherent meanings are reflective of diachronic grammaticalisation processes which have taken place as part of the historical semantic development of the feature. For the most part, such meanings have been 'bleached' out of the composite meaning as grammaticalisation progresses (Bybee 1996) and as the meaning of the feature becomes more abstract and less reflective of its lexical origins. However, in some cases, older, lexically-based meanings will continue to influence the distributional range of the grammaticalising item, restricting its use in certain contexts: this phenomenon has been described as 'retention' (Bybee & Pagliuca 1987).

The underlying hypothesis for the present study is that in certain cases, retained senses reflective of earlier stages in the historical development of a grammaticalising feature may be influencing the native speaker's intuitions regarding the well-formedness of an utterance, and so inhibiting the production of overgeneralisations so common in the dialects of L2 speakers. The study reviews recent studies relevant to the variation in the marking for hypothetical and modal expressions in an L2 variety, Singaporean English, and, using the hypothesis outlined above, offers an explanation for some of the variability in terms of the grammaticalised implicatures which derived hypothetical meanings from past stative verbs in more established varieties of English. By means of a brief questionnaire, it is further hoped to demonstrate that the acquisition by Singaporean speakers of English of grammaticalised implicatures expressing hypotheticality may be seen to correlate with length and possibly frequency of exposure to such phenomena over a prolonged time period.

## 2. English in Singapore

English has long been used in Singapore as a lingua franca between groups of different ethnic and first language backgrounds, and as such it has acquired the status of a nativised and locally-institutionalised variety with a further important role as the language of law, administration, traditional areas of government, and as the main medium of education at all levels (Newbrook (ed.) 1987: 10-11). Formal features reflective of its origins as a second language (L2) variety do distinguish Singaporean English as an independent dialect, and such features have been found to vary in frequency according to educational level. The features under investigation in the present study will be confined to the more educated varieties.

### 2.1 Tense marking in Singaporean English

Perhaps one of the most frequently-cited areas of variation in the descriptions of less-educated varieties of Singaporean English is found in past tense marking; this has been the basis of an exhaustive study by Ho & Platt (1993). In the study, they

examine the frequency of past-tense marking, correlated with such factors as educational level of the subjects, phonological interference, and lexical aspect of the verb forms used (whether or not the verb is punctual, non-punctual, i.e. used duratively or iteratively, or stative). The most significant finding of this study was that punctual verbs are marked for past more frequently than stative, and stative verbs more frequently than non-stative, non-punctual verbs. Frequency of past tense marking was also found to increase with educational level (the sample consisted of speakers ranging from those with only primary education through to tertiary graduates). The findings were related to the studies of Bickerton (1981), who finds similar patterns for past tense marking in his data from Guyanese Creole and Hawaiian Creole English, but Ho & Platt do not discount the possible influence of substratum features from languages such as Chinese, which also appears to distinguish morphologically punctual and non-punctual verbal aspect (1993: 150-1).

Previous studies on the acquisition of Spanish as an L2 by English speakers (Andersen 1991) and the acquisition of English as an L2 by multilingual groups of learners (Bardovi-Harlig & Reynolds 1995) also indicate that lexical aspect of the verb plays a significant role in determining which verb classes will be the first to be marked for past tense for the learners acquiring the languages, and that verbs with inherent punctual or telic aspect are the first to acquire marking for past tense in the learners' interlanguages. Andersen attributes these findings to the operation of a principle of Relevance (following Bybee 1985), by which grammatical inflections denoting past meaning are more readily attracted to verbs with lexical meanings relevant to past time, such as punctual and telic verb types.

Furthermore, typological evidence from Bybee, Pagliuca & Perkins (1994: 92) shows that in some languages perfectives do not apply at all to stative verbs. In their data, pasts are regarded diachronically as further developments from perfectives, and perfectivity, which refers to temporal boundedness (ibid: 54), is entailed in the meaning of punctual and telic verb types. Bybee et al further predict that although pasts initially develop from non-stative perfectives, they gradually increase their range of environments to include statives as well. If the diachronic processes proposed by Bybee et al can be verified, then it may be that the L2 learner's acquisition of past forms in a single language synchronically reflects the historical patterns of the grammaticalisation of past tense cross-linguistically, with the earliest-acquired uses of past tense occurring with non-stative verbs. Similar instances of parallels between diachronic and ontogenic processes have been predicted in previous studies; for example, the acquisition by children of the English present perfect (Slobin 1994) and of Chinese classifiers (Erbaugh 1986). It would be reasonable, therefore, to draw the same conclusions with regard to the grammaticalisation of past tense in Singaporean English.

## 2.2 *The Expression of Hypotheticality in Singaporean English*

A previous study using 60 tertiary-educated Chinese L1 speakers in Singapore and eliciting written Singaporean English data (Ziegeler 1994<sup>1</sup>) found that there was a vast range of variation possible in Singaporean English for the expression of past counterfactual conditionals, 77% of which diverged from ways of marking counterfactual conditionals in standard English.

The use of modal forms in the hypothetical complement clauses of verbs of 'wishing' also appeared to be in a state of flux in the Singaporean English data, as the following examples demonstrate:-

<sup>1</sup> This study will be referred to throughout as "Study A".

- (i) I wish there is peace in the world.
- (ii) I wish that there will be peace in the world.
- (iii) I wish that there would be peace in the world.

These examples were produced by three different subjects in the study. The explanation for the unbackshifted verb form in (i) can be explained with reference to the punctual/nonpunctual distinction as discussed in [2.1]: that statives and non-punctuals are less frequently marked for past. The alternation between *will* and *would* in the study was thought to be an overgeneralisation, the use of a modal auxiliary in such environments being considered redundant since the appropriate meaning could be derived from the use of a subjunctive non-modal form: *I wish there were (was) peace in the world*. Naturally, though, there are dialectal differences relating to the use of modals in such environments; for this reason a number of similar examples were put to the test of the intuitions of a group of native speakers of Australian English (see Ziegeler *forthc.*<sup>2</sup>), along with examples similar to others which appeared overgeneralised in Study A such as:

- (iv) *I wish that I would earn lots of money ...*

The results of the survey showed that, although many such uses of *would* in hypothetical environments were grammaticalising rapidly amongst speakers of some dialects, the common cause for the constraints on the grammaticalisation patterns was attributed to the 'retention' of older, historical meanings associated with the lexical origins of the modal i.e. meanings of volitional intent. When such constraints are less salient, or even absent from the compositional value perceived in the meaning of a grammaticalising item, the form may be overgeneralised by some non-native speakers to new environments; this is especially notable in the dialects of L2 speakers.

### 3. Past Modals and Irrealis Implicatures

Previous grammaticalisation studies have mainly focussed on the process of the strengthening and conventionalisation of conversational implicatures as a motivation for many of the meaning changes which take place during the development of a grammaticalising item (e.g. Traugott (1989) and Bybee, Pagliuca & Perkins (1994)). The conventionalising of conversational implicatures also appears to have motivated the development of hypothetical meanings from past tense modal forms in English (Bybee 1995): hypothetical past modal forms (e.g. *would*) have been found to have developed directly from their deontic origins as past forms of stative verbs, and did not evolve from the past forms of grammaticalised future modals. Under Bybee's analysis, the development of irrealis meanings from past modals is the result of the use of past tense with the original modal forms which were in most cases stative lexical verbs. Because of their stativity, there is no aspectual boundedness in their inherent lexical meaning, and the use of a past tense form leaves open the possibility that either the state has terminated or that it is not known whether it continues beyond past into the present (Bybee 1995: 506). The irrealis meanings produced are actually grammatical conversational implicatures, and this can be ascertained from the fact that such meanings can be cancelled (cf. Grice 1981); e.g.

- (v) She was a teacher, and in fact she still is (may be) one,

<sup>2</sup> This study will be referred to henceforth as "Study B".

with the use of a stative verb in the past, conveys no definable sense of temporal boundedness inherent in such examples as the following:

- (vi) He kicked a goal, \*and in fact he is still kicking it.

The implicature which developed out of the combination of past tense with stative verbs is most likely due to the constraining effects of the retention of former meanings: it was discussed above [2.1] that pasts were believed to have first grammaticalised out of perfectives, and then at later stages past tenses gradually generalised to cover imperfective, including stative environments (Bybee et al 1994: 92). The association of irrealis implicatures with past stative verbs is highly likely to be a by-product of the process of the generalisation of pasts to stative environments, with statives still retaining in some uses the former senses of perfectivity associated with the earlier functions of past meaning. Since states cannot be associated with an inherent lexical meaning of boundedness, the sense of perfectivity retained in the grammatical meaning of a past stative must be pragmatic rather than semantic, thus producing a implicature.

It is further claimed that pragmatic meanings are at the basis of most interpretations of a counterfactual conditional, and that the counterfactuality is attributable to the presence of a conversational implicature (Comrie 1986). Moreover, there are many languages in which degrees of hypotheticality, including counterfactuality, are not marked in conditional constructions: Comrie names Indonesian (which is virtually indistinguishable from Malay) and Chinese as examples (ibid: 91). It is worth noting that neither of these two languages has a grammaticalised past tense category, and both Malay and Chinese are major substratum languages in Singapore. This is not to suggest that an absence of tense marking can be correlated generally with an absence of grammaticalised ways of marking hypotheticality; however, more research in this area could prove interesting.

#### 4. The Study

##### 4.1 Methodology

The study to be reported here is part of a longer and more comprehensive survey conducted in Singapore and using primarily L2 speakers of English. The data were collected mostly in the classroom from four groups representing a total of 148 educated Singaporean speakers. They had all completed at least 10 years of English-medium education and were currently engaged in full-time education when the survey was taken.<sup>3</sup> The four groups are listed as follows:-

1) (Sec.4 Express) Secondary 4 Express students from Bukit Merah Secondary School, Singapore. This group was considered by the teaching staff to be of a higher standard than the Cambridge O-Level class in the same school. The total number of the students was 47 (comprising 2 classes) and the average age was 16. They were in their tenth year of English-medium education.

2) (Sec. 4) Secondary 4 and O-Level students from Bukit Merah Secondary School. The total number was 28. The average age for these students was 16.5 (some were as

<sup>3</sup> The secondary 4 groups included 11 subjects whose primary education was in Indonesia. This factor was monitored closely, and the results of these subjects were checked carefully for any likelihood of skewing due to the subjects' having less exposure to English and English-medium education. Since there were not found to be any significant differences between their results and those of the remainder of the secondary 4 group, they were not eliminated from the study.

old as 18). Most of these students were in their fifth year of secondary education, and in their eleventh year of English-medium education.

3) (NUS 1.) These were tertiary students from the National University of Singapore, and the total number was 39. They were mostly first-year undergraduates, although there were some from higher levels. All had a minimum of Cambridge A-Level education. The average age was 21.6.

4) (NUS 2) 34 second-year undergraduates from the National University of Singapore. The average age was 21.5.

There was also a Control Group, the total number of subjects being 38, although only 37 completed the entire questionnaire from which the questions below were extracted, one failing to complete Question 4, probably due to time constraints. The subjects were first and second year undergraduates from Monash University, and the average age was 22.6.

The informants were asked to state their age and educational level; they were also asked to provide information regarding their mother tongue. This was difficult to obtain from the Secondary students, since 'mother tongue' is actually a syllabus subject in Singaporean schools, where it refers to one of the four official languages (apart from English) - depending on one's ethnicity; this need not be one's true mother tongue. When the intended meaning of the term was pointed out to the students, most of them were willing to volunteer the correct information, though this cannot be guaranteed since unofficial languages are frequently stigmatised in Singapore.

#### 4.2 The Questionnaire

As noted above, the following four questions were extracted from a longer questionnaire containing 12 questions. The additional questions were intended to disguise the objectives of the present separate study, so assisting in eliciting more spontaneous responses from the subjects than would be possible otherwise. The subjects were given no time limit, and most were able to complete the entire questionnaire in approximately five minutes. Any questions raised were answered after it was completed.

The aims of the questions were to test for the presence of implicatures of counterfactuality in the past tense forms of the stative verbs used, or as in Question 4, the past progressive aspect. The questions contained no past modal forms. The four questions to be analysed were presented as follows:-

What is most strongly suggested in the following italicised sentences? Please choose an answer from a), b), or c) below each one.

1) *That lemon tree was in the ground for about 2 months.*

- a) The tree has lemons on it.
- b) The tree is still in the ground.
- c) The tree is no longer in the ground.

2) *He loved her all his life.*

- a) He is no longer alive, but she is.
- b) They are both alive.

c) She is no longer alive, but he is.

3) *They used to live in Changi.*

a) They don't live there now.

b) They live in Changi now.

c) They're living in Changi now, but only for a short while.

4) *This machine was running for a long time.*

a) The machine is now under repair.

b) The machine is continuing to run now.

c) The machine is not running at present.

### 4.3 Results

Table 1. Results for each group, showing scores for each individual question.

| <u>Answer:</u> |                | (a)           | (b)           | (c)           |
|----------------|----------------|---------------|---------------|---------------|
| Question 1.    | Sec.4 Express  | 4/47 = 8.5%   | 21/47 = 44.6% | 22/47 = 46.8% |
|                | Sec. 4         | 1/28 = 3.5%   | 8/28 = 28.5%  | 19/28 = 67.8% |
|                | NUS 1.         | 3/39 = 7.6%   | 12/39 = 30.7% | 24/39 = 61.5% |
|                | NUS 2.         | 0             | 10/34 = 29.4% | 24/34 = 70.5% |
|                | Control        | 2/38 = 5.2%   | 1/38 = 2.6%   | 35/38 = 92.1% |
| Question 2.    | Sec. 4 Express | 21/47 = 47%   | 13/47 = 27.6% | 13/47 = 27.6% |
|                | Sec. 4         | 12/28 = 42.8% | 12/28 = 42.8% | 4/28 = 14.2%  |
|                | NUS 1.         | 25/39 = 64.1% | 9/39 = 23%    | 5/39 = 12.8%  |
|                | NUS 2.         | 21/34 = 61.7% | 6/34 = 17.6%  | 7/34 = 20.5%  |
|                | Control        | 32/38 = 84.2% | 2/38 = 5.2%   | 4/38 = 10.5%  |
| Question 3.    | Sec 4 Express  | 46/47 = 97.8% | 1/47 = 2.1%   | 0             |
|                | Sec 4.         | 26/28 = 92.8% | 1/28 = 3.5%   | 1/28 = 3.5%   |
|                | NUS 1          | 38/39 = 97.4% | 1/39 = 2.5%   | 0             |
|                | NUS 2          | 34/34 = 100%  | 0             | 0             |
|                | Control        | 38/38 = 100%  | 0             | 0             |
| Question 4.    | Sec 4 Express  | 4/47 = 8.5%   | 20/47 = 42.5% | 23/47 = 48.9% |
|                | Sec 4          | 1/28 = 3.5%   | 13/28 = 46.4% | 14/28 = 50%   |
|                | NUS 1          | 6/39 = 15.3%  | 9/39 = 23%    | 24/39 = 61.5% |
|                | NUS 2          | 2/34 = 5.8%   | 8/34 = 23.5%  | 24/34 = 70.5% |
|                | Control        | 4/37 = 10.8%  | 2/37 = 5.4%   | 31/37 = 83.7% |

### The Counterfactual Index

The counterfactual index is measured by the sequence of responses: Q.1(c); Q.2(a); Q.3(a); Q.4(c), since it is this pattern which represents an index of maximal counterfactual evaluation of the selected sentences. The totals for each group producing the indexical sequence are listed below in Table 2.

Table 2. Scores for each group, showing the frequency of occurrence of the counterfactual index pattern.

|                 |       |       |
|-----------------|-------|-------|
| Sec. 4 Express: | 11/47 | 23.4% |
| Sec. 4.         | 6/28  | 21.4% |
| NUS 1           | 14/39 | 35.8% |
| NUS 2           | 15/34 | 44.1% |
| Control         | 25/37 | 67.5% |

Average index of counterfactuality over all 4 Singaporean groups: 31.2%

Average index of counterfactuality for the Control: 67.5%

Table 3. Proportion of deviation of the Singaporean groups from the Control index (67.5%).

|                |       |
|----------------|-------|
| Sec. 4 Express | 44.1% |
| Sec. 4         | 46.1% |
| NUS 1          | 31.7% |
| NUS 2          | 23.4% |

Average percentage of deviation from the Control index: 36.3%

## 5. Discussion

In the following discussion, each of the questions will be analysed in turn, and a justification will be proposed for the use of each one in the questionnaire. A summary of the results will follow.

1) *That lemon tree was in the ground for about 2 months.*

- a) The tree has lemons on it.
- b) The tree is still in the ground.
- c) The tree is no longer in the ground.

This sentence was very similar to one previously informally observed of a Singaporean speaker known to me. At the time at which it was uttered, the speaker was remarking on a tree which he had planted two months prior to making the statement, and which was still alive and growing in the ground. It was presumed that

the consequences of the use of past tense with a stative verb would create for some speakers an implicature of counterfactuality, indicating that the state referred to in the past is no longer continuing. This clearly was not the case for the speaker I observed. The additional use of an adverbial indicating a specific temporal duration, *for about 2 months*, when co-occurring with a past stative verb, might further increase the strength of the implicature for some speakers, suggesting even more the likelihood of the past state having terminated prior to the moment of speaking. However, for the speaker concerned, the adverbial appeared not to affect the duration of the state expressed in the utterance.

A (c) answer would suggest that the counterfactual implicature has been apprehended by the informant; a (b) answer would indicate that the informant either does not perceive the counterfactual implicature to be salient or that s/he has not apprehended it in the meaning of the construction. The (a) answer was the distractor. In the Secondary 4 Express group, which was the youngest of all the groups, the proportion of (c) answers was less than half (46.8%), suggesting that more than half of the informants did not perceive, or wish to acknowledge, the counterfactuality of the construction. Of the remainder, 44.6% gave the construction a 'factual' interpretation (i.e. interpreted a meaning of factuality with regard to the present as well as the past) by choosing the answer (b) stating that the tree is still in the ground. Only 8.5% selected the distractor.

With the increasing age and education of the informants, their willingness to select the counterfactual interpretation also increased. Although there is little difference between the figures for the three older Singaporean groups (67.8%, 61.5% and 70.5% respectively), there is quite a margin of difference between the frequency of the counterfactual perceptions for the youngest group (Sec.4 Express - 46.8%) and the second-year university undergraduates (NUS 2 - 70.5%). Furthermore, in the Control group, the proportion of counterfactual responses was much higher, at 92.1%. This indicates that for this question there was a minimum of 21.6% difference between the Singaporean groups' highest counterfactual response and that of the Control group.

#### Question 2. *He loved her all his life.*

- a) He is no longer alive, but she is.
- b) They are both still alive,
- c) She is no longer alive, but he is.

In Question 2, the counterfactuality relating to the durational adverbial, *all his life*, is tested rather than the counterfactuality of the predicate *loved*, thus questioning whether the state of 'loving' demarcated by the temporal boundary *all his life* still holds; from this it follows to question whether the endpoint of that temporal boundary has been reached. According to Hatav (1989), it is the durational adverbial which provides the implicature of discontinuity into the present. It is proposed in the present study that the already-present implicature derived from a past stative is only reinforced or strengthened by the durational adverbial, which is not the only source for the development of this implicature. This is because durational adverbials can co-occur with the present perfect also, and in such constructions do not imply a boundary terminating prior to the present (e.g. *He has loved her all his life*.) An (a) answer would then be the most appropriate answer supplied by an informant who had perceived the (counterfactual) implicature of temporal termination associated with the use of the past stative verb and reinforced with the durational adverbial. A (b) answer probably would suggest that the counterfactual implicature had not been apprehended, or else that the situation of him loving her had been held by the informant to be still continuing, since the adverbial states that the time period was 'all his life'. (c) was the



distractor, but its capacity in that function seemed less than obvious to some of the informants, as the results show. A (c) answer is possibly inferable from *He loved her* alone. Another possible interpretation of Question 2 is: *They are both no longer alive*; but we have no information about whether 'she' is still alive or not, and the most readily accessible implicature is that suggested in (a).

The results obtained were not unlike those of Question 1. The counterfactual implicature was interpreted by almost exactly the same number of informants at the Sec. 4 Express level, 46.8% answering (c) for Question 1 and 47% answering (a) for Question 2. On the other hand, the proportions of (b) and (c) answers to Question 2 were the same (27.6%), perhaps because (c) appeared to be less of a distractor to some of the informants than it was intended to be. The proportions of counterfactual and non-counterfactual responses ((a) and (b) respectively) were exactly the same for this group (42.8%).

For the two Singaporean university undergraduate groups, the percentages of counterfactual responses were higher than those of the Sec 4 groups (64.1% for NUS 1 and 61.7% for NUS 2). 23% of the NUS 1 group provided a 'factual' response to Question 2, as did 17.6% of the NUS 2 group. The Control group provided the largest counterfactual response to this question (84.2%), indicating a margin of 20.1% between the highest counterfactual score for the Singaporean groups and that of the native speakers.

Question 3. *They used to live in Changi.*

- a) They don't live there now.
- b) They live in Changi now.
- c) They're living in Changi now, but only for a short while.

The reasons for the inclusion of the past habitual marker, *used to*, in Question 3 were mainly to test the extent to which the counterfactual implicatures apparently present in the use of a stative verb with past tense marking are also present with another verb type of non-punctual aspect. The lower frequency of counterfactual interpretations shown by the Singaporean group is hypothesised to be related to the opposition between perfective and imperfective aspect in some varieties of Singaporean English and its compatibility with past tense marking. It has been claimed (Comrie 1976: 28) that the meaning of discontinuity into the present with the use of *used to* is also merely an implicature, and is not part of the actual meaning of such constructions employing this form, as is suggested by the following example (ibid: 29):

(vii) [Bill] used to be a member of a subversive organisation, and he still is/ but I don't know whether or not he is now.

The proof that the meaning of discontinuity of a past habitual situation carries only an implicature of present irrealis is found in the conjoined clauses which act to cancel the implicature.

In Question 3, an (a) answer would be an indication that the counterfactual implicature of discontinuity into the present has been perceived; a (b) answer would suggest that either the implicature has not been perceived by the informant, or that it has been perceived and has been suppressed (this cannot be discounted for any of the questions, and there is no way of determining whether this is so, short of questioning every informant on the motivations for his choice of answer). Answer (c) was intended as the distractor.

The results of Question 3 suggest that for almost all of the informants, the counterfactual implicature was apprehended with hardly any variation in the

interpretations. Nearly 100% of the informants in all the groups interpreted the sentence counterfactually, indicating that the implicature of counterfactuality associated with the use of the past habitual marker *used to* may be well on the way to becoming conventionalised in the dialects represented in the present study. The results most likely contradict the evidence from previous literature (Ho & Platt 1993:78; Platt, Weber & Ho 1984: 71) suggesting that *used to*, or a phonologically reduced form of this marker (*use to*), is generalised to present temporal uses in Singaporean dialects (the past inflection may or may not have influenced some respondents' choices of answers - this cannot be ascertained). It could be predicted from these results that the use of *use to* in Singaporean English to mark present habituality is either disappearing or is restricted to very basilectal varieties which were not surveyed as part of the present study.

Question 4. *This machine was running for a long time.*

- a) The machine is now under repair.
- b) The machine is continuing to run now.
- c) The machine is not running at present.

This was again an example based on a similar example observed informally of a Singaporean speaker: *This machine was running for three years* - at the time at which it was uttered the machine was still running. It was considered that in this instance, the use of a present perfect form of the verb would be more appropriate to express the sense of continuity into the present. As with the previous examples in Questions 1-3, there is a likelihood that the past tense used with a non-punctual verb will produce an implicature of irrealis in the present, that is, suggesting that the machine is either not still running, or at least not known to be still running.

Sentences like Question 4 have been considered unacceptable (e.g. by Hatav 1989), due to the co-occurrence of an adverbial marking temporal boundedness with an aspectual form which does not. For this reason duratives with less definitive endpoints (*for a long time; all night*) might seem more compatible with the progressive, and in fact, have been used by Palmer (1976: 55) to illustrate the ability of the progressive to collocate with duration adverbials, e.g. *I was reading all morning*. The use of past progressive then, must be stative-like in that the duration of the activity is more focussed than the temporal boundaries between which it occurred, and any senses of 'perfectivity' or temporal boundedness associated with the use of a duration adverbial must be no more than an implicature. There should be no reason, therefore, not to presume that the use of past tense with the progressive in Question 4 does not produce the implicature of present irrealis prevalent in Questions 1-3<sup>4</sup>.

The results indicate that this is indeed the case, and showed patterns similar to those indicated for the other three questions. A (c) answer was intended to elicit a counterfactual response; a (b) answer would indicate that the implicature of counterfactuality either had not been apprehended or that it was considered not to be salient in the meaning of the sentence; and the (a) answer was intended to be the distractor. Although (a) may be implied from (c), the implicature relating to a (c) interpretation was considered to be more directly derived from Question 4 than (a).

In the youngest group, the Sec. 4 Express, nearly half of the group (48.9%) selected the counterfactual response in (c), while 42.5% selected the factual one (b).

<sup>4</sup> An interesting example of a context in which the past progressive might be acceptable with durational adverbials was suggested by Keith Allan (p.c.): "After he escaped, John was walking for ten hours before he found a place to shelter." This example clearly focusses on the process of an activity between two time points, rather than on the conclusion of the activity as would be indicated by the use of the simple past tense.

A small number (8.5%) chose the distractor (a) as their response. The figures were similar for the Sec. 4 group, of whom 50% gave a counterfactual response and a slightly higher number than in the Sec. 4 Express group responded with a factual answer (46.4%). In the NUS 1 group there was an increase to 61.5% of counterfactual responses - (c) answers, and 70.5% of the NUS 2 group responded in this manner.

The Control group showed the highest counterfactual response of 83.7%, showing that for Question 4, there was only a 13.2% margin of difference between the highest Singaporean score and that of the Control. This margin was narrower than those of Questions 1 and 2, and the Control counterfactual score was the lowest for this question. Nevertheless, the frequency of counterfactual responses for this question is still high, indicating that the implicatures relating to past statives are common to past progressives as well. This stands as a justifiable argument that progressives may be interpreted pragmatically in the same way as stative verbs.

## 6. Conclusion

In Study B, it was shown that the presence of overgeneralisations attributed to Singaporean usage reflect the possibility that the 'compositional value' of a grammaticalising element for such speakers can sometimes lack the retained senses of older meanings, which are shown to constrain the distribution of the element to new environments in native speaker dialects. The present study reaffirms this possibility, in that the lower frequency of counterfactual or hypothetical implicatures derived from preterite stative forms by Singaporean speakers, compared with native speakers, can be directly related to the lack of retained senses of perfectivity associated with such forms and necessary to produce the implicatures in native speaker dialects. The residual meanings of perfectivity derive from the earliest uses of past tenses, which appear to have been mainly confined to perfective environments (Bybee et al 1994: 92). It is these meanings that, for speakers of Singaporean English, are less likely to be present in the compositional value of statives and non-punctuals than for native speakers, as shown in the present survey by a lower recognition of counterfactual implicatures derived from such verb forms.

It must also be considered that, according to the findings of Ho & Platt (1993), the tense/aspect system of Singaporean English does not categorically mark statives or non-punctual verbs for past tense. This being the case, the cooccurrence of past tense with stative verbs will often not be present to provide the implicature of hypotheticality provided by such means in standard varieties, and if it is present, it is predicted to have less salience as a grammatical marker than in standard varieties. Thus, the general infrequency of past tense marking cooccurring with stative verbs is likely to have consequences for the expression and perception of counterfactual implicatures in many grammatical environments, and the modals *will* and *would*, as stative verbs, are similarly affected.

It appears that the grammaticalised implicatures derived from such forms are acquired over a prolonged period of time and exposure to formal English, as indicated in the present data by the steadily rising counterfactual responses which are concomitant with age and length of exposure to English-medium education. Such results indicate that grammatical implicatures are meanings which are progressively acquired as part of the learner's increasing pragmatic competence - this notion has been proposed by Slobin (1994: 129-30) to explain the gradual acquisition of implicatures relating to the use of the present perfect by children. The perception of counterfactual implicatures signalled in the past stative verb forms develops in accord with individual maturity and exposure to the language in a formal environment. It would be reasonable to propose that this increasing development in the individual

acquisition of implicative meaning by L2 speakers may be parallel to the diachronic development of such meanings over a prolonged period of the history of the language itself. However, such a proposal remains open to further research for verification.

### Acknowledgements

Acknowledgements are gratefully extended to the Australian Vice-Chancellors' Commission for sponsorship of the project which provided the basis of this paper. I would also like to thank the Singapore Ministry of Education, Mew Leng Hoh, Tom Estad, Jane Bishop, Ignatia Tsantarlis and numerous anonymous informants for their unselfish assistance in enabling the research to be conducted; and Keith Allan for his insightful comments on earlier drafts of this paper.

### **References**

- Andersen, Roger W. 1991 Developmental sequences: the emergence of aspect marking in second language acquisition. In Huebner, Thom & Ferguson, Charles A. (eds.) *Crosscurrents in Second Language Acquisition and Linguistic Theories*. Amsterdam/Phil.: John Benjamins. 305-324.
- Bardovi-Harlig, Kathleen & Reynolds, Dudley W. 1995 The role of lexical aspect in the acquisition of tense and aspect. *Tesol Quarterly* 29, 1: 107-129.
- Bickerton, Derek. 1981 *Roots of Language*. Ann Arbor: Karoma Publishers Inc.
- Bybee, Joan. 1995 The semantic development of past tense modals in English. In Bybee, Joan & Fleischman, Suzanne (eds.). *Modality in Grammar and Discourse*. Amsterdam/Phil.: John Benjamins. 503-517.
- Bybee, Joan. 1996 The role of repetition in grammaticization: *can* in English. To appear in Janda, R. and Joseph, B. (eds.). *Handbook of Historical Linguistics*. Oxford: Blackwell Publishers.
- Bybee, Joan, & Pagliuca, William. 1987 The evolution of future meaning. In Ramat, A.G., Carruba, O. & Bernini, G. (eds.). *Papers from the 7th International Conference on Historical Linguistics*. Amstrdam/Phil.: John Benjamins. 109-122.
- Bybee, Joan, Pagliuca, William, & Perkins, Revere D. 1994 *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. Chicago: University of Chicago Press.
- Comrie, Bernard. 1976 *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press.
- Comrie, Bernard. 1986 Conditionals: a typology. In Traugott, Elizabeth C., ter Meulen, Alice, Snitzer Reilly, J. & Ferguson, Charles A. *On Conditionals*. Cambridge: Cambridge University Press.
- Erbaugh, Mary S. 1986 Taking stock: the development of Chinese noun classifiers historically and in young children. In Craig, Collette (ed.). *Noun Classes and Categorization*. Amsterdam/Phil.: John Benjamins. 399-436.

Grice, P. 1981 Presupposition and conversational implicature. In Cole, P. (ed.) *Radical Pragmatics*. New York: Academic Press. 183-198.

Hatav, Galia. 1989 Aspects, *Aktionsarten* and the time line. *Linguistics* 27: 487-516.

Ho, Mian Lian, & Platt, John, T. 1993 *Dynamics of a Contact Continuum. Singaporean English*. Oxford: Clarendon Press.

Langacker, Ronald.W. 1988 An overview of cognitive grammar. In Rudzka-Ostyn, B. (ed.). *Topics in Cognitive Linguistics*. Amsterdam/Phil.: John Benjamins. 3-48.

Newbrook, Mark (ed.). 1987 *Aspects of the Syntax of Educated Singaporean English*. Frankfurt: Peter Lang.

Palmer, F.R. 1976 *The English Verb*. London: Longman.

Platt, John T., Weber, Heidi & Ho, Mian Lian. 1984 *The New Englishes*. London: Routledge & Kegan Paul.

Slobin, Dan. 1994 Talking perfectly. Discourse origins of the present perfect. In Pagliuca, William (ed.). 119-133.

Traugott, Elizabeth C. 1989 On the rise of epistemic meanings in English. *Language* 65: 31-55.

Ziegeler, Debra P. 1994 Conditionals and counterfactuals in Singaporean English. *Journal of Intercultural Studies* 15, 1: 29-49.

Ziegeler, Debra P. Forthcoming. A synchronic perspective on the grammaticalisation of *WILL* in hypothetical predicates. To appear in *Studies in Language*.

### Further Reading

Au, Terry K-F. 1983 Chinese and English counterfactuals: The Sapir-Whorf hypothesis revisited. *Cognition* 15: 155-187.

Binnick, Robert I. 1991 *Time and the Verb. A Guide to Tense and Aspect*. New York: Oxford University Press.

Bloom, Alfred H. 1981 *The Linguistic Shaping of Thought: A Study in the Impact of Language on Thinking in China and the West*. Hillsdale: Erlbaum Ass.

Bybee, Joan. 1994 The grammaticalization of zero. Asymmetries in tense and aspect systems. In Pagliuca, William (ed.). *Perspectives on Grammaticalization*. Amsterdam/Phil.: John Benjamins. 235-254.

Chao, Yuen Ren 1976 *Aspects of Chinese Sociolinguistics*. Stanford: Stanford University Press.

Depraetere, Ilse. 1995 On the necessity of distinguishing between (un)boundedness and (a)telicity. *Linguistics and Philosophy* 18: 1-19.

Gupta, Anthea F. 1991a English in the playground in Singapore schools. *Collected Papers from the International Conference on Bilingualism & National Development*. Vol. 2. Brunei Darussalam: Universiti Brunei Darussalam. 553-562.

Gupta, Anthea, F. 1991b Almost a creoloid: Singapore English. *California Linguistic Notes* 23, 1: 9-21.

Gupta, Anthea F. 1991c. *Acquisition of Diglossia in Singapore English*. In Kwan-Terry, Anna (ed.) *Child Language Development in Singapore and Malaysia*. Singapore: Singapore University Press. 119-160.

Gupta, Anthea F. 1992 (In) Panel discussion: a dictionary of English for Singapore and its practical implications. In Pakir, Anne (ed.) *Words in a Cultural Context*. Singapore: Unipress. 216-237.

Ho, Mian Lian, 1986 *The Verb Phrase in Singaporean English*. Unpublished Ph.D thesis, Monash University.

Kallgard, Anders. 1993 Present-day Pitcairinese. *English World-Wide* 14, 1: 71-114.

Labov, William. 1990 On the adequacy of natural languages. In Singler, J.V.(ed.). *Pidgin and Creole Tense-Mood-Aspect Systems*. Amsterdam/Phil.: John Benjamins. 1-58.

Liu, Lisa G. 1985 Reasoning counterfactually in Chinese: Are there any obstacles? *Cognition* 21: 239-270.

Newbrook, Mark & Chinniah, Y.A. 1987 Aspects of the Singaporean English verb phrase: norms, claims and usage. In Newbrook (ed.) 1987. 339-379.

Omar, Asmah Haji & Subbiah, Rama. 1968 *An Introduction to Malay Grammar*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Quirk, Randolph, Greenbaum, Sidney, Leech, Geoffrey & Svartvik, Jan. 1985 *A Comprehensive Grammar of the English Language*. London: Longman.

Teow, Ai Lan. 1988 *Modal Auxiliaries in Singaporean English*. Academic Exercise. National University of Singapore, Faculty of Arts and Social Sciences.

Visser, F. Th. 1969 *An Historical Syntax of the English Language (Part III)*. Leiden: EJ Brill.

Thomson, A.J. & Martinet, A.V. 1988 *A Practical English Grammar*. Oxford: Oxford University Press.