

Panda eats shoots and leaves

Testing tonality competence in Chinese learners of English

Helen Beer

Foreign Language Dept, Guangzhou University, China

and Paul Tench

Centre for Language and Communication Research, Cardiff University, Wales, UK

A panda walked into a pub and ordered a packet of crisps. He ate the crisps, turned around, shot the person next to him and left. The next day the panda came in again, ordered a packet of crisps, ate the crisps, turned around, shot the person next to him and left. The following day the panda came in again and ordered a packet of crisps. The barman refused to serve him and said 'I can't serve you. You come in here order a packet of crisps, eat them, shoot someone and then leave.' The panda, looking a little puzzled, said 'But I'm a panda, see here, that's what we do.' He then pointed to the entry for panda in an encyclopaedia: 'panda: eats shoots and leaves'.

While not an example of sidesplitting humour, it is an example of how humour in English can be based not only on a play on words, but can involve intonation too. A native speaker of average intelligence would understand the humorous side of this tale, even if not thinking it worthy of repeating. Now try telling the same story to a non-native speaker and you would probably wish you'd never started. After explaining that *shoots* and *leaves* are both homophones, you would then need to explain that the panda uses *eats* intransitively whereas the encyclopaedia uses it transitively, and that whereas the encyclopaedia uses just one clause, the panda uses three clauses, each with a separate intonation unit. And then see if they start smiling!

For many students of English, comprehension of jokes is the least of their worries. While understanding the meaning of every word that a native speaker has uttered, the meaning of the sentence as a whole might be completely lost due to the nature of English intonation. It is a fact that 'we do misunderstand the meaning of intonation patterns in a foreign language . . . In fact, incorrect intonation may seriously hamper communication at any levels' (Wilkins 1972: 41,46). The problem also is 'that mistaken intonation patterns will mean something, but obviously not the intended meaning, and so misunderstandings can easily follow' (Tench, 1996: 11).

This would be particularly so in the case of speakers of a tone language such as Chinese, where the intonation system is a lot less complex than that of English due to the importance of tone in the conveying of lexical meaning. It has been noted 'that a tone language often has a simpler intonation system than a non-tone language, and that it will employ alternative linguistic devices - in grammar, usually - to compensate' (Tench 1996: 6).

The complexity of English intonation is well known. It consists of three different systems which are referred to as *tonality*, *tonicity* and *tone*. *Tone* refers to the pitch movements and variations which make up the actual melody of intonation, and tends to be the primary focus of attempts to teach intonation. *Tonicity* refers to the location of the 'tonic' or 'nuclear' syllable where the primary tone movements begin, and it gives an indication of

the intended focus of the speaker's information; variations from the normal or 'neutral' location tend to express contrast, and there are various kinds of exercise to teach these variations.

But little attention is ever given to contrasts in tonality. *Tonality* refers to the number of intonation units that accompany clauses and its main function is to indicate the speaker's management of the number of pieces of information that they wish to provide. A tonality contrast can be simply illustrated as follows:

a) | my brother who lives in Derby | works for Rolls Royce |

b) | my brother | who lives in Derby | works for Rolls Royce |

The tonality of a) and b) is different, and meaningful. The first indicates that the clause *who lives in Derby* has to be understood as 'defining' which brother is being referred to (a defining – or, restrictive – relative clause); there must be more brothers. The second, with a separate intonation unit accompanying that clause, indicates that additional, but presumably relevant, information is provided (a non-defining – or, non-restrictive – relative clause); there may therefore be no more than one brother.

The tonality of the panda's version of the statement would be

| panda . eats | shoots | and leaves |

as three pieces of information; but that of the encyclopaedia would be

| panda . eats shoots and leaves |

as one single piece of information

In order to test the comprehension of the tonality contrasts in English by advanced non-native speakers, the following test was prepared. The aim was to present a series of clauses, which are potentially ambiguous in meaning, the ambiguity being resolved by tonality. The text contains eighteen such ambiguous cases. The ambiguous phrases are written in bold type, with both variations of intonation. The learners were 52 second year Chinese students majoring in English (BA English) at Guangzhou University; they were divided into two groups of 26. One group received one version of the text, the other a different version, that is a different choice of the possible variations. Each version was recorded on tape; each student had to select a cartoon picture that represented their understanding of what the clauses stated.

The Text

As I was looking out onto the sports field, I noticed that

(a) **the boys who were playing football**

(1)

(b) **the boys | who were playing football**

were being joined by two dogs. One of the dogs grabbed the ball and ran off.

Dave, the captain, ran after the dog, but it disappeared through a hole in the fence.

They needed to get on with the match, so Dave,

- (2) (a) called Alan | the new boy
(b) called Alan the new boy

and asked him to go and get another ball.

The games teacher was supervising a game of volley ball. He quickly found a new ball for Alan. It had begun to rain. Alan was hesitating by the door. The teacher knew that the boys would be wanting to get on with the match and

- (3) (a) told Alan to make sure he hurried back
(b) told Alan | to make sure he hurried back

By now the rain was coming down heavily, so Alan ran for cover. The caretaker's shed door was open. Alan went inside. In the shed, sheltering from the rain were

- (4) (a) the caretaker's wife | Alan's form teacher
(b) the caretaker's wife Alan's form teacher

and the other games teacher. It started raining even harder.

- (5) (a) Alan didn't stay in the shed | because his teachers were in there
(b) Alan didn't stay in the shed because his teachers were in there

He was wet and needed some shelter.

The other boys were getting very impatient.

'I hope he knew he didn't have to ask for a ball', thought Dave.

- (6) (a) I should have told him | to save time
(b) I should have told him to save time

At that moment, the dog came back. He ran into the middle of the field,

- (7) (a) dropping the ball | to be grabbed by the boys
(b) dropping the ball to be grabbed by the boys

By now it had stopped raining. Alan came running along the path, kicking the new ball. To his dismay, he saw that the boys were already playing. Feeling he was no longer needed and angry with Dave for sending him off in the first place,

- (8) (a) **he joined the group of spectators | shouting**
(b) **he joined the group of spectators shouting**

- (9) (a) **kick Dave**
(b) **kick Dave**

The game was progressing when suddenly there was a loud hissing noise. The ball was losing air. A couple of the team tried kicking it, but it hardly moved.

Dave felt like

- (10) (a) **kicking himself**
(b) **kicking himself**

He hadn't checked the ball before re-starting play.

Alan was hesitating at the side of the pitch.

- (11) (a) **the spectators | who could see that Alan had a new ball**
(b) **the spectators who could see that Alan had a new ball**

shouted to him to rejoin the game. Dave caught sight of him:

'Great you've got a new ball. Sit on the bench, you can play after half time.'

The game continued. Alan sat on the bench

- (12) (a) **chewing and biting his nails**
(b) **chewing | and biting his nails**

He was deep in thought.

- (13) (a) **he didn't want to play again | because of the rest of the team**
(b) **he didn't want to play again because of the rest of the team**

He knew he had to prove himself.

The whistle blew for half time.

'Why was he so late back?' the players asked Dave.

'I don't know.'

- (14) (a) he didn't tell me honestly
(b) he didn't tell me honestly

I think he sheltered from the rain. I've told him he can play in the second half.'

They carried on talking about strategies for shooting goals. Alan had not joined them.

'Look at him daydreaming over there. I wonder if

- (15) (a) he's thinking about shooting himself
(b) he's thinking about shooting himself

'Let's ask him to join us. he needs to know our plans for the second half.'

'Do we have to. He ruined the first half.'

- (16) (a) Alan didn't come happily
(b) Alan didn't come happily

He wanted to be alone.

There had been no score during the first half of the match. Both teams had a lot of work to do. The whistle blew. The game began.

As time passed, Alan began to enjoy the game. He broke free from his opponent and took a shot at goal. The ball hit the post and straight past the goal keeper into the net.

The rest of the boys were

- (17) (a) clapping | and thumping him on the back
(b) clapping and thumping him on the back

It was a good feeling. The whistle blew.

- (18) (a) let's cheer Alan
(b) let's cheer Alan

shouted Dave.

Example 1

- (a) the boys who were playing football
(b) the boys | who were playing football

By presenting the information in one unit of information as in 1(a) the inference is that while there were other boys on the pitch, it was the boys who were playing football that were joined by the dogs. The relative clause **who were playing football** is, in this case, a defining clause. If the relative clause is non-defining, as in 1(b), the information is presented in two information units, resulting in the phrase **who were playing football** being merely an extra piece of information

Example 2

- (a) called Alan | the new boy
- (b) called Alan the new boy

By presenting the information in two units as in 2(a) **the new boy** is a phrase in apposition to the name **Alan**. The idea being conveyed is that Alan is a new boy. If, however, only one information unit is used, as in 1(b), the inference is that, when calling Alan, Dave uses the term **new boy** as an intensive complement. (See Young (1980; 130))

Example 3

- (a) told Alan to make sure he hurried back
- (b) told Alan | to make sure he hurried back

The case in question is one of reported speech. What was it that the games teacher told Alan? If presented as one information unit as is in 3(a), then the message from the teacher to Alan would have been **make sure you hurry back**. If two information units are used as in 3(b), the message would have been **the boys will be wanting to get on with the match**. By conveying this message it would be hoped that Alan would see the need to hurry back

Example 4

- (a) the caretaker's wife | Alan's form teacher. . . .
- (b) the caretaker's wife Alan's form teacher. . . .

Example 4 contains another example of possible apposition. 4(a) contains two information units. Without the phrase **and the other games teacher** (which follows in the story line) **Alan's form teacher** could be understood as an example of non-defining apposition in relationship to the phrase **the caretaker's wife**. However, the presence of the phrase **and the other games teacher** turns it into a list. There are thus three people being discussed: 1) the caretaker's wife; 2) Alan's form teacher and 3) the other games teacher. In 4(b), the example is one of defining apposition. **The caretaker's wife** and **Alan's form teacher** are one and the same person, and are presented in one information unit.

Example 5

- (a) Alan didn't stay in the shed | because his teachers were in there
- (b) Alan didn't stay in the shed because his teachers were in there

The use of the negative in the way portrayed in **example 5**, can cause much confusion. Did Alan stay in the shed, or didn't he? Again the issue is one of tonality. 5(a) presents

two pieces of information. In this case Alan does not stay in the shed. The reason for not staying in the shed is the presence of his teachers.

In 5(b), however, one information unit is presented, resulting in the conveying of the meaning that Alan *did* stay in the shed. The use of the negative is to indicate that the reason was not because his teachers were in there. The reason was, as the next phrase indicates: **he was wet and needed shelter**.

In this example, the tone as well as the number of information units changes. The pitch rises in example 5(b) leading in to the expression **he was wet and needed some shelter**. In 5(a), however, the pitch falls, and the expression **he was wet and needed some shelter** is completely separate.

Example 6

- (a) **I should have told him | to save time**
- (b) **I should have told him to save time**

As in **example 3**, this is a case of reported speech. What was the message? In 6(a), two information units are presented. Dave is wishing he had told Alan that **he didn't have to ask for a ball**.

By presenting the information in one unit as in 6(b), the message changes to **save time!**

Example 7

- (a) **dropping the ball | to be grabbed by the boys**
- (b) **dropping the ball to be grabbed by the boys**

Ambiguity in **example 7** is caused by the use of the two verbs **dropping** and **grabbed**. The problem is in discerning who or what is the subject of the second verb. 7(a) presents the information in two units. In this case, the dog, who is the subject of the first verb, also becomes the subject of **grabbed**.

In 7(b) only one unit of information is presented. In this case, the **ball** becomes the subject of the passive verb.

Example 8

- (a) **he joined the group of spectators | shouting:**
- (b) **he joined the group of spectators shouting**

Example 8 is similar to **example 7**. Who is doing the shouting? **Alan** is the subject of the first verb **joined**. If, as in 8(a), two information units are presented, **Alan** is also the subject of the second verb, and is the one doing the shouting.

If, however, only one unit of information is presented, as in 8(b), then **the spectators** are the subjects of the second verb, and Alan by virtue of the fact that he has joined them is also doing the shouting.

Example 9

- (a) **kick Dave**
- (b) **kick Dave**

Ambiguity arises in this example over who, or what is being kicked. The issue grammatically is whether the verb **kick** is transitive or intransitive. In 9(a), the position of the tonic syllable on **kick**, sends a message to Dave to kick the ball. The verb is here being used intransitively.

The choice of **Dave** as the tonic syllable in 9(b) sends a message to an unnamed party to kick Dave. In this case the verb is being used transitively.

Example 10

- (a) **kicking himself**
- (b) **kicking himself**

The ambiguity in this sentence is as a result of **kick** being a verb, which can be used transitively and intransitively, combined with **himself** being both a reflexive and an emphatic pronoun. In 10(a), the tonic syllable falls on **kicking** and indicates that Dave wanted to perform an act of kicking on himself - a transitive use of the verb, together with a reflexive pronoun. The choice of **himself** for the tonic syllable, as in 10(b) indicates that Dave wanted to kick the ball - an intransitive use of the verb, together with an emphatic pronoun.

Example 11

- (a) **the spectators | who could see that Alan had a new ball**
- (b) **the spectators who could see that Alan had a new ball**

Example 11 is similar to that of **example 1**. Again the issue is whether the relative clause is defining or non-defining. In 11(a), two pieces of information are presented. The relative clause, **who could see that Alan had a new ball**, is thus non-defining and serves as an extra piece of information regarding the spectators.

The presenting of one unit of information, as in 11(b) renders the clause a defining clause, and conveys the idea that there were some spectators who could see that Alan had a new ball, and some who couldn't.

Example 12

- (a) **chewing and biting his nails**
- (b) **chewing | and biting his nails**

The issue involved in **example 12** is that of transitivity versus intransitivity. **Chewing** can be both transitive and intransitive. In the example **chewing and biting his nails**, if **chew** is transitive, **nails** is the direct object of **chew**. This meaning is conveyed by the use of one unit of information as in 12(a). The use of two information units, as in 12(b), indicates that **chew** is being used intransitively, and while Alan is biting his nails, it is not his nails that he is chewing.

Example 13

- (a) **he didn't want to play again | because of the rest of the team**
- (b) **he didn't want to play again because of the rest of the team**

As in **example 5**, **example 13** contains the use of the negative. Again confusion could arise over what is being negated. 13(a) presents two units of information. The verb **want** is thus negated, and the hearer knows that Alan does not want to play again.

The presenting of one information unit, as in 13(b) results in the meaning that Alan *does* want to play again, but the reason is not because of the rest of the team.

Example 14

(a) **he didn't tell me **honestly****

(b) **he didn't tell me honestly**

The subject at issue in this instance is whether **honestly** is an adjunct of comment or of manner. The positioning of the tonic syllable on **tell** as in 14(a) conveys the idea that the speaker is being honest in his reporting of the situation. In this case **honestly** serves as an adjunct of comment. However, in 14(b), the positioning of the tonic syllable on **honestly** indicates that Alan had not been telling the truth. In this case **honestly** is an adjunct of manner.

Example 15

(a) **he's thinking about shooting himself**

(b) **he's thinking about shooting himself**

Example 15 is similar to **example 10**. The choice of tonic syllable affects who or what is being shot. In 15(a), the tonic syllable on **himself**, implies that the boys are wondering if Alan is thinking of shooting a goal. **Himself** is an emphatic pronoun working with an intransitive verb. However, 15(b) presents the tonic syllable on **shooting**, thus indicating that the boys thought that Alan might be thinking of performing an act of shooting on himself. In this instance **himself** is a reflexive pronoun working with a transitive verb.

Example 16

(a) **Alan didn't come happily**

(b) **Alan didn't come happily**

As in **example 14**, **example 16** contains adjuncts of comment and manner. 16(a) shows the tonic syllable on **happily**. This indicates that **happily** is an adjunct of manner, and conveys the meaning that Alan came but that he wasn't happy about it.

16(b), however, has the tonic syllable on **come**. **Happily** thus becomes an adjunct of comment, and the message being given is that Alan did not come and that the boys were happy about it.

Example 17

(a) **clapping | and thumping him on the back**

(b) **clapping and thumping him on the back**

As in **example 12**, **example 17** contains a verb that can be used both transitively and intransitively. In 17(a), two units of information are presented. In this case **clap** is being

used intransitively, and two separate actions are being described - the boys are clapping their hands and they are thumping Alan on the back.

17(b) makes use of **clap** as a transitive verb, by presenting one unit of information. In this case the **clapping** and the **thumping** are both being performed on Alan.

Example 18

(a) **let's cheer Alan**

(b) **let's cheer Alan**

As with **example 9**, the meaning of the phrase depends on whether **cheer** is being used transitively or intransitively. The appearance of the tonic syllable on **Alan** as in 18(a) renders **cheer** as a transitive verb, with **Alan** as the direct object of that verb. The other boys are thus being encouraged to cheer for Alan. The intransitive use of cheer is accomplished by placing the tonic syllable on **cheer** as in 18(b). In this case Alan is being encouraged to cheer - what he is to cheer or for whom is not specified.

The eighteen examples of potential ambiguity were adapted from examples given by Tench (1996;39-49,70,71).

Maintaining Ambiguity

In preparing the text, attention was given to maintaining the ambiguity throughout the context of the story. This was particularly important in the cases of **examples 5 & 13**. In both these examples the intonation affects whether Alan did or did not do a particular thing. If the context of the story were to give any clues as to his actions, any testing of these phrases would not be accurate, as the response of the candidates might be based on the story line and not on the intonational devices used.

Example 5 reads:

Alan didn't stay in the shed | because his teachers were in there

Alan didn't stay in the shed because his teachers were in there

Each rendering can be followed by the phrase:

he was wet and needed some shelter.

In the first case the implication is that because he left the shed **he was wet and needed some shelter**, whereas in the second case the reason for staying in the shed is the fact that **he was wet and needed some shelter**.

Similarly **example 13** reads:

Alan didn't want to play again | because of the rest of the team

Alan didn't want to play again because of the rest of the team

In each case the following phrase: **he knew he needed to prove himself** makes sense.

In the first instance Alan doesn't want to play again - the reason being that he knows that he will be expected to prove himself and finds it a daunting process. In the second instance he

does want to play again because he knows that for his self esteem he has to prove himself.

Modifications to the Text

To enable the understanding of the intonational patterns discussed above to be tested, it would be necessary to prepare audio tapes. Before recording the tapes, the text was read several times, practising both versions of each example. As a result of the practice readings, several modifications were made to the text

In the original text, **examples 9, 10, 14, 15, 16 & 18** were presented as examples whereby the meaning is affected by the altering of the tonic syllable. However, when reading the text, the context of four of the examples required the addition of an information unit. In effect a tonic syllable was being added rather than changed.

Example 9 required the subject of the verb to shout. In **9a**:

kick Dave

the shouting requires the giving of more prominence to **Dave**, and thus the using of two information units:

kick | Dave

This giving of more prominence to the final vocative by the use of two units of information, is acknowledged by Tench (1996;71), after listing a similar example as a case of tonicity affecting the grammatical meaning.

The example which parallels **example 9** is **example 18**. While it was not deemed as necessary to give prominence to the final vocative in this example, it was decided that there should be a consistency in the way the two examples were presented, and hence **18b** is presented as two units of information:

let's cheer | Alan

Example 10b presents Dave as wanting to kick the ball:

Dave felt like **kicking himself**

Himself is being used as an emphatic pronoun. The context surrounding the phrase would indicate that Dave wanted to kick the ball in addition to the other members of the team who had already kicked it. It therefore seemed more appropriate to deliver the phrase as two information units:

kicking | himself

The example which parallels **example 10**, is **example 15**.

In **15a**:

he's thinking about shooting himself

the emphatic pronoun **himself** was again deemed worthy of more prominence, by virtue of the fact that Alan's possible thoughts of goal shooting were in relation to himself as the shooter, in contrast to the plans of the team, which were also under discussion. This

example was thus presented as two units of information:

he's thinking about shooting | himself

Examples 14 & 16 concern the difference between adjuncts of comment and manner.

Although the difference between the use of **happily** as an adjunct of comment or of manner is presented by Trench (1996;71) as being a matter for tonicity, the example of the use of the word **honestly** in such a way is presented as a tonality issue (1996;34). **Honestly** used as an adjunct of comment can be viewed as a plea by the speaker to believe what s/he is saying, and therefore worthy of its own intonation unit.

It was thought appropriate to present both examples as a tonality issue so as not confuse matters. Therefore **14a** is now presented as two units of information:

he didn't tell me | honestly

as is **16b**:

he didn't come | happily

Test Construct

Having prepared the text it was necessary to find a suitable medium for testing the intonational patterns outlined. The issues explained above could be tested through questioning. This would, however, mean that the inability on the candidate's part to either understand the question, or to reply in a coherent way may affect the data. The validity of the test as a means of acquiring data could thus be called into question.

'A test is said to have construct validity if it can be demonstrated that it measures just the ability which it is supposed to measure.'

Hughes (1989;26)

Based on such testing criteria, it was deemed inappropriate to use a form of testing which would not require the testees to do anything other than listen.

To complement the text, a series of cartoon diagrams were prepared. For each occasion of potential ambiguity, two cartoons were prepared, one above the other. The only differences between these two cartoons were the differences implied in the text. In the case of **examples 8 & 9**, the two cases of ambiguity were depicted by means of four similar cartoons. Each testee would receive a copy of the cartoons in the form of a booklet. The testees would be required to indicate which cartoon best matched the text they were listening to.

The Cartoons

Example 1 was tested by two cartoons indicating boys playing football. As the issue was

whether the relative clause was defining or non-defining, one cartoon pictured one group of boys in the scene as playing football, while other boys were involved in other forms of athletic endeavour. The choice of this cartoon would indicate understanding the text to mean that out of all the boys on the sports field it was ones playing football that were joined by two dogs. This would correspond to the information being presented as one unit:

the boys who were playing football

and would indicate the clause to be defining.

The alternative cartoon showed only one group of boys, who all happened to be playing football. Choice of this cartoon would correspond to hearing two units of information:

the boys | who were playing football

and would indicate the clause to be non-defining.

Example 2 involved the issue of two noun phrases in succession. In one of the cartoons Dave is shown with a speech bubble containing the word **Alan**. Choice of this cartoon would indicate that the information was viewed to be two units:

called Alan | the new boy

and that the act of calling used the first of the noun phrases, leaving the second phrase **the new boy** as an item in apposition to the first.

In the alternative cartoon, the phrase **new boy** is in the speech bubble. Choice of this cartoon would indicate an understanding of one unit of information:

called Alan the new boy

and indicating that it is not an item in apposition but rather a term used when addressing Alan.

Example 3 contained an example of reported speech. The two cartoons both depicted the games teacher talking to Alan. In one cartoon he is telling Alan ‘**the boys will be wanting to get on with the match.**’ Choice of this cartoon would indicate that the person listening to the text had viewed the phrase **told Alan | to make sure he hurried back** as two units of information, with the **told Alan** referring to the information given in the previous information unit.

The alternative cartoon depicts the teacher telling Alan ‘**make sure you hurry back.**’ Choice of this cartoon would indicate the hearing of one unit of information, thus changing the words that were being reported.

Example 4 again contains the possibility of items in apposition. In one cartoon there are three people shown to be in the shed. They would be 1) the caretaker’s wife, 2) Alan’s form teacher and 3) the other games’ teacher. For the three noun phrases to be translated as meaning three people it would be necessary for the phrase

the caretaker’s wife | Alan’s form teacher

to be heard as two units of information. In this way both noun phrases are part of a list.

The alternative cartoon shows two people, **the caretaker's wife**, who also happens to be **Alan's form teacher**, and **the other games teacher**.

For the message to be interpreted in this way only one unit of information would be heard in the phrase

the caretaker's wife Alan's form teacher.

Example 5 presents the problem of whether Alan stayed in the shed or whether he didn't. One cartoon thus shows him in the shed and would be chosen by those who heard the information presented as one unit of information

Alan didn't stay in the shed because his teachers were in there

The alternative cartoon shows Alan outside the shed, and would be chosen by those who perceived two units of information:

Alan didn't stay in the shed | because his teachers were in there

Example 6 is another example of reported speech. One cartoon shows Dave saying '**You don't have to ask for a ball**' and the choice of such would indicate the hearing of two units of information in the phrase

I should have told him | to save time

The speech thus reported is that contained in the previous unit of information **I hope he knew he didn't have to ask for a ball**

The alternative cartoon shows Dave saying '**save time**'. The choice of this cartoon would indicate an understanding of the text which corresponds to one unit of information. Thus the speech being reported is contained within the same information unit as the words

I should have told him.

Example 7 requires the listener to decide who or what is the subject of the second verb. One cartoon shows Dave taking hold of the ball, and would be the choice of those hearing the information as one unit:

dropping the ball to be grabbed by the boys

and thus understanding ball to be the subject of the verb **grabbed**.

The alternative cartoon shows Dave picking up the dog. Choice of this cartoon would indicate the hearing of two units of information:

dropping the ball | to be grabbed by the boys

and the understanding that it was the dog, a feature of the previous unit of information, which was the subject of the verb **grabbed**.

Examples 8 & 9 were depicted together. Four cartoons are used. One cartoon shows Alan and the other spectators shouting to Dave to kick the ball. Choice of this cartoon would indicate understanding firstly that both Alan and the spectators were the subjects of **shout**. This would require **example 8** to be heard as one unit of information:

he joined the group of spectators shouting

It would further entail hearing **example 9** as two units of information:

kick | Dave

indicating the intransitivity of the verb, with **Dave** as a vocative.

The second cartoon depicts Alan and the other supporters shouting to an unnamed player to **kick Dave**. Choice of this cartoon, as with the first cartoon, indicates that **example 8** is heard as one unit of information, but, in contrast, **example 9** is also understood as one unit of information:

kick Dave

the verb being transitive and **Dave** being the direct object of the verb.

The third cartoon shows Alan amongst a group of spectators. In this instance it is only Alan doing the shouting. He is shouting to Dave to kick the ball. Choice of this cartoon would indicate understanding Alan to be the only subject of **shout**. This would correspond with the presenting of two units of information:

he joined the group of spectators | shouting

Example 9 would be understood in the same way as in the first cartoon mentioned, with Dave being encouraged to kick the ball.

The final cartoon shows Alan amongst a group of spectators. As with the third cartoon he is the only one shouting. In this case, however, as in the second cartoon, the message being shouted is to an unnamed player to kick Dave. Choice of this cartoon would require the listener to understand Alan to be the subject of the verb as in the choice of the third cartoon, and the verb to be transitive with **Dave** as the direct object of the verb as in the second cartoon.

Example 10 requires the listener to decide on what was being kicked. One cartoon shows Dave kicking the ball. Choice of this cartoon would indicate that the listener perceived two units of information:

kicking | himself

and thus understood **kick** to be intransitive, and **himself** to be an emphatic pronoun.

The alternative cartoon depicts Dave performing an act of kicking on himself. Choice of this cartoon would indicate the detection of one unit of information:

kicking himself

and thus the understanding of **kick** as a transitive verb, and **himself** as a reflexive pronoun.

Example 11 again contains a relative clause. One cartoon shows a group of spectators, some of whom start shouting to Alan. The remainder of the spectators are looking away from Alan. Choice of this cartoon would indicate the hearing of one unit of information:

the spectators who could see that Alan had a new ball

and thus the understanding of the relative clause as defining, i.e. of the spectators it was those who could see he had the new ball who shouted to him.

The alternative cartoon shows all the spectators shouting to Alan. Choice of this cartoon would indicate the hearing of two units of information:

the spectators | who could see that Alan had a new ball

and thus the interpretation of the clause as non-defining in that all the spectators are involved.

Example 12 contains the issue of transitivity. One cartoon shows Alan with his nails in his mouth, chewing and biting them. Choice of this cartoon would indicate that the listener perceived the phrase to be one unit of information:

chewing and biting his nails

and that thus **chewing** is being used transitively, with **nails** as the direct object.

The alternative cartoon shows Alan chewing gum and biting his nails. Choice of this cartoon would indicate a perception of two units of information:

chewing | and biting his nails

and thus the understanding of **chew** as being used intransitively and not in relation to **nails**.

Example 13 calls on the listeners to make a decision about what is being made negative. One cartoon shows Alan with a thought bubble indicating that he wants to play again. Choice of this cartoon would indicate the hearing of one unit of information:

he didn't want to play again because of the rest of the team

meaning that the negative does not apply to Alan's desire to play again, but instead that the reason why he *did* want to play was not **because of the rest of the team**.

The alternative cartoon shows Alan, again with a thought bubble. This time the thought bubble indicates Alan's lack of desire to play again. Choice of this cartoon indicates the hearing of two information units:

he didn't want to play again | because of the rest of the team

and the understanding of the negative in this case applying to Alan's desire to play.

Example 14 involves the comprehension of adjuncts. One cartoon shows Dave talking to other members of the team. The words '**I'm telling the truth**' are shown in a speech bubble. Choice of this cartoon would indicate the hearing of two units of information in the phrase:

he didn't tell me | honestly

and thus the understanding of **honestly** to be an adjunct of comment.

The alternative cartoon shows Dave talking with Alan. Dave is illustrated with a thought bubble containing the words '**I think he's lying**'. Choice of this cartoon would indicate the hearing of one unit of information:

he didn't tell me honestly

and the understanding of **honestly** to be an adjunct of manner and thus indicating that Alan

was not being honest.

Example 15 involves transitivity and pronouns. One cartoon shows Alan shooting a goal. Choice of this cartoon would indicate the hearing of two units of information:

he's thinking about shooting | himself

and the understanding of **shoot** as an intransitive verb and **himself** as an emphatic pronoun.

The alternative cartoon shows Alan with a gun to his head. Choice of this cartoon would indicate the hearing of one unit of information:

he's thinking about shooting himself

and the understanding of **shoot** as a transitive verb and **himself** as a reflexive pronoun.

Example 16 again involves adjuncts. One cartoon shows Alan joining the rest of the team, but not being happy about it. Choice of this cartoon would indicate the hearing of one unit of information:

Alan didn't come happily

and thus the understanding of **happily** as an adjunct of manner.

The alternative cartoon shows Alan not joining the team, and the other boys being happy about it. Choice of this cartoon would indicate the hearing of two units of information:

Alan didn't come | happily

and the understanding of **happily** as an adjunct of comment.

Example 17 again involves the issue of transitivity. One cartoon shows members of the team clapping their hands and thumping Alan on the back. Choice of this cartoon would indicate the hearing of two units of information:

clapping | and thumping him on the back

and the understanding of **clap** as an intransitive verb, not being performed on Alan.

The alternative cartoon shows other members of the team clapping Alan's back and thumping Alan's back. Choice of this cartoon would indicate the hearing of one unit of information:

clapping and thumping him on the back

and the understanding of **clap** as a transitive verb, being performed on Alan.

Example 18 again concerns transitivity. One cartoon shows Dave encouraging Alan to cheer. Choice of this cartoon would indicate the hearing of two units of information:

let's cheer | Alan

and the understanding of cheer as an intransitive verb.

The alternative cartoon shows Dave encouraging the rest of the team to cheer for Alan. Choice of this cartoon would indicate the hearing of one information unit:

lets cheer Alan

and the understanding of cheer as a transitive verb.

Reading of the Text onto Tape

Two versions of the text were read onto tape. The text contains nine corresponding pairs of ambiguous statements. In each version the reading allowed for an example of each way of rendering an ambiguity. The only examples which were not direct opposites were number 2 & number 4. While both examples can be read as examples of noun phrases in apposition, the alternative reading of number 2 puts the second noun phrase in the vocative case, whereas number 4 renders the second noun phrase as part of a list. In this case one of the phrases was read as if the noun phrases were in apposition, and the other received the alternative rendition.

Each text was read twice. The first time it was read straight through. On the second reading, the informants' attention would be alerted by the ringing of a bell at points in the text where grammatical ambiguities arose. At the end of the phrase in question a number was given, corresponding to the number of the cartoon drawing. At this point the informants would indicate their choice of cartoon drawing.

Results

The results will be briefly outlined in terms of the nine corresponding pairs of ambiguous statements. The appendix contains the results in a hierarchy of success rates for each group and compared with the results of the other group.

The Relative Clause

The relative clause was the subject at issue in **examples 1 and 11**.

Group 1

The group was presented with **example 1** as an example of a defining clause:

the boys who were playing football

Only 2 out of 26 chose the correct cartoon showing boys playing football being joined by a dog, while other boys are engaged in other sporting activities.- a 7.692% success rate.

Example 11 was presented as an example of a non defining clause:

the spectators | who could see that Alan had a new ball

11 out of the 26 chose the correct cartoon showing all the spectators seeing that Alan had a new ball- a 42.308% success rate

Group 2

The group was presented with **example 1** as an example of a non- defining clause:

the boys | who were playing football

18 out of 26 chose the correct cartoon showing only one group of boys - a 69.231% success rate

Example 11 was presented as a defining clause:

the spectators who could see that Alan had a new ball

16 out of 26 chose the correct cartoon, showing some of the spectators noticing that Alan had a new ball - a 61.538% success rate.

Two Successive Noun Phrases

Examples 2 and 4 involved two noun phrase in succession. Depending on the intonation, one phrase would be viewed as being in apposition to the other or not.

Group 1

The group was presented with **example 2** as an example of the second noun phrase being in apposition to the first:

so Dave called Alan | the new boy

22 out of 26 chose the correct cartoon showing Dave calling Alan's name - an 84.615% success rate.

Example 4 presented the second noun phrase as part of a list, rather than a phrase in apposition to the first:

the caretaker's wife | Alan's form teacher

11 out of 26 made the correct choice of cartoon, showing the caretaker's wife and Alan's form teacher as two characters - a 42.308% success rate. Interestingly 10 out of the 11 also made the correct choice for example 2.

Group 2

Example 2 was presented with the second noun phrase not as a phrase in apposition to the first:

so Dave called Alan the new boy

10 out of 26 chose the correct cartoon, showing Dave shouting the words 'new boy' to summon Alan - a 38.462% success rate.

Example 4 was presented with the second noun phrase in apposition to the first:

the caretaker's wife Alan's form teacher

24 out of 26 chose the correct cartoon, showing Alan's form teacher and the caretaker's wife as the same person - a 92.308% success rate.

The 10 who made the correct choice for example 2 also made the correct choice for example 4.

In the case of whether noun phrases are in apposition to each other or not the two groups were comparable in their response rate.

Report Clauses

Examples 3 and **6** involved reported speech, the issue being, what was actually reported.

Group 1

Example 3 was presented in such a manner that the phrase being reported followed the verb **tell**:

told Alan to make sure he hurried back

19 out of 26 chose the correct cartoon, showing the games teacher saying 'make sure you hurry back' - a 73.077% success rate.

Example 6 illustrated the reporting of the phrase which occurred before the verb **tell**:

I should have told him | to save time

5 Out of 26 chose the correct cartoon, showing the games teacher saying 'the boys will be wanting to get on with the match' -a 19.231% success rate

Of the five who made the correct choice for example 6, 3 also made the correct choice for example 3.

Group 2

Group 2 was presented with the same versions as Group 1.

In the case of example 3, 22 out of 26 made the correct choice - an 84.615% success rate.

For example 6, 7 out of 26 made the correct choice - a 26.923% success rate.

Of the 7 who made the correct choice for example 6, 6 also made the correct choice for example 3.

The Negative Domain

Examples 5 and 13 contained negative phraseology. The issue was what was being negated.

Group 1

Example 5 was presented in such a way as to indicate that the verb following the negation was not itself being negated:

Alan didn't stay in the shed because his teachers were in there

i.e. Alan did stay in the shed.

Only 4 out of 26 chose the correct cartoon, showing Alan staying in the shed - a 15.385% success rate.

Example 13 was an example where the verb following the negation was itself being negated:

he didn't want to play again | because of the rest of the team

16 out of 26 chose the correct cartoon, showing Alan with a thought bubble saying 'I don't want to play again' - a 61.538% success rate.

Of the 4 who chose the correct response for example 5, 3 also chose the correct response for example 13.

Group 2

Example 5 was presented to indicate that the verb following the negation was itself being negated:

Alan didn't stay in the shed | because his teachers were in there

26 out of 26 chose the correct cartoon, showing Alan outside the shed- a 100% success rate.

Example 13 was presented so that the verb following the negative phrase was not what was being negated:

he didn't want to play again because of the rest of the team

5 out of 26 chose the correct cartoon, showing Alan with a thought bubble saying 'I do want to play again' - a 19.231% success rate.

Viewing the category as a whole, the weakness in being able to correctly identify that the verb following the negative phrase was not what was being negated was comparable. However, the 100% success rate in interpreting cartoon 5 when the verb phrase is being negated might indicate that the cartoons showing Alan either in or outside the shed were easier to interpret by the candidates than those containing the thought bubbles.

Two Successive Verb Phrases

Example 7 and **8** involve the use of two verb phrases in succession. The issue is who or what is the subject of the second verb.

Group 1

Example 7 was presented to mean that the second of two nouns was the subject of the second verb:

the dog came back dropping the ball to be grabbed by the boys

21 out of 26 chose the correct cartoon, showing the boys grabbing the ball - an 80.769% success rate.

Example 8 was presented to mean that the first of two noun phrase was the subject of the verb:

he joined the group of spectators | shouting

15 out of 26 chose the correct cartoon, showing Alan doing the shouting- a 57.692% success rate.

Of the 15 who correctly responded to example 8, 14 had correctly responded to example 7.

Group 2

Group 2 was presented with the same versions as Group 1

For example 7, 21 out of 26 made the correct choice - an 80.769% success rate. (Exactly the same success rate as for group 1)

For example 8, 14 out of 26 made the correct choice - a 53.846% success rate.

Of the 14 who correctly responded to example 8, 12 also responded correctly to example 7.

It would appear that it was generally easier to identify when the noun closest to the verb is its subject. However, the design of the cartoons could also be a factor, as the cartoon containing the information for example 8, also contained that for example 9 (perhaps causing unnecessary confusion).

Transitivity of Verbs Followed by Direct Objects and Vocatives

Examples 9 and 18 are examples of verbs which can be used transitively or intransitively. In each case the verb is followed by a noun which could either be a direct object, making the verb transitive; or a vocative, making the verb intransitive.

Group 1

Example 9 was presented with an intransitive verb and a vocative:

kick | Dave

10 out of 26 chose the correct cartoon, showing Dave being urged to kick the ball - a 38.462% success rate.

Example 18 was presented as transitive verb and a direct object:

let's cheer Alan

19 out of 26 chose the correct cartoon showing Dave encouraging the team to cheer for Alan - a 73.077% success rate.

Out of the 10 who correctly responded to example 9, 9 also correctly responded to example

18.

Group 2

Group 2 was presented with the same versions as Group 1.

For **example 9**, 9 chose the correct cartoon - a 34.615% success rate.

For **example 18**, 25 out of 26 made the correct choice - a 96.154% success rate.

Of the 9 who made the correct choice for example 9, 8 also chose correctly for example 18.

The results of the two groups were comparable, with a significantly higher success rate when the verb is transitive. However, as mentioned in the case of example 8, the cartoon could also be affecting the results somewhat.

Transitivity and Pronouns

Examples 10 and **15** contain examples of verbs which can be used transitively or not depending on whether the pronoun is emphatic or reflexive.

Group 1

Example 10 was presented as a case of a transitive verb combined with a reflexive pronoun:

Dave felt like kicking himself

13 out of 26 chose the correct cartoon, showing Dave performing an act of kicking on his own body - a 50% success rate.

Example 15 was presented as a case of an intransitive verb with an emphatic pronoun:

I wonder if he's thinking about shooting | himself

23 out of 26 chose the correct cartoon, showing Alan thinking about shooting a goal - an 88.462% success rate.

Of the 13 who responded correctly to example 10, 13 responded correctly to example 15.

Group 2

Example 10 was presented as a case of an intransitive verb and an emphatic pronoun:

Dave felt like kicking | himself

16 out of 26 chose the correct cartoon, showing Dave about to kick the ball- a 61.538% success rate.

Example 15 was presented as a case of a transitive verb and a reflexive pronoun:
I wonder if he's thinking about shooting himself

3 out of 26 chose the correct cartoon, showing Alan taking a gun to his head - an 11.538% success rate.

Of the three that responded correctly to example 15, 3 responded correctly to example 10.

While in both groups the success rate for intransitive verbs combined with emphatic pronouns was higher than that of transitive verbs and reflexive pronouns, the responses of group 2 might indicate that logic was being applied over what was actually heard. The examples might be considered to be at fault.

Transitivity of the First of Two Verbs

Examples 12 and **17** contain examples of two verbs following each other. In each case the first verb can either be transitive or intransitive.

Group 1

Example 12 was presented so that the first verb was used transitively:
chewing and biting his nails

21 out of 26 chose the correct cartoon, showing Alan chewing his nails and biting his nails - an 80.769% success rate.

Example 17 was presented so that the first verb was used intransitively:
clapping and thumping him on the back

17 out of 26 chose the correct cartoon, showing the team clapping their hands and thumping Alan on the back - a 65.385% success rate.

Out of the 17 who made the correct choice for example 17, 16 also made the correct choice for example 12.

Group 2

Group 2 was presented with the same versions as Group 1.

For **example 12**, 22 made the correct choice - an 84.615% success rate

For **example 17**, 15 chose the correct cartoon - a 57.692% success rate.

Of the 15 who chose correctly for example 17, 13 also chose correctly for example

Adjuncts of Comment and Manner

Examples 14 and **16** contain adjuncts which could be viewed as being either of comment or of manner.

Group 1

Example 14 was presented as an adjunct of comment:

he didn't tell me | honestly

16 out of 26 chose the correct cartoon, showing Alan saying 'I'm telling the truth' - a 61.538% success rate.

Example 16 is presented as adjunct of manner:

Alan didn't come happily

25 out of 26 chose the correct cartoon, showing Alan arriving but not looking happy about it - a 96.154 success rate.

Of the 16 who chose correctly for example 14, 15 also chose correctly for example 16.

Group 2

Example 14 was presented as an adjunct of manner:

he didn't tell me | honestly

18 out of 26 chose the correct cartoon, showing Dave saying 'I think he's lying' - a 69.231% success rate.

Example 16 was presented as an adjunct of comment:

Alan didn't come | happily

3 out of 26 chose the correct cartoon, showing Alan not coming and the rest of the team being happy about the situation - an 11.538% success rate.

Of the 3 who chose correctly for example 16, all 3 responded correctly for example 14.

Analysis of results

An analysis of the results reveals that both groups had similar success rates for ten out of the eighteen examples. Of the eight cases where they differed, six could be considered as three corresponding pairs. In all these six cases the informants had been presented with a different rendition of the text and therefore had to choose a different cartoon to indicate their understanding:

1) Defining and non-defining relative clauses

Group 1's success rate in identifying the relative clause was considerably lower than that of group 2's (group 2's rate of success was 700% higher). Group 1 was presented with two cartoons showing boys playing football. In one cartoon there were other groups of boys engaged in other forms of sporting events. Choice of the cartoon with two groups of boys would indicate that they had correctly identified the defining relative clause. Group 2's identification of the defining relative pronoun was based on two cartoons showing Alan with a new ball. In one cartoon all the spectators notice this fact, whereas in the other cartoon only some of them do so.

It seems unlikely that the members of group 1 were not aware of the possibility that the relative clause can indicate the presence of more than one group of people because when presented with a similar choice where they needed to identify a non-defining relative clause, 57.692% incorrectly chose the cartoon showing two groups of people, one pointing at Alan and one not.

It would appear that it was easier to spot a defining relative pronoun when presented with the cartoon of some spectators in a group pointing at Alan than the cartoon showing the dog joining the boys playing football as opposed to the boys doing other forms of sports. When the cartoons were in preparation, the cartoon of the boys on the sports field was the hardest one to get right. It might be that there was too much going on in the picture for the informants to get the point. The cartoon which showed only one group of boys was more focused on the boys football game and may have attracted the attention of the informants more readily as in either rendition the boys around whom the text revolved were playing football.

Both groups had a higher success rate spotting the non-defining relative clause, although again group 2's success rate was higher than group 1's. This may again be due in part to the focus of the cartoon.

2) Transitivity of verbs with reflexive and emphatic pronouns

Group one was presented with a rendition whereby the correct choice of cartoons were Dave kicking his own body (transitive verb and reflexive pronoun) and Alan shooting a goal (intransitive verb and emphatic pronoun). The correct choices for group 2 were Dave attempting to kick the ball (intransitive verb and emphatic pronoun) and Alan taking a gun to his head (transitive verb and reflexive pronoun).

Group 1's success rate for the transitive verb and reflexive pronoun was 333% higher than group 2's. While there was uncertainty about the choice of cartoon showing Dave attempting to kick a ball as opposed to Dave kicking his own body by group 1, the majority of group 2 incorrectly chose the cartoon of Dave shooting a goal as opposed to the cartoon showing him with a gun to his head.

In the case of the intransitive verb and the emphatic pronoun, again group 1's success rate was higher than that of group 2 (43.752% higher) While the choice of Dave attempting to kick a ball as opposed to Dave kicking his own body was again debateable, the choice of Alan shooting a goal as opposed to Alan taking a gun to his head seemed again to be the more logical choice.

The differences in results for the two groups seems to be as a consequence of the cartoon of Alan taking a gun to his head. In hindsight this choice of example was not so good, as by now the storyline has concentrated solely on football, the introduction of a gun might not appear so logical even if the intonation pattern allows for it.

3) Adjuncts of comment and manner

Group 1 was presented with a rendition whereby the correct cartoons were of Dave saying 'I'm telling the truth' (adjunct of comment) and Alan coming but not looking happy about it (adjunct of manner). Group 2 was presented with a rendition whereby Dave has a thought bubble saying 'I think he's lying' (adjunct of manner) and Alan not coming and the rest of the team looking happy about it (adjunct of comment). Group 1 seemed to have more success than group 2 in both choices.

Group 1's success rate was 433% higher than that of group 2 in the case of the adjunct of comment while in the case of the adjunct of manner group 1's success rate was higher by 39%. Interpreting this with respect to the choice of cartoon, the informants were more inclined to chose the cartoon depicting Alan coming although not happily than they were to chose Alan not coming at all. This resulted in a high success rate for group 1 in terms of the object of manner and a low success rate for group 2 in terms of the adjunct of comment. The cartoons depicting Dave discussing his conversation with Alan seemed to be more open to debate, resulting in group 1's success rate for the adjunct of comment being similar to group 2's success rate for the adjunct of manner.

From the point of view of the cartoons showing Alan coming, but not happily and Alan not coming and the other members of the team looking happy, it would appear that it is easier for Chinese students to understand this sentence in terms of the adjunct applying to the subject of the preceding phrase – an adjunct of manner. This, however, was not endorsed by the cartoons showing Dave telling his team mates that he was telling the truth (adjunct of comment) and Dave thinking that Alan was lying (adjunct of manner). For the results to correspond with the aforementioned cartoons it would be expected that most of the informants would chose the cartoon showing Dave thinking that Alan was lying. It is possible that the cartoons caused confusion. Following the text Dave is at this point talking

to his team mates and not to Alan. It might be that some of the informants chose the cartoon showing Dave talking to his team mates as opposed to Dave talking to Alan based on the situation rather than on what he was saying or thinking. This would result in less of the informants viewing the word honestly as applying to the subject of the preceding phrase as they did in the corresponding example.

4) The negative domain

In the case of the negative verb negating the following phrase, the informants had also been presented with a different rendition. In this case group 2's success rate was 100%. They had been presented with two cartoons, one showing Alan inside the shed and the other showing him outside the shed. Group 1 had the choice of Alan's thought bubble saying 'I do want to play' and a thought bubble saying 'I don't want to play'. It might be that the use of text was more confusing than a straight forward picture, especially as there was only the difference of one word in the text. However, group 2 seemed to be fairly consistent when deciding between these two cartoons, all be it wrongly.

5) Transitive Verb and Direct Object

In the case of the transitive verb and the direct object, the success rate for group 2 was 31.5% higher. In this case both groups had received the same rendition of the text. In fact both groups scored quite highly, with group 1 having a 73.077% success rate and group 2 a 96.152% success rate.

Intonation teaching

After the test each group was given some basic lessons in intonation, focusing on the trio of tonality, tonicity and tone. It was not purpose of the teaching to cover every issue of ambiguity, but rather to ascertain whether a basic knowledge of what is involved in the intonation system of English would enable the informants to make a more correct judgement.

Teaching focused on the ability to discern both the tonic syllable in any given phrase and also the number of pieces of information being conveyed.

In the course of the teaching programme, some of the ambiguities were covered, but no reference was made to the corresponding ambiguities in the text. The examples given were:

I gave the book to my brother who lives in Guangzhou (relative clause)

I washed and brushed my hair (transitivity of two successive verbs)

I didn't go to the museum today because it was raining (negative domain)

Also covered was the intonation involved when listing items. This could have some bearing on the issue of whether nouns are in apposition or not.

After this period of teaching the two groups were tested again. The overall success rate was not much greater than it had been on the first occasion although there were changes in the distribution of successful responses.

Group 1

29.915% of the responses changed between test 1 and test 2. Of those changes 49.286% were changes from an incorrect to a correct response, while 50.714% were changes from a correct response to an incorrect response. The most significant of these changes are outlined below:

Defining and non-defining relative clauses

The success rate for the defining relative clause rose by 250% from 7.692% to 26.923%, while the success rate for the non-defining relative clause fell from 42.208% to 23.077%. Of the seven informants who chose the correct cartoon for the defining relative clause, five chose incorrectly for the non-defining relative clause. Neither of the two informants who had responded correctly the first time responded correctly on the second occasion. One of those two had on the first occasion given the correct response for both defining and non-defining clauses, but on the second occasion both responses were incorrect.

The negative domain

The issue of what the negative phrase is negating is obviously a difficult one for a student of English to comprehend. The overall success rate for the case of the negative phrase negating something other than the following phrase remained the same at 15.385%. Of the four who responded correctly in the first test, two also responded correctly on the second occasion. One of these informants also responded correctly on both occasions to the corresponding issue of the negative phrase negating the following phrase.

The change which occurred in this area was a 25% fall in the number of correct responses to the negative phrase negating the following phrase. This might be as a result of an increased awareness that the phrase could have more than one meaning.

Transitivity with vocatives and direct objects

In the case of the transitive verb with the vocative and the intransitive verb and the direct object, the success rate for both rose. (40% and 21% respectively)

Noun phrases in apposition

While the success rate for the noun phrases not in apposition rose, the rate for those in apposition fell.

The overwhelmingly high success rate for the case of the two noun phrases in apposition in test 1 (84.615%) might again have been a direct result of the cartoons. The case of the two noun phrases in apposition was portrayed by means of a cartoon showing Dave summoning Alan by using his name. The alternative cartoon which portrayed two noun phrases not in apposition showed Dave summoning Alan by calling him 'new boy'. The choice of the first cartoon might appear more logical. The 13.6% fall in correct responses could be due to a growing awareness that both options are in fact possible.

In the case of the two noun phrases not in apposition there was a 27.271% rise in success rate. To indicate a correct understanding of this issue, the informants were required to choose between a cartoon showing two teachers and another showing three teachers. In the first cartoon, the caretaker's wife and Alan's form teacher were one and the same person whereas in the second cartoon they were two separate people. It had been anticipated that the **'the caretaker's wife Alan's form teacher and the other games teacher'** would be more readily understood as being three people. However, in the first test only 42.308% of informants answered correctly. In the second test the correct response rate was 53.846%. Again on looking at the cartoons as a whole it is possible that the informants were influenced to choose the cartoon showing two teachers present, because the following cartoon concerning whether Alan did or did not stay in the shed showed two teachers in the shed. The teaching on intonation would appear to have resulted in at least some informants listening to what was actually being said and discerning the presence of more than one unit of information.

Group 2

23.504% of the responses changed from test 1 to test 2. Of those changes, 56.364% were changes from an incorrect to a correct response, while 43.636% were changes from an incorrect to a correct response. The significant changes are listed below:

Adjunct of comment

As noted previously, the success rate for correct recognition of the adjunct of comment was significantly lower than that of group 1. Following the period of teaching the success rate rose by 167% from 11.538% to 30.769%. There was no corresponding change in success rate for the adjunct of manner.

The negative domain

In the case of the negative phrase negating something other than the following phrase, the success rate rose by 140% from 19.231% to 46.154%.

Defining Relative Clause

There was a 25% rise in the number of correct responses to the issue of the defining relative clause, from 61.538% to 76.923%. Unlike group 1 there was no significant corresponding change to the success rate for the non-defining clause.

Recommendations

The purpose of the cartoons in the testing of the students comprehension was to help them, not confuse them. However, it appears that in a number of cases the informants were not sure as to the meaning of the cartoon. It is therefore suggested that the results of the test be authenticated by testing a group of a similar level of English using the following simple form of multiple choice questioning:

- 1) How many groups of boys were there?
 - A) one
 - B) More than one

- 2) What did Dave call Alan?
 - A) The new boy
 - B) Alan

- 3) What did the games teacher say to Alan
 - A) The boys will be wanting to get back to the match
 - B) Make sure you hurry back

- 4) How many people (apart from Alan) were in the shed?
 - A) Three
 - B) Two

- 5) Did Alan stay in the shed?
 - A) Yes
 - B) No

- 6) What did Dave wish he had told Alan
 - A) Save time
 - B) You don't have to ask for a new ball

- 7) What did the boys grab?
 - A) The dog
 - B) The ball

- 8) Who was shouting?
 - A) Alan
 - B) The spectators

- 9) What did the shouter/s want kicked?
A) Dave
B) The ball
- 10) What did Dave wish he had kicked?
A) The ball
B) Himself
- 11) Who saw that Alan had a new ball?
A) All the spectators
B) Some of the spectators
- 12) What was Alan chewing?
A) Gum
B) His nails
- 13) Did Alan want to play again
A) Yes
B) No
- 14) Did Alan give Dave a reason for being late?
A) Yes
B) No
- 15) What did the boys wonder if Dave were doing?
A) Shooting a goal
B) Shooting himself
- 16) Did Alan come?
A) Yes
B) No
- 17) What were the boys clapping?
A) Their hands
B) Alan's back
- 18) Who was Dave talking to?
A) The boys
B) Alan

In addition to authenticating the results of this test it is suggested that different groups of students be tested using a different text. The following text has been prepared in an effort to rectify some of the problems raised in the original text. The process of preparing the

original tape highlighted that although it is possible to say something it is not always easy for a native speaker to make the correct distinctions. Also, just because it is possible to say something, doesn't mean to say that we do. Normally in speech native speakers are aware of ambiguities and will clarify what they have said. In addition a native listener may ask a question to ensure correct comprehension of what has been said. With this in mind the examples of transitive verb and reflexive pronoun as opposed to intransitive verb and emphatic pronoun.

In the original text the examples of nouns being either in apposition or not in apposition were not exact opposites of each other. In the second text they are opposites.

Cartoons have been prepared to accompany the text. The cartoonist for the first test was a professional cartoonist. The cartoonist for the second test is herself a student of English and prepared the cartoons from the viewpoint of a student. In addition to the cartoons a series of questions have been prepared as an alternative method of testing.

The text

a) students who were studying English

The

b) students who were studying English

had a problem.

a) Rosie | the secretary and Jean

They sent

b) Rosie the secretary and Jean

to arrange a meeting of the staff student panel.

a) to discuss the problem | in the common room

The students wanted

b) to discuss the problem in the common room

a) left the panel | to investigate the issues raised

Rosie and the head mistress

b) left the panel to investigate the issues raised

a) to read | and write her report

After the meeting Rosie went to the library

b) to read and write her report

a) The lecturer didn't arrive happily

The bell went for class.

b) The lecturer didn't arrive | happily

The next day the students were holding a meeting.

a) didn't go because she felt under pressure

Rosie

b) didn't go | because she felt under pressure

she really needed to solve the problem.

At four o'clock Rosie went to the headmistress' office.

a) The headmistress an English expert and Rosie

b) The headmistress | an English expert and Rosie

Discussed the matter for a long time.

a) left the headmistress to make up her own mind

Finally Rosie

b) left the headmistress | to make up her own mind

By now it was late

a) e-mail the students to avoid another meeting

Rosie would have to

b) e-mail the students | to avoid another meeting

a) cooked | and ate her breakfast

In the morning Rosie

b) cooked and ate her breakfast

As she was eating she remembered the last meeting she remembered the last meeting.

a) why don't you answer | Rosie

Everybody was shouting

b) why don't you answer Rosie

a) left that meeting sadly

She had

b) left that meeting | sadly

Perhaps another meeting like that could be avoided.

a) didn't rush to school | because of the meeting

She

b) didn't rush to school because of the meeting

she needed to speak to Jean

Rosie knew that some students might be chosen to go to France.

- a) told Jean to start a rumour**
She
b) told Jean | to start a rumour

When she entered the common room later, the students were discussing who should be sent.

- a) we will have to choose Rosie** said Jean
b) we will have to choose | Rosie

Accompanying Questions

- 1) Were all the students studying English
 - A) Yes
 - B) No
- 2) How many people were sent to arrange the meeting?
 - A) One
 - B) Two
- 3) Where did the problem take place?
 - A) Don't know
 - B) In the common room
- 4) Who investigated the issues?
 - A) Rosie and the headmistress
 - B) The panel
- 5) What was Rosie reading?
 - A) Her report
 - B) Something other than her report
- 6) Did the lecturer arrive?
 - A) Yes
 - B) No

7) Did Rosie go to the meeting?

- A) Yes
- B) No

8) How many people discussed the problem?

- A) Two
- B) Three

9) Who was making up her mind?

- A) Rosie
- B) The headmistress

10) Did Rosie

- A) write the words 'avoid another meeting' in her e-mail?
- B) Hope that her e-mail would result in the avoiding of another meeting?

11) What did Rosie cook?

- A) Her breakfast
- B) Don't know

12) Whose answer was wanted?

- A) The students'
- B) Rosie's

13) Who was sad?

- A) The students
- B) Rosie

14) Did Rosie rush to school?

- A) Yes
- B) No

15) What did Rosie tell Jean

- A) Some students might be chosen to go to France
- B) Start a rumour

16) Who was Jean talking to?

- A) The students
- B) Rosie

Conclusions

It would appear that as with native speakers of English, students of the language make many of their decisions as to meaning based on the logic of the situation. However, unlike native speakers in many cases these students are not always aware that there might be more than one logical choice. While a native speaker might ask for clarification if the situation could have more than one meaning, a student might not do so and hence completely misunderstand the situation.

More research needs to be done to determine to what extent students can make choices as to meaning based on their understanding of intonation patterns.

Appendices

Comparison of groups 1 & 2

Group 1 (Test 1)

- 1 Defining relative clause - 7.692%
- 2 Negative phrase negating item other than following verb - 15.385%
- 3 Reporting of phrase prior to the reporting verb - 19.231%
- 4 Intransitive verb and vocative - 38.462%
- 5 Non-defining relative clause - 42.308%
- 6 Two noun phrases not in apposition - 42.308%
- 7 Transitive verb and reflexive pronoun - 50%
- 8 First noun phrase subject of second verb - 57.692%
- 9 Adjunct of comment - 61.538%
- 10 Negative phrase negating following verb - 61.538%
- 11 Intransitive verb preceding a transitive verb - 65.385%
- 12 Reporting the phrase following reporting verb - 73.077%
- 13 Transitive verb and direct object - 73.077%
- 14 Second noun phrase subject of second verb - 80.769%
- 15 Transitive verb preceding a transitive verb - 80.769%
- 16 Two noun phrases in apposition - 84.615%
- 17 Intransitive verb and emphatic pronoun - 88.462%
- 18 Adjunct of manner - 96.154%

Group 2 (Test 1)

- Adjunct of comment - 11.538%
- Transitive verb and reflexive pronoun - 11.538%
- Negative phrase negating item other than following verb - 19.231%
- Reporting of phrase prior to the reporting verb - 26.923%
- Intransitive verb and vocative - 34.615%
- Two noun phrases not in apposition - 38.462%
- First noun phrase subject of second verb - 53.846%
- Intransitive verb preceding a transitive verb - 57.692%
- Defining relative clause - 61.538%
- Intransitive verb and emphatic pronoun - 61.538%
- Non-defining relative clause - 69.231%
- Adjunct of manner - 69.231%
- Second noun phrase subject of second verb - 80.769%
- Transitive verb preceding a transitive verb - 84.615%
- Reporting the phrase following reporting verb - 84.615%
- Two noun phrases in apposition - 92.308%
- Transitive verb and direct object - 96.152%
- Negative phrase negating following verb -100%

The combined results for both groups are as follows:

Groups 1 & 2 Combined (Test 1)

- 1 Negative phrase negating item other than following verb - 17.308%
- 2 Reporting of phrase prior to the reporting verb - 23.077%
- 3 Transitive verb and reflexive pronoun - 30.769%
- 4 Defining relative clause - 34.615%
- 5 Adjunct of comment - 36.538%
- 6 Intransitive verb and vocative - 36.538%
- 7 Two noun phrases not in apposition - 40.385%
- 8 Non-defining relative clause - 55.769%
- 9 First noun phrase subject of second verb - 55.769%
- 10 Intransitive verb preceding a transitive verb - 61.539%
- 11 Intransitive verb and emphatic pronoun - 75%
- 12 Reporting the phrase following reporting verb- 78.846%
- 13 Negative phrase negating following verb - 80.769%
- 14 Second noun phrase subject of second verb - 80.769%
- 15 Transitive verb preceding a transitive verb - 82.692%
- 16 Adjunct of manner - 82.692% 18, 12
- 17 Transitive verb and direct object - 84.615%
- 18 Two noun phrases in apposition - 88.462%

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- 18 Adjunct of manner - 96.154%

Group 2 (Test 1)

- 1 Adjunct of comment - 11.538%
- 2 Transitive verb and reflexive pronoun - 11.538%
- 3 Negative phrase negating item other than following verb - 19.231%
- 4 Reporting of phrase prior to the reporting verb - 26.923%
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- 18 Negative phrase negating following verb - 100%

Group 1 (Test 2)

- Negating phrase negating item other than following verb - 15.385%
- Reporting of phrase prior to the reporting verb - 19.231%
- Non-defining relative clause - 23.077%
- Defining relative clause - 26.923%
- Transitive verb and reflexive pronoun - 46.154%
- Negative phrase negating following verb - 46.154%
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Group 2 (Test 2)

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- Defining relative clause - 76.923%
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- 16 Adjunct of manner - 82.692%
- 17 Transitive verb and direct object - 84.615%
- 18 Two noun phrases in apposition - 88.462%

Group 2 (Test 2)

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- Two noun phrases not in apposition - 30.769%
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- Negative phrase negating following verb - 92.308%
- Transitive verb and direct object - 92.308%

Groups 1 & 2 Combined (Test 2)

- Reporting of phrase prior to the reporting verb - 19.231%
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- Reporting the phrase following reporting verb - 80.769%
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- Two noun phrases in apposition - 82.693%
- Transitive verb and direct object - 90.37%

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