

## MENTAL REPRESENTATION OF ENGLISH COMPLEX NOMINALS BY SPANISH SPEAKERS

**Paula Jullian**

Pontificia Universidad Católica de Chile

### INTRODUCTION

The structure of the Noun Phrase (NPh) in English and in Romance languages differ considerably. Nominal groups<sup>1</sup> in English accept numerous modifiers preceding the head Noun, and so have the capacity to condense large amounts of information in few words. Romance languages, on the contrary, do not resort regularly to this lexico-grammatical device to condense information as pre-head modifiers, but convey it more explicitly by means of: adjectives (before and/or after the phrasal head), prepositional/adjective/adverbial phrases or relative/explicative clauses after the head noun.

As the example below shows, in English, all the information modifying the noun head appears in a predicative position, whereas in Spanish (which I will refer to in this article) the same information may be conveyed in numerous different ways:

A <u>great</u> problem	= Un <u>gran</u> problema
A <u>difficult</u> problem	= Un problema <u>difícil</u>
A <u>money</u> problem	= Un problema <u>de dinero</u>
A <u>knee</u> problem	= Un problema <u>en /de /a la rodilla</u>
A <u>growing</u> problem	= Un problema <u>que va en aumento</u>
A <u>never-ending</u> problem	= Un problema <u>eterno</u>
A <u>serious political</u> problem	= Un <u>serio</u> problema <u>político</u>

---

<sup>1</sup> For this paper I followed Quirk *et al.* (1985) definition of Noun Phrase.

This English/Spanish lexico–grammatical divergence causes much trouble to Spanish speaking ESL learners, even to those speakers with a considerably good command of English.

In addition, in English, the pre-modifiers follow the principle of iconic proximity, which states that elements which have a closer relationship, or are more constituent elements of the head must be placed closer to the noun than its characterisation or evaluation (see Ungerer & Schmid 1996). Obviously, the more elements such sequences have, the more trouble they cause to non-native speakers of English. For example:

*A very nice informal unprecedented end-of-the-school-year class CELEBRATION.*

could be translated as follows, or in many other ways:

*Una simpática CELEBRACIÓN de curso, muy informal y sin precedentes, para celebrar el fin de año escolar.*

The word order of the noun phrase in Spanish is much more flexible, as this principle does not apply to Spanish, as rigidly as to English. Hence ESL learners fail in the proximity of the iconic representation of the elements.

However, despite the difficulty the interpretation of complex NPhs entails, most Spanish speaking ESL learners eventually manage to interpret them. However, they hardly ever acquire the reverse skill to construct them. Their performance shows a strong tendency to avoid their production, and when produced, they are usually paraphrased in the Spanish fashion, displaying a clear Spanish word order transference<sup>2</sup>. (See Odlin, 1989: 96)

## THE STUDY

The present study intended to explore the interference of Spanish word order in the comprehension and production of English complex nominals. In this piece of research, the hypothesis is that the mastery of the receptive skill to decode these units, is very seldom accompanied by the productive skill to encode them. To do so, a group of advanced learners and highly proficient ESL speakers were induced to produce such units, by means of a guided activity.

<sup>2</sup> For a good discussion on a current approach on language transfer see Jarvis, 2000, who states that the term transfer is rather arbitrary, and that it has been used quite inconsistently in language transfer research.

The point to test was, whether the participants would be able to reconstruct complex nominal sequences, immediately after reading them. It was attempted to work out whether the mental representation of such sequence was stored in its original English grammar or if it was paraphrased into Spanish.

The activity set the learners in a situation where they were pseudo-forced to reproduce two complex NPhs they had just read, anticipating that immediate recall would facilitate their literal reproduction.

This minor piece of research sought to reveal the way Spanish speaking EFL learners process complex NPhs as opposed to native speakers of English, and to measure the impact of the subjects' L1 in the representation of such strings in the development of their L2 grammar.

## **PARTICIPANTS**

The participants were 78 third and fourth year BA students, from Pontificia Universidad Católica de Chile. Their academic curriculum includes four intensive semesters of English language, aimed at developing the four skills. Their levels of proficiency ranged from upper intermediate to advanced.

There was also a native speaker control group comprised by 17 American university students of the same age range, doing one academic semester in Chile. These subjects, chosen at random, were given the same task. They represented a smaller group, because it was not meant as a comparison group per se, but just as an indicator of the native speaker's conformity to the complex nominal form.

## **THE PROCEDURE**

The study was based on the data collected from learners from five different classes. The instrument, or rather stimulus material, consisted of a short text, which the participants had to read carefully. The passage, which briefly described the plot of a film, was self-contained and short enough to be partly memorised:

The film tells the story of a low-achieving primary school boy, who struggles his way through a dilapidated and discouraging state-run education system. He faces obstacles from his parents and teachers. However, no inconvenience manages to hinder his will to succeed in life. (*italics added*)

The subjects were asked to read it very attentively and try to learn it well (without saying by heart). They were allowed to ask vocabulary-related questions and make comments about it. A few minutes later, after being examined carefully, the slips of paper were collected, and they were asked to rewrite the passage, immediately as literally as possible, making special emphasis on trying to re-write it identically to the original.

The passage contained two long noun phrases, which were the ones that focused our attention. The objectives were to check:

1. what percentage of the learners would be able to reproduce the sequences completely,
2. how much of the information condensed in the nominal groups would appear in their original form, and
3. how much and which parts would be either be omitted or paraphrased.

## RESULTS

The participants completed the task without knowing what was being tested. They all seemed to have understood the nominal sequences, as no questions were asked about them. In fact, the questions only came from some vocabulary items, such as struggle, dilapidated, and hinder.

Although I worked with the two long NPhs, in this paper I will only report on the results of the first sequence, ... a low-achieving primary school boy..., as this one alone shed enough light to come to a few interesting conclusions. Besides, this NPh appeared on the first line, which facilitated its recalling better than the one placed later on in the text.

This syntagm was reproduced as follows:

- a) Nine participants provided the full sequence in the same order. (11.54%):
  - 7 ... a low achieving primary school boy...
  - 1 ... a low achieving primary education boy ...
  - 1 ... a low achievement primary school boy ...

- b) Eight participants omitted all three pre-modifiers and kept only the head (10.26%):  
 8 ... a boy ...
- c) Eleven participants omitted ONE constituent (14.10%):  
 7 ... a low achieving (primary) school boy ...  
 2 ... a low achieving primary(school) boy ...  
 2 (?) ... an (low) achieving primary school boy...
- d) Ten participants omitted TWO constituents (12.82%):  
 3 ... a low achieving ( primary school) boy ...  
 3 ... a low achievement (primary school) boy ...  
 2 ... a low achieving (primary school) student...  
 1 ... a (low achieving primary) school kid...  
 1 ... a (low achieving primary) school boy...
- e) Sixteen participants used prepositional phrases after the head noun<sup>3</sup> (20.51%):  
 3 ... a boy in primary school ...  
 3 ... a low achieving boy at school...  
 2 ... a low achieving child at school...  
 2 ... a boy of primary school ...  
 2 ... a boy in primary education...  
 1 ... a primary school boy with low achievement.  
 1 ... the low achievement of a primary school boy ...  
 1 ... a boy who studies in primary school...  
 1 ... a low achievement student in primary school.  
 1 ...a student of very low achievement...
- f) Thirteen participants used an explicative clause after the head (some made minor changes in the wording, such as the addition like little, student, who goes) (16.66%):  
 4 ... a primary school boy, whose achievement is low ...  
 2 ... a low achievement boy, who goes to primary school...  
 1 ... a low achieving boy who goes to primary school...  
 1 ... a boy who was a low achieving student...  
 1 ... a little boy who was a low achiever...

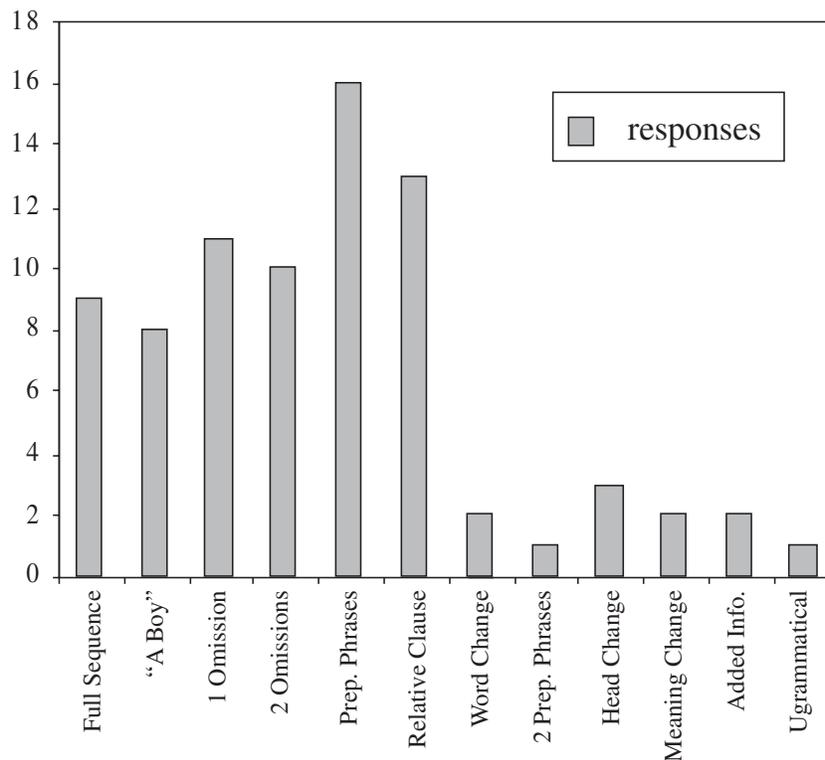
<sup>3</sup> In this section the focus was on the fact that they had made use of a prepositional phrase and ignored the fact that many of them also omitted some information.

\* This response was placed under relative clauses, even though it also fit under the prepositional phrase category.

- 1 ... a boy at school who was low achieving...\*.  
 1 ... a school boy who has low achievement...  
 1 ... a little boy who has low achievement at school...
- g) Two participants changed the wording but kept the meaning (2.56%):  
 1 ... a boy who had troubles at school ...  
 1 ... a child who doesn't do well at school...
- h) One participant paraphrased it with two prepositional phrases (1.28%):  
 1 ...the low achievement of a boy in primary school...
- i) Three participants changed the head noun (3.85%):  
 2 ... a low achieving boy school ...  
 1 ... a low primary school boy achieving ...
- j) Two participants changed the meaning (2.56%):  
 1 ... of a boy who goes to a low achieving school...  
 1 ... a low student boy...
- k) Two participants added information supposed by themselves (2.56%):  
 1 ... a poor boy...  
 1 ... a humble primary school boy...
- l) One participant produced an ungrammatical sequence (1.28%)  
 1 ... a low achieved boy ..

We disregarded the change of lexical items for near synonyms, such as boy for child and primary for elementary, school (countable) for education (uncountable in this context), provided that they kept the same grammatical category. The same criterion was applied for the substitutions of low achieving for low achievement, provided that it was used as an adjective.

The results showed that responses e), f), g), and h) followed in some way the Spanish grammatical pattern. That is an amount of 32 answers, what totals 41.02% of the replications.



The American participants on the other hand had no problem to reproduce such sequences. Their instances displayed omissions of some of the elements, but none of the other phenomena occurring in the experimental group corpus took place in the control corpus.

**FINDINGS**

The results shed some statistical evidence on this recurrent tendency of Spanish speaking ESL learners. These students showed a clear proneness to paraphrase the English NPhs into structures closer to the Spanish word order pattern-replacing the information which in English appears in an attributive position, for predicative syntagms, by means of prepositional phrases, or explicative clauses. An important number of them decomposed the NPhs into more phrases (e.g. the low achievement of a school boy).

But the outcome of the study also cast a few other interesting results/findings:

- 1) Despite the structural modifications, most of the participants kept all the information, and the meaning unaltered in their new

version. This seems to reveal that there was full retention of the message (and complex syntagms), despite the Spanish-like wording.

- 2) The repeated omission of some of the elements. This phenomenon, which appeared repeatedly in the control group as well, seems to be more a problem of attention and memorisation, rather than of cognitive processing or mental representation.
- 3) Basically all the new versions were grammatically correct despite being different from the model.
- 4) Many participants, who noticed the long strings and tried to reconstruct all the pre-modifiers identically, failed to replicate them correctly and made more severe mistakes than those who followed their L1 instinct (such as shifting the head noun). This is surprising as these learners were considerably good speakers, but apparently their desire to stick to the norm played against them.
- 5) None of those students who stuck to the English grammar and repeated the full sequence, altered the order of the constituents, violating the principle of iconicity. Some subjects simply omitted some of the elements, but no one shifted the order of the elements.
- 6) Those participants who replaced the word boy by student, omitted school; what may reveal the way learners process the implicit information of strongly marked terms such as school.

## DISCUSSION AND CONCLUSIONS

The study certainly presents numerous shortcomings<sup>4</sup>, but despite its limited range, it seems to assert more seriously what a teacher-intuition may suggest.

The Chilean learners seemed perfectly capable of decoding the complex sequences and retaining their message. Nevertheless, a significant number of them was unable to reconstruct them in their English manner. This may suggest that even at advanced levels, they formulated the mental representation of English phrases in terms of their mother tongue, especially the strings which differ substantially in the L1-L2.

---

<sup>4</sup> Mistakes such as the wrong choice of spelling *low-achieving* without a hyphen, what induced to instances such as ... *a (low) achieving primary school boy...* The hyphenated form *low-achieving*, would have certainly facilitated its recalling.

Even though the subjects managed to make sense of such long sequences, they do seem to be misled by them. These complex NPhs are very likely to make the reader lose from sight the head noun, because in Spanish it usually appears at the left; initiating the phrase.

Surprisingly, this L1 influence shows more at the phrase level than at the sentence level. The English–Spanish sentence word order does not differ dramatically, but at the phrase level they do. It is not surprising then, that these structures were the ones that suffered most change. The rest of the text, though, remained basically identical to the original version.

On the other hand, apart from the omissions, none of the Americans subjects produced any syntagm similar to the ones produced by the Chilean subjects. They ignored part of the information, but none reworded it or moved the pre–modifiers to a predicative position.

This point seems to confirm that even advanced Spanish speaking ESL learners handle these kind of units differently from native speakers, and also that the successful receptive skill to interpret such sequences, does not necessarily entail the reverse/inverse ability; namely, the skill to construct NPhs after the English word order. So for ESL teaching and learning purposes more work on these two different skills should be done.

## REFERENCES

- JARVIS, S. (2000). *Methodological rigor in the study of transfer: Identifying L1 influence in the interlanguage Lexicon*. *Language Learning*, 50: 2, pp. 245-306. June 2000.
- KIUPER, K. & ALLAN S. (1996). *An introduction to English Language*, London, Macmillan.
- ODLIN, T. (1989). *Language Transfer*. Cambridge, CUP.
- QUIRK, R., GREENBAUM, S., LEECH, G. SVARTVIK, J. (1985). *A comprehensive grammar of the English Language*. London, Longman.
- UNGERER, F. & SCHMID, J.H. (1996). *An introduction to Cognitive Linguistics*. London, Longman.