## COMPLEXITY IN THE HEADLINES OF THE TIMES OF LONDON (1970-1990) AT THE "SENTENCE" LEVEL

The purpose of this paper is to study "complexity" in the headlines of "The Times" of London at the "sentence" level. That is, to investigate in how far the "sentences" that form the headlines contain one or more subordinate clauses functioning as immediate constituents (Quirk et al. 1985: 719), what is the type of "complexity" that they show and the repercussions on style.

This aspect is of interest because one of the most common rules for headline writers states that the headline should be easy to understand. Thus, we must expect the structure of the headlines to be simple with a limited number of structural elements in each grammatical unit. However, does the theory correspond to the practice? In his article "Complex Sentence Structures in Headlines" A. Brisau seems to think so, as he comes to the conclusion that in the sample of headlines from "The Observer" that he examines "dependence is scarce" and "more complex structures than two very simple clauses linked together rarely occur" (1969: 31-38). The problem with his study is that no statistical justification is offered for the size and selection process of the corpus he bases his observations on; consequently, his findings are to be taken with certain caution.

In this paper, we shall study "complexity" in headlines to see if subordination is indeed scarce in a corpus of 6616 words corresponding to 1200 headlines from "The Times" of London, collected by statistical procedures so as to be representative of the period from 1970 to 1990. We shall only examine "complexity" in the headlines made up of clauses, leaving "complexity" within the headlines formed by non-verbal phrases for another paper.

Most studies about headlines have shown very little concern with the statistical justification of the samples they study. They don't offer much information about the criteria they may have followed when choosing the sample. As a consequence, there is no statistical way of knowing how reflective the results are of the relevant population or universe. And furthermore, this lack of information about the collection methods makes these works not replicable, making it impossible to test the results obtained.

On the contrary, in our project we were particularly concerned with sampling. We didn't want to focus merely on size. We wanted to collect a sample that reflected with reasonable accuracy the characteristics of the entire group, so that the results derived from it could be gener-

We have put "sentence" in inverted commas, because as we shall see, later on, in headlines the sentences can contain both a finite or non-finite verb functioning as main verb. The inverted commas are intended to mark the special nature of the sentences in headlines.

alised to the whole population of headlines from 1970-1990. Similarly, we wanted to avoid subjectivity in the selection process as, frequently, only those headlines that are particularly appealing are studied, ignoring others, which are equally important but less interesting.

We needed to know, then, how many headlines we had to study, how we had to choose them and -of course- how close our approximation was to the results we would have obtained if we had studied the entire population, that is the margin of error and confidence levels of our investigation. To solve these questions we decided to use Inferential Statistics techniques to provide us with the answers we needed.

After counting a random sample of headlines from issues of *The Times* in the Hemeroteca Nacional in Madrid we estimated the total population of headlines in the period (20 years) to be more than 20,000. We calculated, therefore, that for a confidence level z=2 95,5% the total number of headlines we had to analyse was 1,200, the margin of error being less than 3%.

As equally important as the size of the sample was the headline selection process, thus the next step was to choose the headlines as objectively as possible within the newspaper, within the different sections and finally on the page. For this, we used a combination of "simple random" and "stratified random sampling".

We figured out the n° of the newspaper to be studied in the following way: As we knew that the number of the first newspaper (01 January 1970) was 57748 and the number of the last one was 64015, we generated a table of random numbers from 1 to 6268 (that is the total population of newspapers published during 1970-1990). Then, we added the numbers in our table of random numbers to the publishing number of the first newspaper, and obtained, in this way, the number of the newspaper we specifically had to study. For example: the second number in our table of random numbers was 142, therefore we added 142 to 57.748 (the number of the first newspaper in the universe) and that gave us the number of the second issue to study: 57.890. Then, we continued with this process until all the members of the sample had been determined.

After that, we had to select the pages we would extract the headlines from. As we were interested in examining six sections within each newspaper, in particular: "Front page", "Home news", "The Arts", "Business", "Sport", "Letters to the Editor" we had to choose 6 pages from each issue, one from each section. As before, another table of random numbers 1 to 6 (maximum number of pages being 6, minimum 1) was consulted to do this task.

Finally, to choose the headline within the page we also used a table of random numbers. We prepared a grid dividing the page into sections numbered 1 to 12, and chose the headline nearest to the intersection marked with the number provided by the table of random numbers. Basically, this was the whole procedure we followed. As our time is limited we shall not dwell longer on this aspect and shall simply reiterate that our main aim was to avoid subjectivity and the choosing of a sample that allowed the generalization of the results to the entire population, with reasonable accuracy.

The problem, at this stage, was that we were facing the analysis of an overwhelming 6616 words. For this reason, we designed a Syntactic Database in Dbase IV to facilitate the processing and the calculations of the different structures. This simplified greatly the classification of the material and allowed us to carry out a deeper analysis that we would have been able to do manually.

Before having a look at the results of our research, it must be noted that one of the difficulties we face when studying headlines lies in their disjunctive nature, that is, in their belonging to what is called "block language", i. e. language restricted by space or temporal reasons.

Because of the special communicative needs of headlines and the obvious limitation on the space available, their grammar shows certain differences with respect to standard grammar that are not found in other registers. An important difference is that ellipsis affects this language a great deal more than others, particularly as far as omission of the verb "to be" is concerned. However, according to G. N. Leech (1966) the crux of the difference between disjunctive (block language grammar) and discursive grammar (standard grammar) is that:

in fully discursive grammar, minor and non-finite clauses are dependent; in fully disjunctive grammar they are independent ... It means, in effect, that in disjunctive language a sentence need not contain a finite predicator, and this in turn means that a single nominal group or a single adverbial group may be grammatically independent. Either of these groups may in turn consist of a single word. In other words, there is no limit to the simplicity of a grammatical unit." (1966: 93).

It must be noted, then, that the main verb in the sentence of a headline may be finite or non-finite and furthermore that structures without verbs can function with total independence. To account for these features, Leech distinguishes three categories: "finite clauses", "non-finite" and "minor clauses" without a verbal element. Bearing these distinctions in mind, we decided to apply similar categories to the analysis of the headlines in our sample as follows:

I. "VERBAL HEADLINES": headlines formed by clauses which contained either a finite or non-finite verb functioning as the main verb: 671 cases were found (55,92%).

II. "NON-VERBAL HEADLINES": made up of independent non-verbal phrases ("nominal, adjectival and prepositional"): of which we found 497 cases (41,42%).

II. 1 "NOUN PHRASES" (479 cases) 09 / 01 / 70 P. P. SPAIN'S TOUGH ANSWER TO HIJACKERS 20 / 05 / 87 P. P. KINNOCK VISION OF DICKENSIAN FUTURE

II. 2. "ADJECTIVE PHRASES" (8 cases)
15 / 03 / 90 ART. STRANGELY TENTATIVE
04 / 09 / 90 ART. IMPLAUSIBLE OR INEXPLICABLE?

<sup>&</sup>lt;sup>1</sup> We did not find any adverbial phrase functioning independently.

II. 3. "PREPOSITIONAL PHRASES" (10 cases) 29/06/71 ART. BY, ABOUT, AND FOR ADULTS 17/02/73 ART. OF MICE AND MEN

III. AND "SPECIAL CASES": headlines formed by combinations of non-verbal phrases ("nominal, adjectival and prepositional") and clauses joined without any explicit markers of coordination, subordination or commas. Only 32 cases were found (2.67%). These were problematic cases. Because of the high degree of ellipsis, it was difficult to make decisions about the status and grammatical relations between the structures involved.

03 / 06 / 75 ART. LUCA GIORDANO: CELERITY WAS THE MOTHER OF INVENTION 02 / 07 / 82 ART. TATI IN RETROSPECT: AFFECTIONS OF A MASTER CLOWN

The headlines in I "VERBAL HEADLINES" were further subdivided according to the special nature of the verbal form, as Leech does<sup>1</sup>, obtaining the following results:

- I. "VERBAL HEADLINES":
- I. "SIMPLE HEADLINES" (574 cases):
- I. 1. a Headlines formed by a "simple sentence".
  - 25 / 01 / 89 P. P. KIDNEY ROW TURK PLANS COURT ACTION<sup>2</sup>
- I. 1. b Headlines formed by clauses containing a non-finite verb as the main verb: 18 / 12 / 73 NAC. ANTI-FAULKNER MEN TO SEEK COUNCIL SEATS
- I. 1. c Headlines formed by an "independent subordinate clause": 17 / 09 / 83 DEP. WHY BRITISH DRESSAGE NEEDS DUTCH COURAGE
- I. 2. "COMPLEX HEADLINES" (83 CASES):
- I. 2. a Headlines formed by a "complex sentence".

06 / 01 / 78 P. P. YARD CHIEF SAYS PLO INVESTIGATION IS NOT WELCOME

- I. 2. b The verb of the "superordinate clause" is non-finite:
  - 11 / 08 / 08 NAC. SEVEN SAVED AFTER TUG CAPSIZES
- I. 3. "COMPOUND HEADLINES" (14 cases):
- I. 3. a Headlines made up of a "compound sentence":
  - 11 / 08 / 08 DEP. VICTORY IS LIGHTER BUT HER LOAD IS HEAVIER
  - 19 / 06 / 82 P. P. FURIOUS ASLEF CHIEF CONCEDES DEFEAT AND CALLS OFF STRIKE
- I. 3. b Headlines in which either one or both main verbs are non-finite:

Leech analyses the following headlines from "The Times" 23-07-1964 in the following way: CURFEW / RE-NEWED / IN SILENT SINGAPORE (S Pn A); RIOTS DEATH TOLL / NOW / EIGHT (S A C); NEWSPAPER / TO HAND / OVER / PHOTOGRAPGH (S Pn A C); TORY POLITICAL CENTRE CHIEF / LEAVING (S Pn). The meaning of the abbreviations used is S= subject / C= complements / P= finite verbs / Pn= non-personal verbs / A= adverbial group or adjuncts.

<sup>&</sup>lt;sup>2</sup> The following abbreviations mean: "PP"= Front Page, "NAC"=Home News, "DEP"=Sport, "ART"= The Arts, "CD"= Letters to the Editor, "ECO"= Business.

- 17 / 07 / 73 DEP. YORKSHIRE SPUN OUT FOR 43 AND BEATEN IN TWO DAYS BY SUR-REY
- 19 / 06 / 82 ECO. SHIPYARD LOSSES CUT TO &25M BUT NEW SLUMP THREATENS

As can be seen, most of the headlines in the sample are "simple". Only 12.37 % of the verbal headlines are "complex"; the percentage for the total sample being even smaller 6.91 %.

It must be made clear that when we say "complex" we are using this term after Quirk et al. (1985). They include "complex sentences" within "multiple sentences", and describe a "complex sentence" in the following way: "In a complex sentence one or more of its elements such as direct object or adverbial, are realised by a subordinate clause" (1985: 719).

In this sense, the headline: DR OWEN SAYS BRITAIN CANNOT INTERVENE OVER SAUDI ARABIAN FLOGGINGS can be said to be complex since the subordinate clause functions as the direct object in the sentence. On the contrary, the headline UNIVERSITY CHIEF WHO PROSTITUTED REPUTATION FINED IN HEATING CASE is simple, because it does not have another clause realising any of the sentence functions (S, O, A, Cs, Co). The clause WHO PROSTITUTED REPUTATION functions within a phrase, thus, in this case, we can speak of complexity at the level of the phrase but not at the level of the sentence or clause.

21 / 03 / 80 Nac. University Chief who "prostituted reputation" fined in Heating Case

The following are examples of typical complex headlines in our sample:

- 18 / 06 / 77 P. P. ATTORNEY GENERAL REFUSES TO ACT OVER POSTAL BAN
- 27 / 08 / 73 NAC. HOVE "NOT A BAD PROSPECT" OFFICIALS TELL MR THORPE
- 11 / 08 / 08 NAC. SEVEN SAVED AFTER TUG CAPSIZES
- $16\,/\,11\,/\,70$  NAC. MASS USE OF TELEVISION URGED TO HELP TO EASE THE SHORTAGE OF TEACHERS

Let's move on now to the different types of complexity that our headlines show. Subordinate clauses can be classified according to their:

- a)"Structural type": as "finite clauses", "non-finite clauses", and "verbless clauses". (Quirk et al. 1985: 992 ff.).
- b) And their function in the "superordinate clause" as subject, direct object, etc. (Quirk et al. 1985: 1047).

As far as the former is concerned, we found 42 cases of subordinate "finite clauses" (that is 50.6 % of all the complex headlines), 40 cases of "non-finite clauses" (that is 48.19 % of the complex headlines), and only one case of a "verbless clause". Nominal finite clauses were one of the most frequent patterns -with 24 cases found:

03 / 12 / 90 P. P. ODDS ON A WAR ARE 50-50 SAYS SADDAM 25 / 04 / 88 NAC. ANXIOUS MPS SAY SCIENTISTS NEED MORE HELP

Within non-finite clauses, infinitive clauses were the most common ones, as we only found three cases of "ing clauses" and not a single one of "ed participle clauses":

01/12/75 ECO. UPHILL GOING BECOMES HARDER FOR EQUITIES 02/10/74 NAC. MR THORPE ADMITS WAGE FREEZE BEING CONSIDERED

As regards their function in the "superordinate clause", complexity appears mainly in the functions of direct object (52 casos 62.65 %) and adverbial (29 cases 34.94 % of the complex headlines), being practically insignificant in the other functions. The main types of clauses realising the "direct object" function were 27 infinitive clauses and the 24 nominal finite clauses we mentioned before:

29 / 06 / P. P. MR WILSON PLANS TO BLOCK EARLY COMMITMENT ON MARKET ENTRY 30 / 11 / 90 NAC. BITTER "LOYALISTS" SEEK TO UNSEAT CRITCHLEY

Adverbial clauses were the other major group. Infinitive clauses of purpose, temporal finite clauses and clauses with "as" as a "reason subordinator" were the main types found here.

10 infinitive clauses of purpose:

68 127 P. P. TRIPOLI SENT NEW PROPOSALS TO END LONDON SIEGE 69 91 P. P. EUROPE LEADERS PLAN \$50,000 M FUND TO STABILIZE CURRENCIES 4 temporal finite clauses:

29 / 06 / 73 DEP. IRELAND START DISASTROUSLY WHILE ENGLAND KEEP STEADY 08 / 02 / 89 P. P. WARNINGS ON TOWERS GO OUT AFTER LEGION VICTIM DIES

And 12 cases of clauses with "as" as a reason subordinator:

18 / 04 / 78 P. P. OWEN-VANCE MISSION HAS MINOR SUCCESS AS SALISBURY LEADERS AGREE TO CONSIDER ALL

31 / 07 / 71 DEP. NEW ZEALAND STUNNED AS LOCHORE IS RECALLED

As can be seen from the above examples, the complexity we found in our sample was of a very simple nature. Even though English has structures which are very suitable for compactness and brevity such as "ed" y "ing non-finite clauses" they were not used often.

A final type of complexity that might be mentioned here is the type of non-standard "complexity" that we found in some headlines included in the group we called "special cases". Because these cases were highly affected by ellipsis, the grammatical relations between them were not easily inferred. For example, in some cases, it was difficult to decide if there was a relation of subordination or coordination between the structures. In 16 cases the headlines were formed by combinations of phrases, in 15 cases they were made up of combinations of phrases and clauses and only in one case there were two clauses joined by a colon. Here are some examples to illustrate what we mean:

Combinations of phrases:

 $24\,/\,06\,/\,77$  C. D. FREEDOM FOR EMPLOYEES: THE CONFLICT AT GRUNWICK  $14\,/\,12\,/\,74$  ART. JOHN TYDEMAN: LEAR FOR THE EAR

Combinations of phrases and clauses:

- 17 / 07 / 73 ART. BETTER AT BARNS: WHEN INIGO JONES TURNED HIS HAND TO ARCHITECTURE  $^{\rm l}$
- 29 / 06 / 73 NAC. BIRMINGHAM THREAT OF LEGAL ACTION AFTER MINISTER CUTS DOWN ALL-IN SCHOOLS PLAN
- 26 / 10 / 76 NAC. PSYCHOLOGY: HOW MACHINES HEAR MUSIC
- 03 / 06 / 75 ART. LUCA GIORDANO: CELERITY WAS THE MOTHER OF INVENTION

Disregarding the combinations of phrases, the combinations in which there was at least one clause only accounted for 16 cases, hence should any other researcher wish this figure may be added to the percentage of "complex" headlines.

Finally, a couple of words seem in order about the repercussions on style. This lack of syntactic complexity is fully understandable, as the headline, among other things, must be easy to read and grasp. According to H. Evans, the headline must be simple and:

simplicity does not merely mean simple words: it equally means the simple expression of a single thought. Just as a sentence becomes difficult to follow when it is overloaded with separate ideas so does a headline. (1974: 35).

## Evans continues:

Effectively to convey one single idea in the limited space of a headline, requires skill; to convey two ideas in the same space, with the same intelligibility, requires a rare genius". Two breaths are needed for GAMBLING ICE CREAM MAN'S BRAIN OPERATION CALLED OFF AS HE SEEKS GROUP HELP.

In his opinion: "The 'as he ...' construction generally means that the writer is wandering too far from a vivid single point" (Evans, 1974: 35). The advice for the use of "simple" sent-ences in the technical way cannot be more clear in this quotation. Simplicity and the clear expression of ideas seems to be fundamental in his view. Also Herbert Read in a book on style (1952) advises against the use of excessive complexity when writing, by saying that:

The danger with all long and complex sentences is that they may lack balance. The sense may be logically clear, the rhythm may be easy, but still they try our patience or offend our sensibilities" (1952: 44).

This also applies to headlines, as a long headline with excessive subordination could be too long and tiring to read, irritating the reader instead of attracting his attention. If a headline is too complex and therefore difficult to read the article could pass unread. This may be the reason why complexity is so scarce in headlines and is of such a simple nature - at least at the sentence level.

<sup>&</sup>lt;sup>1</sup> Some headlines could have been analysed as copulative sentences with the following structure: (S V) Cs (A), with an elliptical verb and subject. We preferred to include them here.

The reader must able to read and grasp the headline almost immediately, or if not must be induced to read the article, intrigued by the puns on words, evocative power and connotations of the words etc. - which, incidentally, are formulated in fairly simple terms syntactically speaking. Indeed, there must be a threefold compromise between the need to inform, to write an eye-catching headline and the effort required on the part of the reader.

Before we finish, it must be made clear that in this paper we have found complexity to be quite simple just at the sentence level. Complexity at the phrase level is a different matter. Maybe because of the need to pack a lot of information in the limited space available, the majority of the phrases in our sample, were found to be complex: being pre or postmodified and in some cases both. On the other hand, finite and non finite clauses as premodifiers or postmodifiers were not used often. As our time is limited, I am afraid I cannot go into more detail here and shall have to leave this for another paper.

It must be pointed out, as well, that headlines can be quite complex in a non-technical way, because of the frequent use of nominalizations, abstract nouns, ellipsis etc. Vocabulary and the use of rhetorical imagery such as plays on words, metaphors, metonymies etc. also contribute to making headlines fairly "complex" in an everyday sense.

To conclude, I would like to emphasize the need to carry out studies based on the analysis of actual corpora - if possible collected by statistical procedures. As often assertions are solely based on the subjectivity of the linguist and not on results obtained from the analysis of a statistically collected sample. Corpus studies are needed so that our intuitions are checked against the real use of the language.

Mª Dolores López Maestre Universidad de Murcia

## **BIBLIOGRAPHY**

Beirne, F. F. 1927: Newspaper English, American Speech, v. II, n 1, 8-12.

Brisau, A. 1969: Complex Sentence Structures in Headlines, English Studies, v. 50, 31-38.

García Ferrando, Manuel 1987: Socioestadística: Introducción a la Estadística en Sociologia. Madrid: Alianza Universidad Textos.

Garst, R. E., Bernstein, T. M. 1933: Headlines and Deadlines. Nueva York: Columbia University Press.

El Bakri, A. A. R. 1974: Syntactic Study of British English Headlines. Universidad de Londres nº 921 acc 326360.

Evans, H. 1974: News Headlines. Londres: Heinemann.

Kevelson, R. 1977: The Inverted Pyramid: An Introducction to a Semiotics of Media Language. Indiana: Indiana University.

- Leech, G. N. 1966: English in Advertising: A Linguistic Study of Advertising. Londres: Longman.
- Mardh, Ingrid 1980: Headlinese on the Grammar of English Front Page Headlines. CWK Gleerup Lund Studies in English.
- Quirk, R., Geenbaum, S, Leech, , Svartik, J. 1985: A Comprehensive Grammar of the English Language. Londres: Longman.
- Rockwell, Harold E. 1927: Headline Words, American Speech, VII N3, 140-141.
- Straumann, H. 1935: Newspaper Headlines. Allen & Unwin.
- Simon-Vanderbergen, A. M. 1981: *The Grammar of Headlines in the Times 1870-1970*. Bruselas: paleis der academiën-hertogsstraat I1981.
- Steel, B. 1971: Headline Classes in Journalistic Spanish an Exercise in Register Analysis, Ibero-romania, 2, 174-187.
- Turner, G. W. 1972: The Grammar of Newspaper Headlines Containing the Preposition "On" in the Sense "About", Linguistics, V 87, 71-86.

\* \* \*