

*STATISTICAL RESEARCHES IN THE VERBUM LEXICAL FIELD ON THE
FRONTONIAN RHETORICAL WORKS, DE ORATIONIBUS AND DE ELOQUENTIA*

Our work, which is divided into three parts, is written with the purpose of finding *verbum lexical field* within the two rhetorical works by M. C. Fronto, *De Oratōnibus* and *De Eloquētia*.

Of course the object field of our study cannot be defined in a strictly reliable manner in the sole selection of the terms which belong to the *verbum lexical field*.

To this scope we had to compare the characteristic frequency of each word to be studied, with the characteristic frequency offered us by the Frequency Dictionary of Classical Latin Words by D.D. Gardner (1).

It was possible thereon to complete further research which allowed us to reach interesting hypotheses.

After having calculated the list of words in order of diminishing frequency, we compared the lexicon of our author with the one of other Latin Classics.

Before comparing the lists, in order to reach interesting conclusions on the deviation from the average of some Frontonian words and therefore on the causes determining such differences, it will be best to proceed with a few considerations in the statistic field.

The foregoing comparison will be based on the recent lexicon of Gardner. We must compare the use of words, which are the objects of our research only in the field of the Latin Literature of this classical period (2) because Gardner's Frequency Dictionary is the only one that can be consulted, in as much as others on this subject cannot be found in Turin.

All the results obtained thus far, therefore, are the author's privilege and also in part the evolution of the Latin Language.

L. Delatte borrows from P. Guiraud the method of research in order to proceed, by means of above mentioned comparison, to the study of the style and the psychological world of Propertius and Tibullus (3).

Following the trail of L. Delatte, one may proceed to a similar kind of work by any author.

Our research will be oriented mostly towards the stylistic analysis of *De Oratationibus* and *De Eloquentia* by Fronto, while it will skim over the psychological world of the rhetorician.

In fact there is a difference in the psychological study of a poet reviewing his vocabulary and studying the text of a writer of essays though the letter is in the epistolary form.

The psychological motive of the rhetorician, in fact, is either non-existent, or, most of the time, of no account, and it would be presumptuous to look for it, even when not apparent.

Let us select a list of theme-words (4).

Not all theme-words are pertinent to our research. We have selected from the preceding lists the characteristic words relative to the subject which interest us.

From these, by means of a few calculations, we can discover the key-words of Fronto in his works, *De Orationibus* and *De Eloquentia*.

*DEFINITE LISTS OF KEY-WORDS IN DECREASING ORDER OF
FREQUENCY*

1.- De Orationibus and De Eloquentia (5)

1 VERBUM	4 ORATIO	7 FABULA
2 ELOQUENTIA	5 SENTENTIA	8 CARMEN
3 VOX	6 POETA	9 DICO

We find the noun *verbum*, the object of our research, in the center of the frequency field.

Verbum is found with a frequency percentage between the words in this field, of 34.857 %; *Eloquentia* of 12.571 %; *Vox* of 10.857 %; *Oratio* of 9.143 %; *Sententia* of 8.571 %; *Poeta* and *Fabula* of 2.285 %; *Carmen* of 1.714 % and *Dico* of 17.714 % (6).

2.- De Orationibus

1 VERBUM	4 POETA	7 INVENIO
2 ELOQUENTIA	5 CARMEN	8 AIO
3 SENTENTIA	6 ORATIO	9 DICO

The same noun *verbum* is again found in the center of the field relative only to *De Orationibus*.

Verbum is found here with the frequency percentage of 24.138 %; *Eloquentia* of 6.897 %; *Sententia* of 13.793 %; *Poeta* of 5.172 %; *Carmen* of 3.448 %; *Oratio* of 8.621 %; *Invenio* and *Aio* of 6.897 %; and *Dico* of 24.138 %.

3.- De Eloquentia

1 ELOQUENTIA

3 VOX

5 FABULA

2 VERBUM

4 ORATIO

In the rhetorical work *De Eloquentia* we have therefore obtained the narrowest frequency field of verbal communication. This one also presents another important fact, *verbum* does not occupy first place as it had in the preceding lists. Indeed it is second after the noun *eloquentia*. This fact is attributable to a more specific subject in this epistolary treatise.

Eloquentia is here found with the frequency percentage of 18.750 %; *Verbum* of 48.958 %; *Vox* of 16.667 %; *Oratio* of 11.458 % and *Fabula* of 4.167 %.

Above datas will be drawn graphically, in the last pages of this article (x; y; v;).

The appearance of *verbum*, occurring in the first place two times out of three, in the word lists, is a further confirmation of the importance of the word for Fronto (7).

We can also explain our lists of key-words graphically. In this tables you can see how intentional the use of rhetorical terms are in Fronto's two works.

First we shall briefly explain the mathematical process used in obtaining this ulterior confirmation to our thesis.

If you consider a group of n elements, which ought to be equal, you can verify how absolute is their equality.

After a diligent verification, there is some dispersion of value which characterises the elements being reviewed.

If the cause of dispersion is predicted on casual reasons, an interesting conclusion can be found and can be proved by opportune diagram.

On our diagram the characteristic values of each term are shown in abscissas (x) and, in correspondence of each abscissa, the ordinate (y) shows the number of elements characterized by the value expressed by the same abscissas.

We can thus derive a Gaussian diagram. The highest value always corresponds to the medium value of the tested element.

This medium value should be defined by

$$\text{m.v.} = x = \sum_i^n \frac{x_i}{n}$$

In the following graphic illustrations one can see that no value of the element defined as a non-casual one can be reproduced in a Gaussian diagram.

In our graphic tables (8), in abscissas there is the segmentarian frequency of each term and in ordinates there is the number of the quantity of segments which have that frequency.

At the end of these experiments, one can carry on a further analysis regarding the key-words in the Frontonian works, *De Orationibus* and *De Eloquentia*.

We were induced to follow this work either through the wish of discovering the psychological thought of the author or through a suspicion that the words in the lexical field should have been, if not actually the only key-words, at least the principal key-words of Fronto's.

In this experiment the process used is the same which we followed in the principal part of this work (9).

The following is a list of the words which ultimately resulted in key-words. Included are those terms which are not found in Gardner's Frequency Dictionary. These words present the same characteristics in our preceding analysis.

*LISTS OF OTHER KEY-WORDS IN DECREASING ORDER OF
FREQUENCY*

1.- De Orationibus and De Eloquentia (10).

Sapientia : which presents the highest error (écart-réduit) in all four comparisons.

Contemno : which presents an error higher than 9.

Concupisco : which has an écart-réduit included between 7.3 and 13.5, three out of four times (11).

Magister : which presents the highest error of 14.5 and a minimum error of 9.5.

Nummus : with only one negative écart-réduit and with an error comparable to ∞ (12). This noun occupies a particularly interesting place, in as much as the value of its repetition, in the whole of Fronto's vocabulary pertaining his two rhetorical works, is comparable to 3, therefore it cannot even appear in the number of nouns which belong to the listed theme-words.

Corrigo : also with three errors higher than 5, out of four experiments. This verb appears four times in both Frontonian works, for this reason also it cannot appear in the lists of theme-words. This observation renders it more interesting, because it underlines the intentionality of its use.

2.- De Oratationibus

Ignoro : which presents one positive error three times out of four (13).

Magister : with all positive errors, which however are not very far from the minimum value of 5.

Navigo : which also presents 4 écart-réduits over 4, but its errors are far from 5.

Nummus : with a remarkable error (14) comparable to ∞ and a high error in the other three comparisons.

Os : which has three small errors out of four computations (15).

Actus : which presents an error comparable to ∞ and three values not superior to the minimum error of 5 (16).

3.- De Eloquentia

Sapientia : which does not appear in the *De Oratationibus* list of key-words and presents here a very high error.

Contemno : with a considerably large error.

Officium : which presents three errors higher than the minimum value, but even its écart-réduit hasn't got a high value.

Placeo : also with three low values in its comparisons.

Concupisco : which also has three errors higher than 5.

Magister : with slight positive errors in each text.

Corrigo : which presents four normal positive values of error.

One must also include a few words in our field, which were not included in Gardner's Frequency Dictionary, for their too infrequent use in classical literature works :

Philosophia : which appears 7 times in the two Frontonian words; 7 in *De Eloquentia*, but it is absent in *De Oratationibus*.

Pallium : with a frequency of 5, 2 in *De Oratationibus* and 3 in *De Eloquentia*.

Antiquitas : Which records a frequency of 4 in *De Oratationibus*, while it is absent from *De Eloquentia*.

Dialecticus : with the same quantitative characteristics of the noun *antiquitas*, only used in *De Eloquentia*.

Conueniens, *maculosus* and *usurpo* : which are equally distributed in the Frontonian rethorical universe.

Cloaca : which has a frequency of only 2 in *De Eloquentia*.

A few words haven't been taken into consideration either by L. Delatte or ourselves. They cannot in fact underline either the psychological world

of the author or his linguistic or stylistic characteristics, for their non-specific meaning : *Video, Res, Possum, Multus* etc...

One cannot forgo a few considerations of a basic nature. These considerations tend to show the prevailing positions of *verbum* lexical field over all the others in the Frontonian vocabulary.

Almost all the terms, which were not normally used by Fronto, are connected with the *verbum* lexical field, and, what's more, those very words, whose use seems to have been farther from the normal one, can also be included in the *eloquentia* field.

These words are used as metaphors or belong to a rhetorical topic against the philosophers.

On the ground of these results and of the foregoing, we can evidently assert that Fronto, in his two works, did not carry on a didactic job, but he himself participated in influencing M. Aurelius in rhetorical studies.

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NOTES

- (1) D. D. GARDNER, A frequency dictionary of classical latin words, U.M.L.T.G. 1970 Michigan, U.S.A.
- (2) D. D. GARDNER, op. cit. p. 7.
- (3) L. DELATTE, Key-words and poetic themes in Prop. and Tib., Revue III, 1967.
- (4) L. DELATTE, op. cit p. 33 : "Theme-words : the words which the author uses most often and which express his ideas"; p. 32 : "They occur in every sentence i.e. it is almost impossible to express an idea without using them, and they have a wide semantic range".
- (5) A few words are key-words only if one consider De Or. and De El. as one work.
- (6) Look at graphic tables.
- (7) F. PORTALUPI, M. C. Frontone, Torino 1961, p. 33 : "Assai più vivo interesse per il termine, il *vocabulum*, il *verbum* in sè, che per uno studio vero e proprio per il pensiero."

- (8) We can divided the two Frontonian works into a few segments of 225 words each, in order to render our experiment more precise Fronto's *De Or.* has been divided into 5 segments while *De El.* has been divided into 13 segments.
- (9) We have selected a list of theme-words and we have also selected from these key-words, using the same mathematical processes.
- (10) Look at note (5).
- (11) *Contemno* has a frequency of 11, in these two Frontonian works.
- (12) The value comparable to ∞ is due to the frequency of 0, in the term relating to the prose work in epistolary form in Gardner's frequency dictionary.
- (13) Negative proof was obtained comparing the frequency value of the verb in Fronto's *De Or.* with the reduced value of the sample in the frequency of the same verb in prose work of essayists taken from Gardner's frequency dictionary.
- (14) *Nummus* has in Frontanian *De Or.* a frequency of 3.
- (15) Negative proof was obtained comparing the frequency value of *os* with its frequency value in epistolary work taken from Gardner's.
- (16) Value of ∞ was obtained in a similar manner.

Dico	
Carmen	
Fabula	
Poeta	
Sententia	
Oratio	
Vox	
Eloquentia	
Verbum	

Dico

Aio

Invenio

Oratio

Carmen

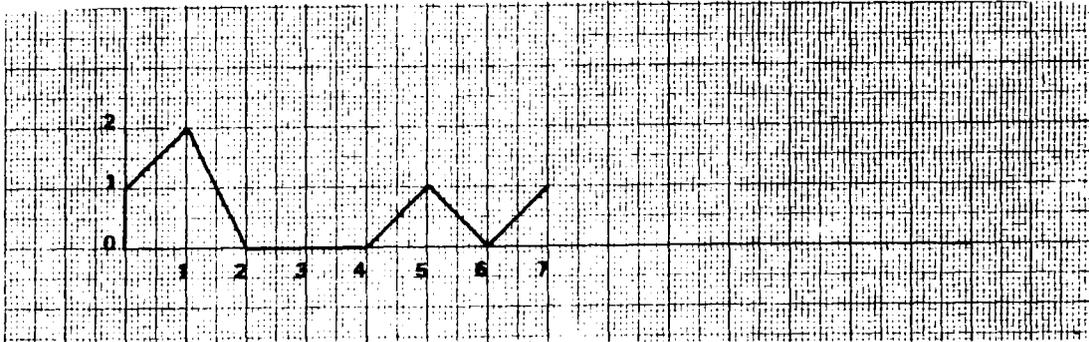
Poeta

Sententia

Eloquentia

Verbum

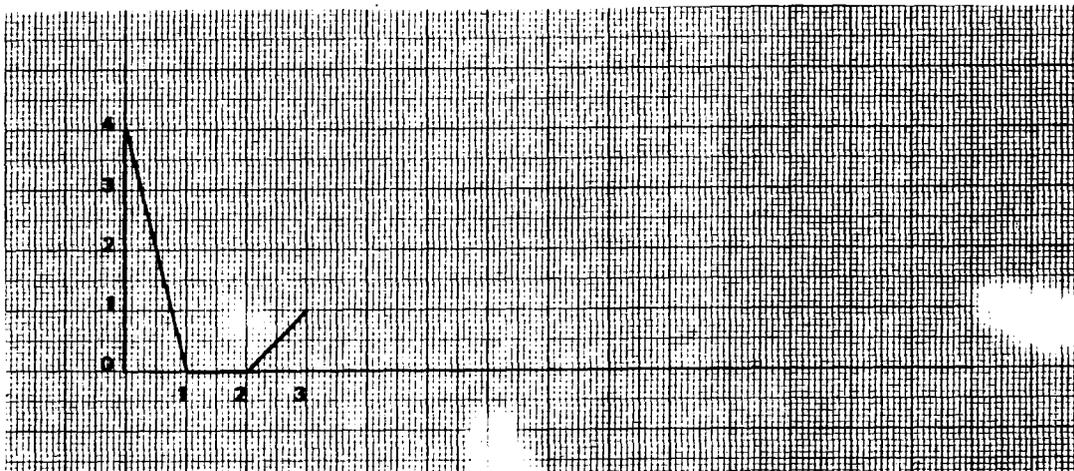
Fabula	
Oratio	
Vox	
Verbum	
Eloquentia	



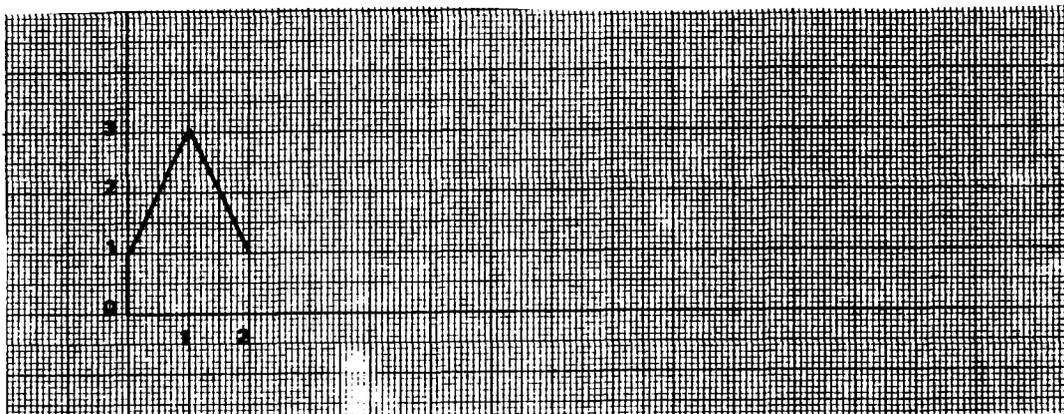
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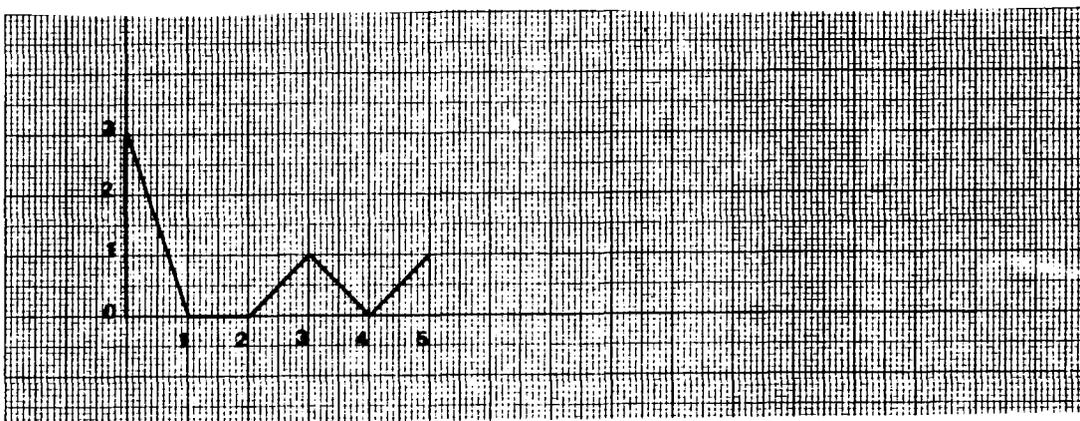
ELOQUENTIA in DE OR.



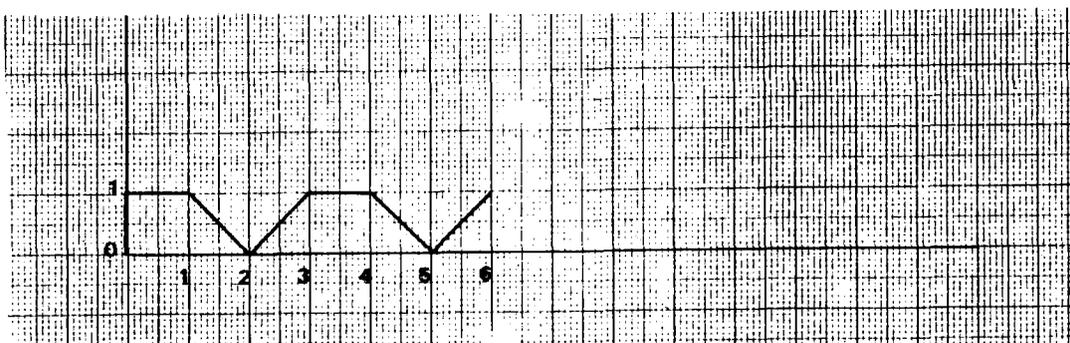
VOX in DE OR.



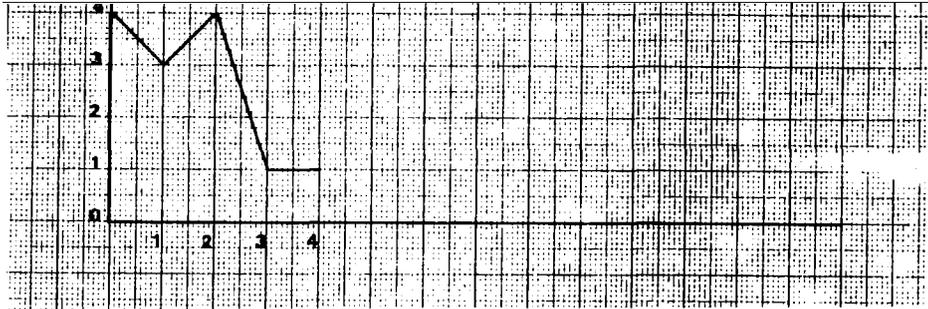
ORATOR in DE OR.



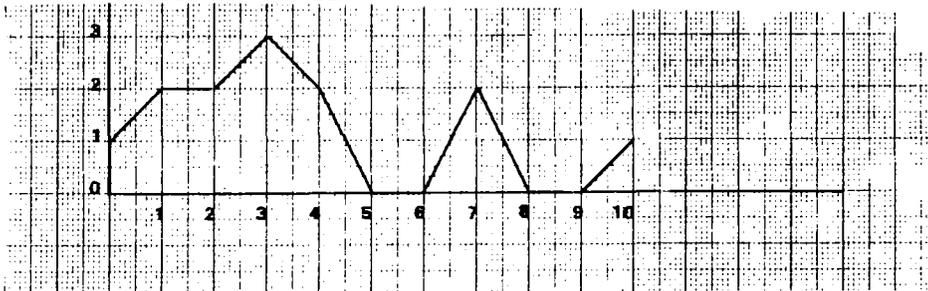
SENTENTIA in DE OR.



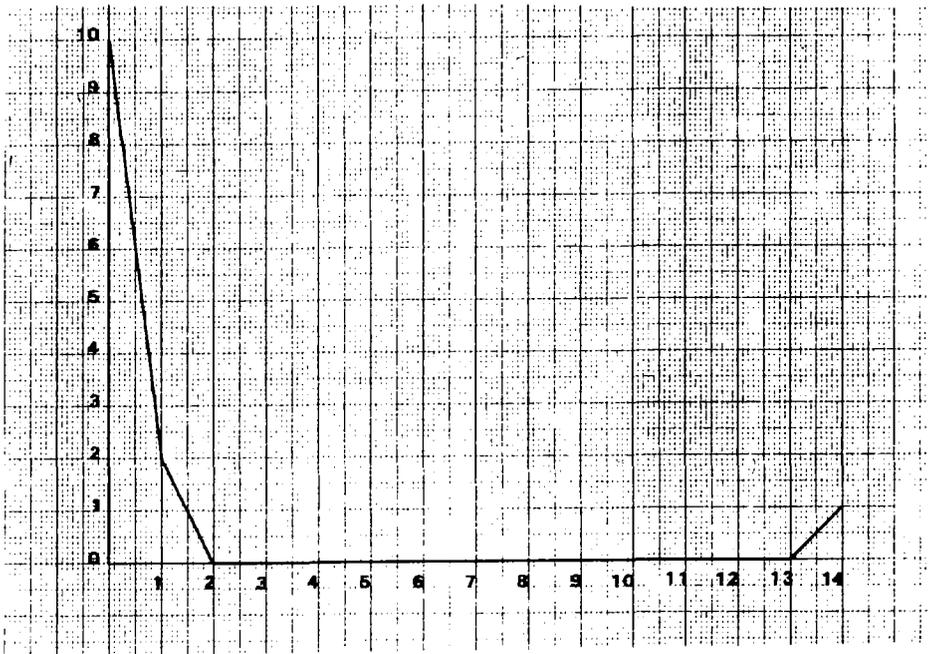
DICO in DE OR.



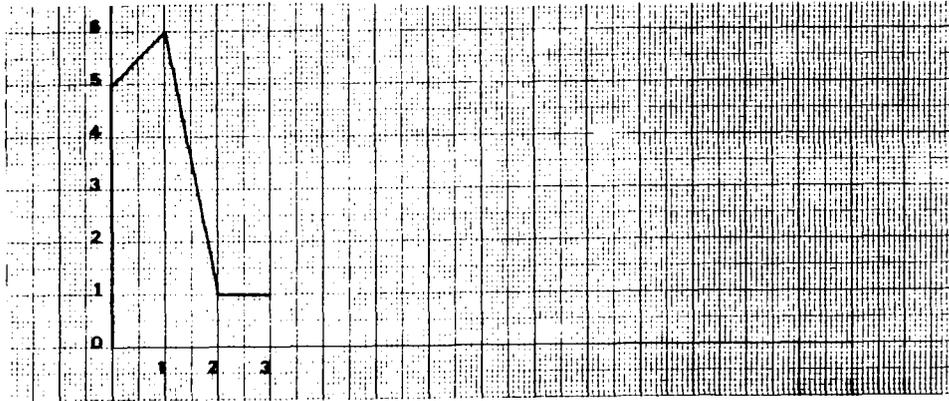
ELOQUENTIA in DE EL.



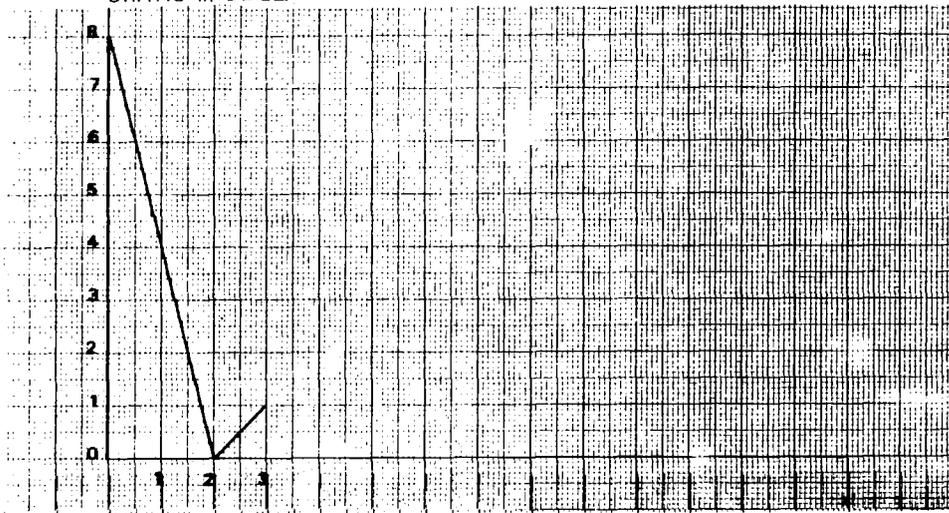
VERBUM in DE EL.



VOX in DE EL.



ORATIO in DE EL.



SENTENTIA in DE EL.



DICO in DE EL.