# A comparative study of cohesion in L2 candidates' texts

Virginia-Maria Blani

PhD candidate

National and Kapodistrian University of Athens

Supervising committee:

Associate Professor Bessie Mitsikopoulou

Professor Mary Sifianou

Professor George Mikros

# Aim of the presentation

- To show how cohesion analysis applies in the investigation of text grammar

- To provide findings regarding the correlation between the quality of candidates' scripts and the cohesive devices used
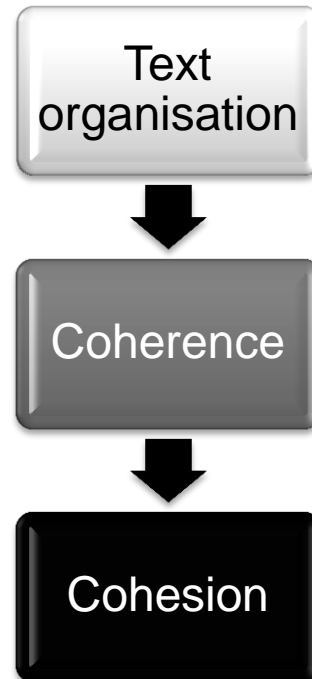
# What is Text Grammar?

Above the level of sentence analysis examining patterns used in order to produce meaningful texts that respond successfully to their communicative purpose

# What is Text Grammar?

In this paper text grammar is linked to textuality and context

❖a multifaceted writing criterion

```
┌─────────────────┐
│      Text       │
│  organisation   │
└─────────────────┘
         │
         ▼
┌─────────────────┐
│    Coherence    │
└─────────────────┘
         │
         ▼
┌─────────────────┐
│    Cohesion     │
└─────────────────┘
```

# Text Grammar
## vs
# Sentence Grammar

### Sentence grammar

✓refers to the lexicogrammatical choices of the writer

✓includes the standard rules of grammar, syntax and morphology

✓focuses on the sentence-level

# What is cohesion?

Connectedness when the interpretation of an element of the text depends on the interpretation of another element

A meaningful whole

# What is cohesion?

Cohesion

✓contributes to the creation of the text

✓enhances the unity of the text

❑ Not enough for a text to be coherent

# Cohesion
## vs
# Coherence

❖ Common misinterpretation in literature

❖ Coherence presupposes cohesion but cohesion is not enough

❖ Coherence linked with the communicative purpose of the text

# Cohesion and script quality

Research has been conducted investigating the connection of cohesion and the quality of the script

e.g. Collins, 1998; De Villez, 2003, Grant and Ginther (2000), Liu and Braine (2005), Norment (1994) and Song Meihua and Xia Weirong (2002)

# Data

- ✓ L2 candidate scripts (KPG exams)
- ✓ C1 level/Activity 2
- ✓ Marked by experienced and trained raters
- ✓ Of different quality/performance

# Cohesion analysis

❑Grammatical cohesion across the three script categories

❑Lexical cohesion across the three script categories

❑Grammatical vs. lexical cohesion

# Methodology

- Cohesion analysis based on the model introduced by Halliday and Hasan (1976)
- Incorporated some of the categories of Hoey's model (1991) for lexical cohesion
- Use of annotation tool (Nvivo)
- Excel Workbook for recording the annotation

# The cohesion analysis workbook

| | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| 1 | scriptID | Mark | band | paragraph | genericStr | coh_type | coh_subcat1 | coh_subcat2 | text |
| 2 | 2010199 | | E | 1 | | conjunction | additive | simple, additive | and |
| 3 | 2010199 | | E | 1 | | conjunction | additive | simple, additive | and |
| 4 | 2010199 | | E | 1 | | conjunction | additive | simple, additive | and |
| 5 | 2010199 | | E | 1 | | conjunction | ditive | apposition, exemplificato | for example |
| 6 | 2010199 | | E | 1 | | conjunction | additive | apposition, exemplificato | such as |
| 7 | 2010199 | | E | 1 | | conjunction | adversative | adversative proper, -and | but |
| 8 | 2010199 | | E | 1 | | conjunction | additive | simple, additive | also |
| 9 | 2010199 | | E | 1 | | conjunction | additive | simple, additive | also |
| 10 | 2010199 | | E | 1 | | conjunction | additive | simple, additive | and |
| 11 | 2010199 | | E | 1 | | lexical cohesion | collocation | | family |
| 12 | 2010199 | | E | 1 | | lexical cohesion | collocation | | children |
| 13 | 2010199 | | E | 1 | | lexical cohesion | collocation | | careers |
| 14 | 2010199 | | E | 1 | | lexical cohesion | complex repetition | | get married |
| 15 | 2010199 | | E | 1 | | lexical cohesion | complex repetition | | getting married |

# Grammatical cohesion

| Grammatical cohesion | Script category | | | | | | |
|---|---|---|---|---|---|---|---|
| | F | Relative frequency | M | Relative frequency | U | Relative frequency | Total |
| Conjunction | 448 | 0,3286 | 444 | 0,3257 | 471 | 0,3455 | 1363 |
| Ellipsis | 2 | 1 | 0 | 0 | 0 | 0 | 2 |
| Reference | 906 | 0,3954 | 831 | 0,3627 | 554 | 0,2418 | 2291 |
| Substitution | 10 | 0,333 | 14 | 0,466 | 6 | 0,2 | 30 |
| Grand Total | 1366 | | 1289 | | 1031 | | 3686 |

# Conjunction

| Conjunction in relation to the total use of grammatical cohesion | | | | | |
|---|---|---|---|---|---|
| Script category | F | % | M | % | U | % |
| Relative frequency | 0,32 | 32 | 0,34 | 34 | 0,46 | 46 |

# Reference

| Reference in relation to the total use of grammatical cohesion | | | | | | |
|---|---|---|---|---|---|---|
| Script category | F | % | M | % | U | % |
| Relative frequency | 0,66 | 66 | 0,64 | 64 | 0,54 | 54 |

# Significance tests
# for grammatical cohesion

o Conjunction

No difference

o Reference

Fully satisfactory- Unsatisfactory scripts

# Conjunction subtypes

| Type of conjunction | F | M | U | | Chi-square | p-value | | Chi-square | p-value |
|---|---|---|---|---|---|---|---|---|---|
| Additive | 301 | 278 | 302 | | | | | | |
| Adversative | 70 | | | F-M-U | 6,517 | 0,0384 | F-U | 6,451 | 0,011 |
| Causal | 41 | 76 | 75 | F-M-U | 12,406 | 0,0020 | U-F | 9,966 | 0,0015 |
| | | | | | | | M-F | 10,47 | 0,0012 |
| Temporal | 34 | 27 | 38 | | | | | | |
| Total | 446 | 442 | 458 | | | | | | |

# Additive conjunctions

| Sub-type | Script category | | | | | | |
|---|---|---|---|---|---|---|---|
| Additive conjunctions | F | | M | | U | | |
| | frequency | Relative frequency | frequency | Relative frequency | frequency | Relative frequency | |
| Apposition, exemplificatory | 21 | 0,446 | 15 | 0,319 | 11 | 0,234 | 47 |
| Complex emphatic, additive | 22 | 0,4680 | 11 | 0,234 | 14 | 0,297 | 47 |
| Complex emphatic, alternative | 1 | 1 | 0 | 0 | | 0 | 1 |
| Simple, additive | 231 | 0,331 | 229 | 0,3290 | | 0,339 | 696 |
| Simple, alternative | 26 | 0,292 | 22 | 0,247 | 41 | 0,4606 | 89 |
| Simple, negative | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| Total | 301 | | 278 | | 302 | | 881 |

# Adversative conjunctions

| Sub-type | Script category | | | | | | |
|---|---|---|---|---|---|---|---|
| Adversative conjunctions | F | | M | | U | | |
| | frequency | Relative frequency | frequency | Relative frequency | frequency | Relative frequency | |
| Adversative proper, -and | 19 | 0,283 | 24 | 0,358 | 24 | 0,358 | 67 |
| Adversative proper, emphatic | 18 | 0,473 | 15 | 0,394 | 6 | 0,157 | 38 |
| Adversative proper, simple | 21 | 0,75 | 10 | 0,28 | 4 | 0,114 | 35 |
| Contrastive, emphatic | 8 | 0,285 | 11 | 0,39 | 10 | 0,55 | 28 |
| Contrastive, simple | 1 | 0,5 | 0 | 0 | 2 | 1 | 2 |
| Correction of meaning | 3 | 0,75 | 1 | 0,25 | 0 | 0 | 4 |
| Total | 70 | | 61 | | 46 | | 177 |

# Adversative conjunctions

✓Results of statistical significance tests

|  | | Chi-square | p-value | | Chi-square | p-value |
|---|---|---|---|---|---|---|
| adversative proper, emphatic | F-U | 6 | 0,014 | | | |
| adversative proper, simple | F-M-U | 12,743 | 0,0017 | F-U | 11,56 | 0,00067 |

# Causal conjunctions

| Sub-type | Script category | | | | | |
|---|---|---|---|---|---|---|
| Causal conjunctions | F | | M | | U | |
| | frequency | Relative frequency | frequency | Relative frequency | frequency | Relative frequency |
| causal specific (I) result | 3 | 0,5 | 2 | 0,333 | 1 | 0,1666 | 6 |
| general, emphatic | 3 | 0,5 | 3 | 0,5 | 0 | 0 | 6 |
| general, simple | 4 | 0,093 | 18 | 0,418 | 21 | 0,488 | 43 |
| reversed causal | 30 | 0,211 | 53 | 0,373 | 59 | 0,4154 | 142 |
| specific, result | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 41 | | 76 | | 81 | | 198 |

# Causal conjunctions

✓Results of statistical significance tests

So

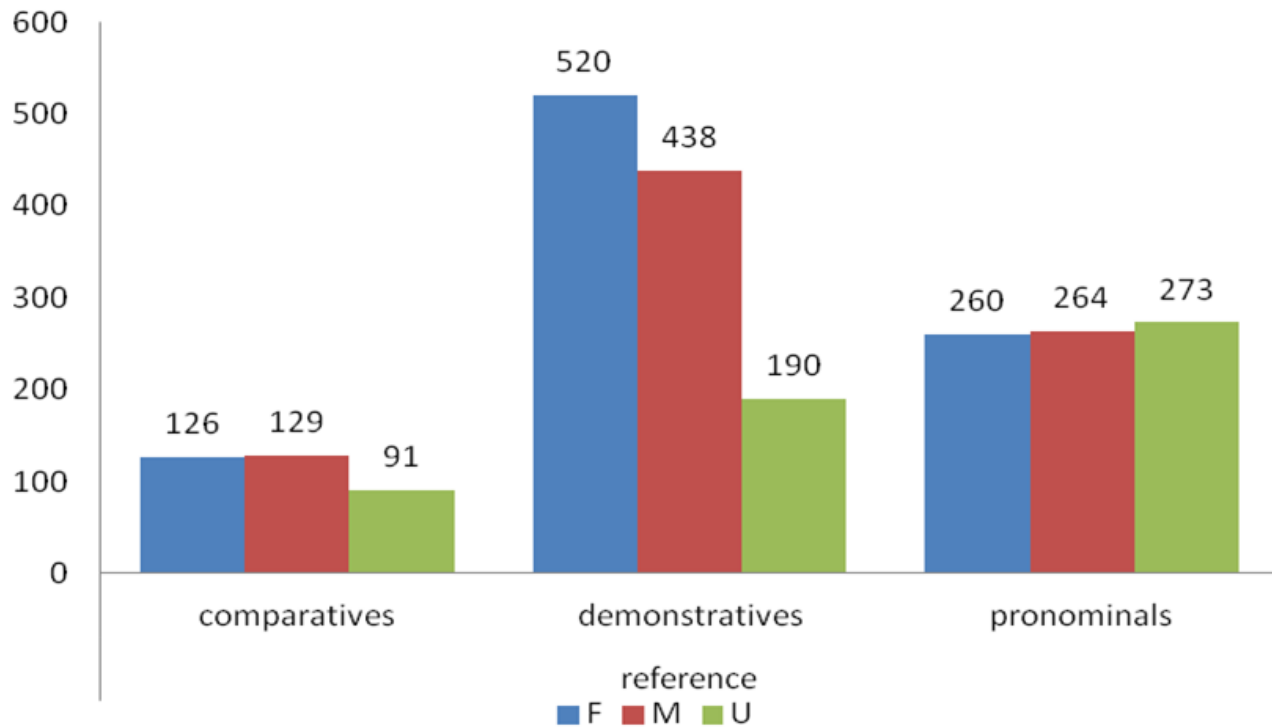| | | Chi-square | p-value | | Chi-square | p-value |
|---|---|---|---|---|---|---|
| general, simple | F-M-U | 11,488 | 0,0032 | M- F | 8,909 | 0,002 |
| | | | | U-F | 11,56 | 0,0006 |
| reversed causal | F-M-U | 9,901 | 0,007 | M-F | 6,373 | 0,011 |
| | | | | U- F | 9,449 | 0,0021 |

Because
Due to

# Temporal conjunctions

| Sub-type | Script category | | | | | |
|---|---|---|---|---|---|---|
| temporal conjunctions | F | | M | | U | |
| | frequency | Relative frequency | frequency | Relative frequency | frequency | Relative frequency |
| conclusive | 2 | 0,2 | 0 | 0 | 8 | 0,8 | 10 |
| correlatives (E), sequential | 1 | 0,5 | 0 | 0 | 1 | 0,5 | 2 |
| correlatives (I), conclusive | 1 | 0,5 | 0 | 0 | 1 | 0,5 | 2 |
| correlatives (I), sequential | 7 | 0,36 | 3 | 0,157 | 9 | 0,473 | 19 |
| internal temporal, conclusive | 10 | 0,526 | 6 | 0,315 | 3 | 0,157 | 19 |
| internal temporal, sequential | 4 | 0,19 | 10 | 0,476 | 7 | 0,333 | 21 |
| simple, sequential | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| summary, summarising | 8 | 0,32 | 8 | 0,32 | 9 | 0,36 | 25 |
| Total | 34 | | 27 | | 38 | | 99 |

# Reference



**Reference types per script category**

# Reference

✓Results of statistical significance tests

| Types of reference | F | M | U | | Chi-square | p-value | | Chi-square | p-value |
|---|---|---|---|---|---|---|---|---|---|
| Comparatives | 126 | 129 | 91 | M-U | 6,564 | 0,0104 | | | |
| Demonstratives | 520 | 438 | 190 | F-M-U | 154,293 | 0 | F-M | 7,019 | 0,008 |
| | | | | | | | F-U | 153,38 | 0 |
| | | | | | | | M-U | 97,936 | 0 |
| Pronominals | 260 | 264 | 273 | | | | | | |
| Total | 906 | 831 | 554 | | | | | | |

# Reference

| | | Chi-square | *p*-value | | Chi-square | *p*-value |
|---|---|---|---|---|---|---|
| Definite | F-M-U | 197,751 | 0 | F-U | 202,041 | 0 |
| | | | | M-U | 135,844 | 0 |
| Demonstrative far | U-M | 1,92 | 0,017 | | | |
| Demonstrative far extended | | | | | | |
| Demonstrative near | | | | | | |
| Demonstrative near extended | | | | | | |

# Lexical Cohesion

| Lexical cohesion | Script category | | | | | | Grand Total |
|---|---|---|---|---|---|---|---|
| | F | Relative frequency | M | Relative frequency | U | Relative frequency | |
| Collocation | 335 | 0,478 | 198 | 0,282 | 167 | 0,238 | 700 |
| Complex paraphrase | 2 | 0,666 | 0 | 0 | 1 | 0,333 | 3 |
| Complex repetition | 189 | 0,413 | 146 | 0,319 | 122 | 0,266 | 457 |
| General item | 0 | 0 | 0 | 0 | 4 | 1 | 4 |
| Repetition | 521 | 0,303 | 615 | 0,357 | 582 | 0,338 | 1718 |
| Superordinate | 53 | 0,337 | 58 | 0,369 | 46 | 0,292 | 157 |
| Synonymy hyponymy | 207 | 0,343 | 222 | 0,368 | 173 | 0,287 | 602 |
| Grand Total | 1307 | | 1239 | | 1095 | | 3641 |

# Lexical cohesion

| Lexical cohesion | Chi-square | | p-value | Chi-square | | p-value |
|---|---|---|---|---|---|---|
| | | | | | | |
| Collocation | F-M-U | 68,506 | 0 | F-M | 36,567 | 0 |
| | | | | F-U | 57,903 | 0 |
| Complex paraphrase | | | | | | |
| Complex repetition | F-M-U | 15,129 | 0,0005 | F-U | 14,434 | 0,00014 |
| General item | | | | | | |
| Repetition | M-F | 7,778 | 0,0052 | | | |
| Superordinate | | | | | | |
| Synonymy hyponymy | M-U | 6,078 | 0,013 | | | |

# Conclusions

❑The lower the quality of scripts the higher the frequency of conjunctions used.

❑Adversative conjunctions are used in scripts with higher marks.

❑Causal conjunctions are used in scripts with lower marks

❑Reference is more frequent in scripts of high quality.

# Conclusions

❑Lexical cohesion:

Simple repetition vs collocation

A differentiating factor

Scripts of higher quality use more instances of collocation

Thank you for your attention