



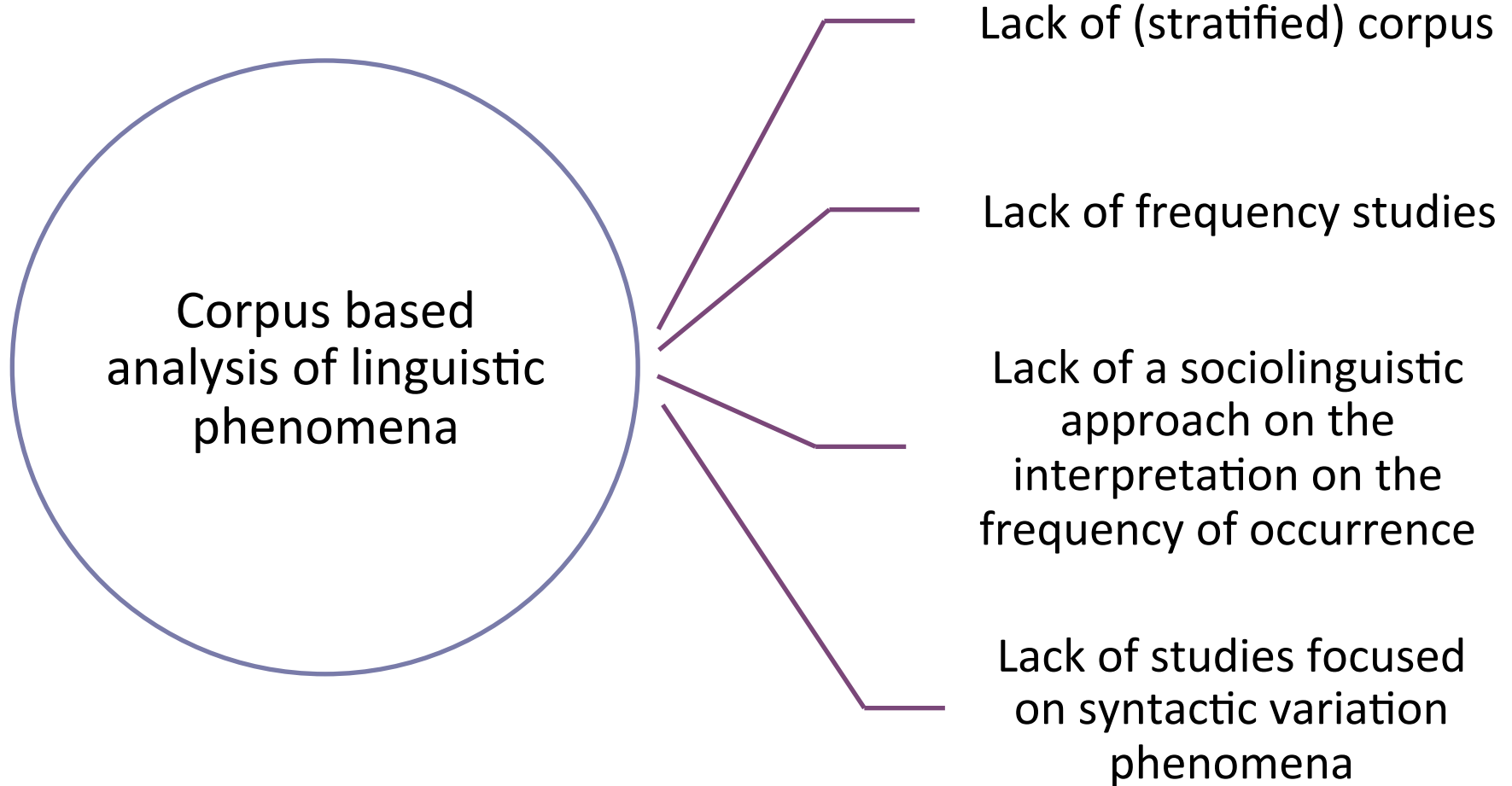
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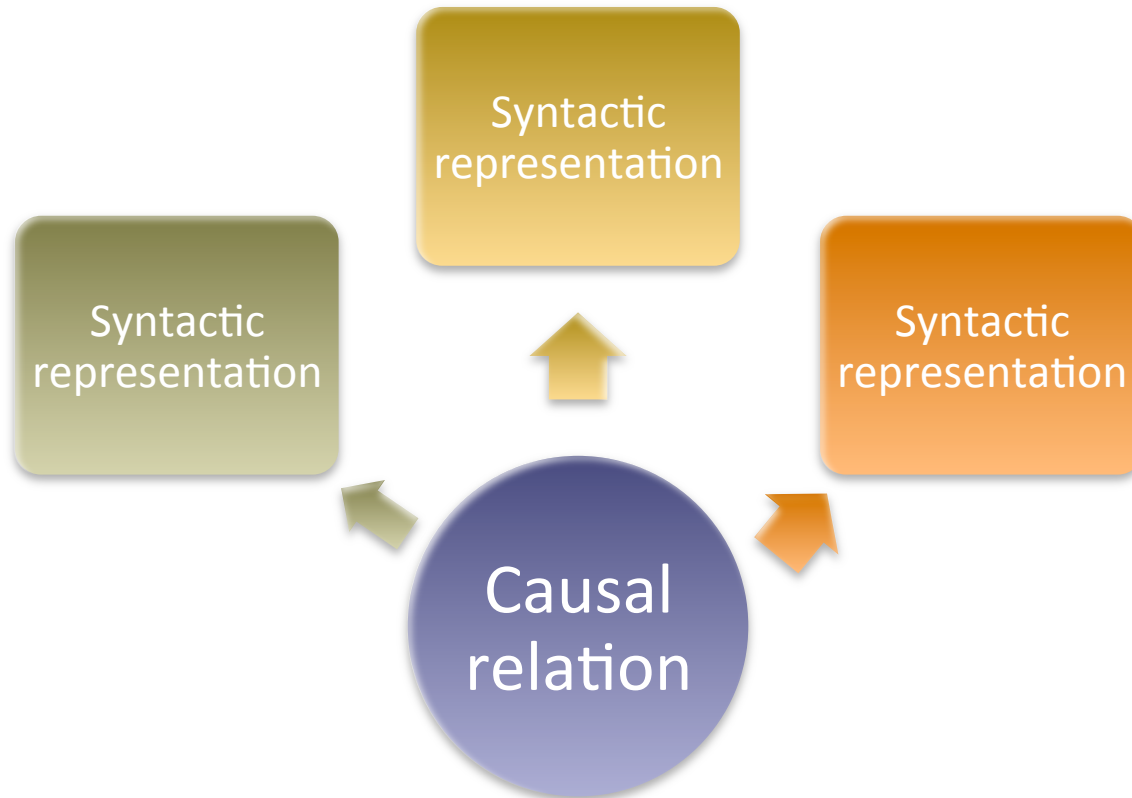
A corpus based analysis on causal relations in European Portuguese

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State of the art



*A variable is the abstract representation
of two or more linguistic variants
(Meyerhoff, 1999)*



Structure

Causal Relations

Methodology

Results and discussion

Conclusion



+ Causal Relations

Causal Relations (tripartite distinction, Sweetser 1990)

Real World

- (1) O João partiu a perna porque caiu das escadas.
John broke his leg because he fell from the stairs.

Explicative

- (2) O João não almoçou, porque a cozinha está limpa.
John didn't have lunch, because the kitchen is clean

Speech act modifier

- (3) Vai almoçar, porque retomamos os trabalhos às 13h.
Eat something, because we start working at 1p.m.

Causal relations: syntactic structures

Real Cause

Copulative Coordination

- (4) *O João caiu e partiu a perna.*
 - John fell **and** broke his leg.

Central adverbial clauses (Haegeman, 2004, 2009, e.o.)

- *por, por causa de + inf, devido a + inf.* (Lopes, 2004)
- (5) *O João partiu a perna porque caiu.*
 - John broke his leg **because** he fell. (not for any other reason)

■ Juxtaposition

■ Supplementation (Peres & Mascarenhas, 2006; Lobo, 2013, Mendes, 2013)

Pois, porque (explicative), que, logo, por isso, assim, portanto, etc.

(6) *O João é um bom aluno, **pois** tem sempre bolsa de mérito.*

John is a good student, **for** he always has a scholarship.

■ Subordination

■ Peripheral adverbial clauses (Haegeman, 2004, 2009, e.o, Lobo, 2013)

como, visto que, posto que, dado que, uma vez que, já que, etc.

(7) *O João é um bom aluno, **visto que** tem sempre bolsa de mérito.*

John is a good student, **since** he always has a scholarship.

■ Gerund and participial clauses

(8) ***Sentindo-se** adoentada, foi para casa mais cedo.* (Lopes, 2004, p. 49)

Felling sick, she went home earlier.

Speech act modifier

■ Juxtaposition

(9) Traz-me um copo de água. Estás de pé e tudo.

Bring me a glass of water. You are standing and everything.

■ Supplementary Clauses (*porque, que*)

(10) Traz-me um copo de água, que não me apetece levantar.

Bring me a glass of water, because I don't want to get up.


■ Peripheral adverbial clauses (*já que, visto que, uma vez que*)

(11) Traz-me um copo de água, já que estás de pé.

Bring me a glass of water, since you are standing.

+ Methodology

+ Corpus

- 120 argumentative texts written upon request and 48 blog entries.
 - ±250 words each/ 48.509 words total 
- Written by 84 European Portuguese speakers, stratified according to gender, education and age.
 - The themes and the number of words per texts were controlled to avoid biased results (Aries & Johnson, 1983; Tannen, 1990; Herring & Paolillo, 2006)

Causal Relations

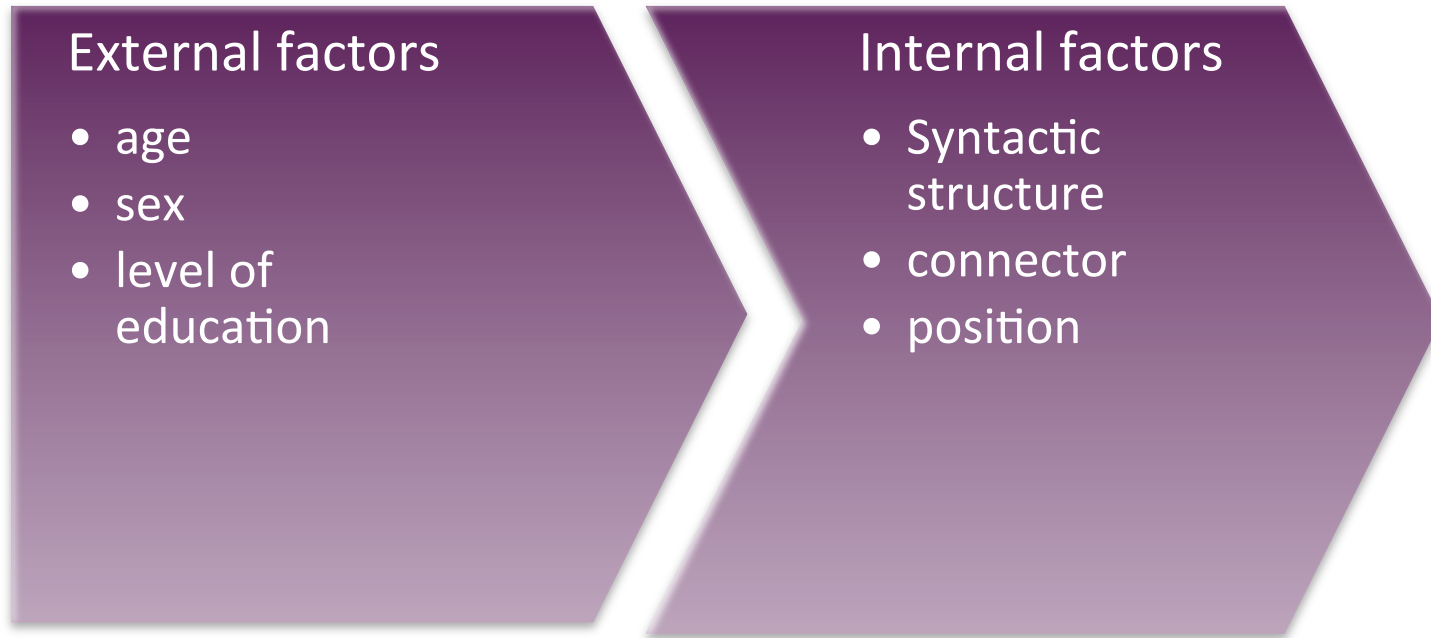
Syntactic
Representations

Methodology

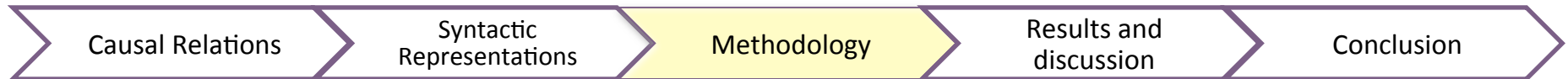
Results and
discussion

Conclusion

+ The variables



○ **Statistics:** SPSS, Qui-Square test.



Research questions

- ❑ To what extent does syntactic representation of causal relations vary?
- ❑ What is the importance of social variables in the clarification of the variation observed?

Hypotheses

- ❑ More real cause relations in younger informants (easier to process)
- ❑ More subordination in the younger informants (prototypical structure to establish causality).
- ❑ More postposed adverbial clauses in women's texts (Mondorf, 1996; 2002).

+ Results and Discussion

- 554 tokens
- Overall frequencies:
 - Sex
 - Masc. 49% / Fem. 51%
 - Causal Relation
 - Real 28,2 % / Explicative 67,1 % / Speech act modifier 4,7 %
 - Structure
 - Subordination 34,5% / Supplementation 36,1% / Juxtaposition 25, 3% / Coordination 4,1%

+ How does syntax convey causality?

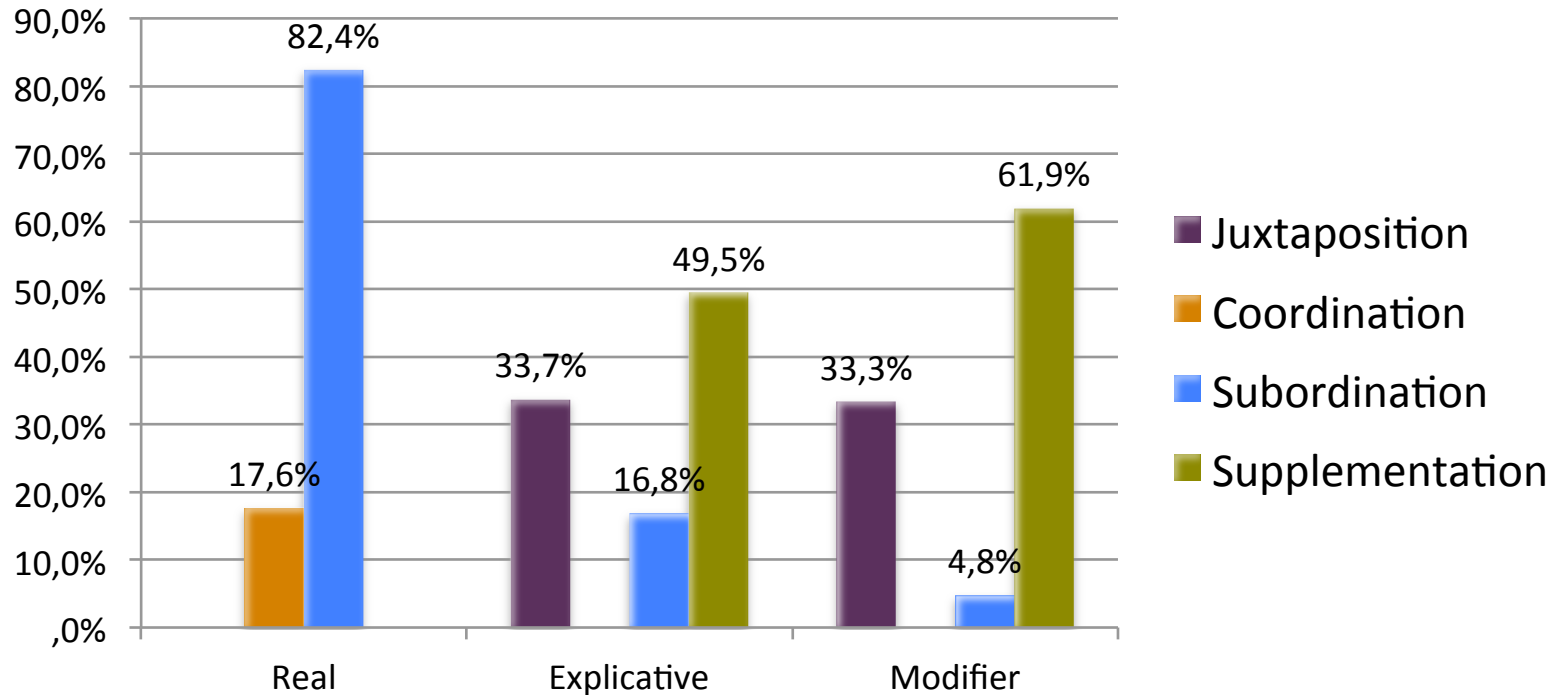


Figure 1- Crosstab syntactic structure * causal relation.

+ Causal Relation and level of education

(cohort with age on 1CEB and 2 CEB)

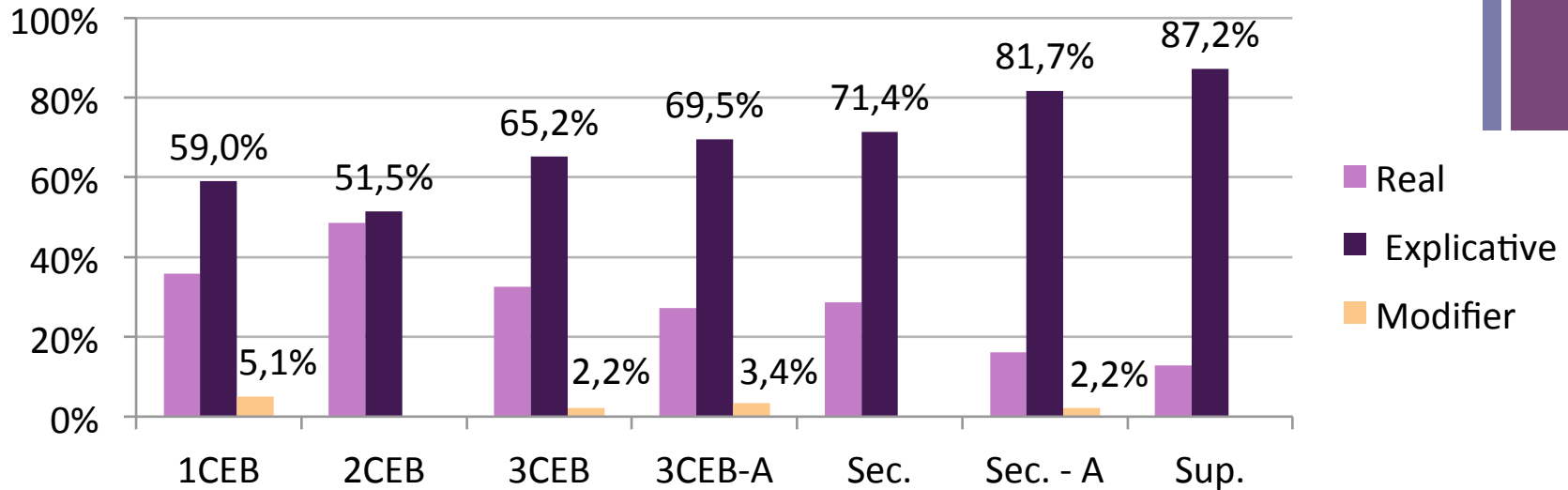


Figure 2- Argumentative subcorpus - Crosstab causal relation * level of education ($\chi^2(12)=26.550$, $p=.009$)

- Younger informants > real cause.
- Older informants > explicative cause.
- Real cause relations are easier to process when compared to explicative relations (Noordman & Blijzer, 2000: 38).

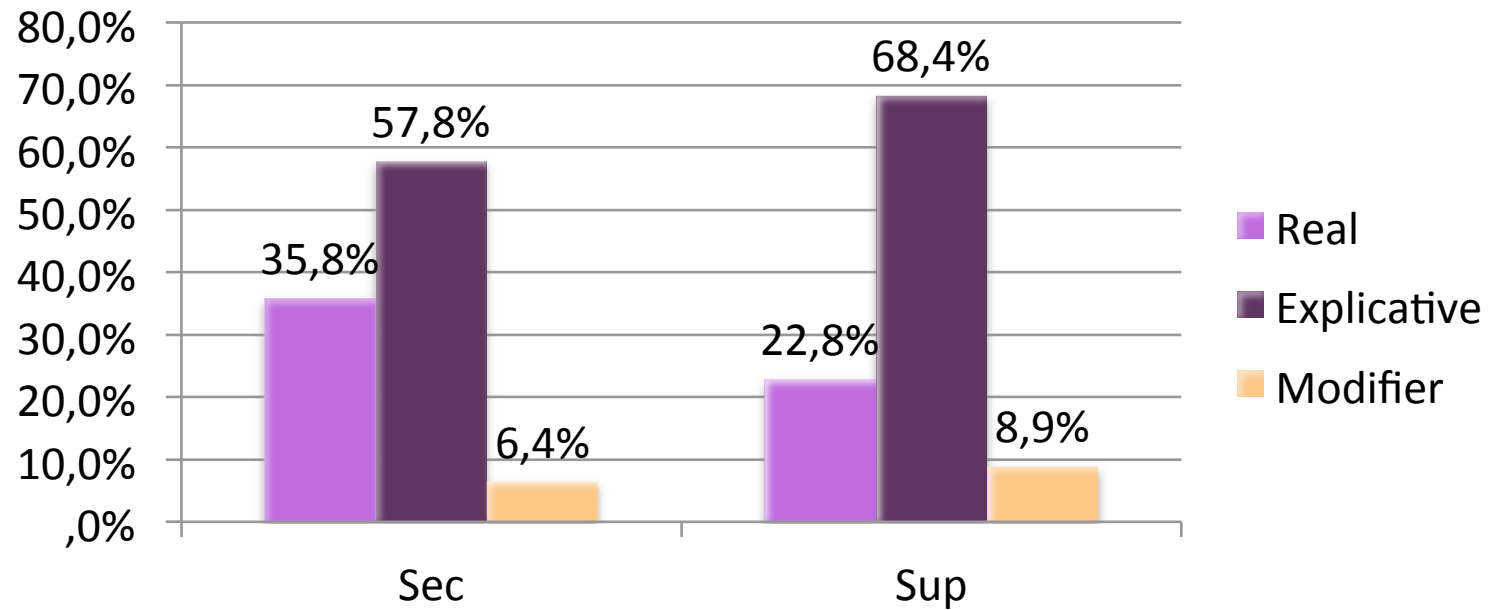


Figure 3- Blog subcorpus - Crosstab causal relation * level of education. ($\chi^2(3)=11.869$, $p= .008$)

- Higher level of education > % of explicative cause relations
- Higher % of speech act modifier cause
 - Are blogs more dialogic?

+ Syntactic Structure and Education

(cohort with some age intervals)

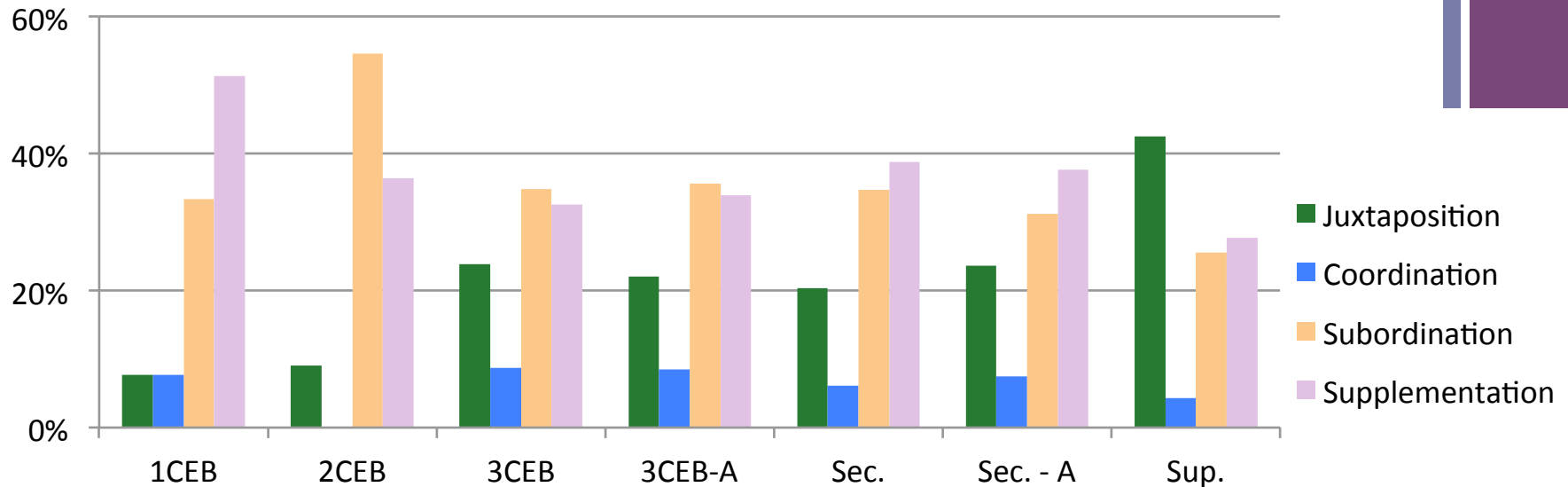


Figure 4- Argumentative subcorpus - Crosstab syntactic structure * level of education.

- Subordination and supplementation > younger informants.
 - The syntactic strategies to express causal relations are still under development (Lopes, 2004).
 - In younger informants, *porque* (because) is more frequent:
 - prototypical conjunction to establish causality (Lopes, 2004);
 - common in school communication contexts (Diessel, 2004; Diessel & Hetterle, 2011).
- Adults with 3CEB and secondary tend to use a broader variety of connectors.

- Similar results were found in the subcorpus of blog entries.

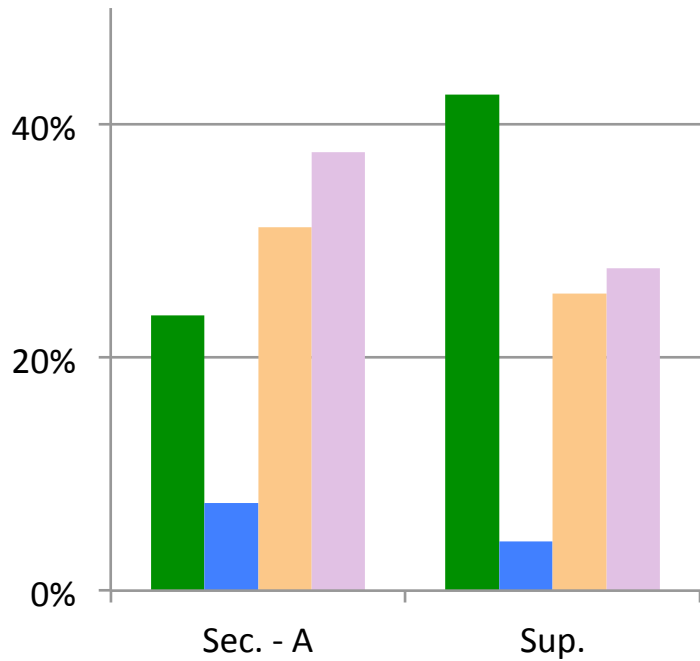


Figure 5- Argumentative subcorpus – Crosstab syntactic structure * level of education.

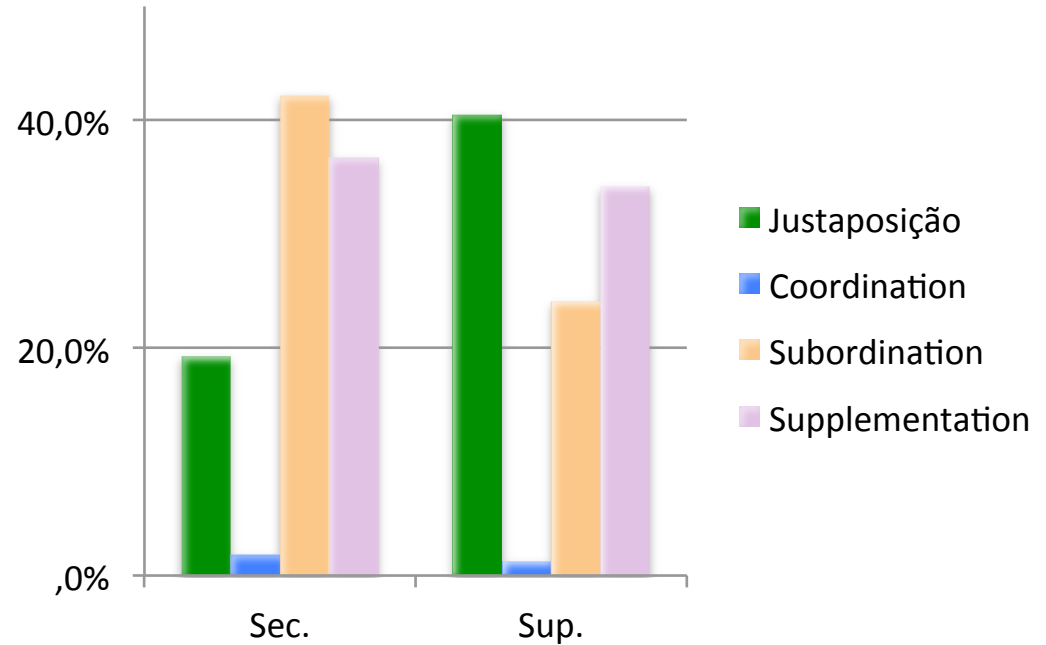


Figure 6- Blog subcorpus – Crosstab syntactic structure * level of education.

+ Position of subordinated clauses

Position of adverbial clauses						
	Argumentative		Blogs		Total	
Initial	21	16,7%	8	12,3%	29 (15,2%)	
Final	105	83,3%	57	87,7%	162 (84,8%)	
Total	126		65		191	

Table 1- Position of adverbial clauses according to the subcorpus

- Overall tendency for the final position (default position in Portuguese (Decat, 1995; Paiva, 1998) and in many other languages (Ford, 1993, 1994; Diessel, 2001; 2005). This reflects the iconic order consequence-cause/affirmation-explanation (Neves, 1997).
- Obligatory initial position of *como*
 - *Como não te vi, fui-me embora* 'As I didn't see you, I left'

+ ■ Preposed adverbial causal clauses:

- work as guides and shifters of the discourse (Ford, 1993).
- express “high commitment toward the truth of the proposition expressed” (Mondorf, 2002:166)
- require more planning and a higher cognitive effort (Ford, 1993).

■ Education* Position

- Anteposition > in informants with more years of schooling (except in argumentative texts written by informants with a degree (0%))

■ Gender*(ante)Position

- Higher % in argumentative texts written by female informants [20-40], 12 years of schooling, unlike predictions (Mondorf, 2002)

Conclusion

- This work sheds some light on the frequency of occurrence of the causal relations and the syntactic structures:
- Speech act modifier causality is more frequent in blogs.
- The frequency of occurrence of explicative causality increases with age and level of education.
- The frequency of occurrence of juxtaposition increases with age and level of education.
- Subordination is more common in the younger informants (also with less years of schooling).
 - In EP the majority of the adverbial clauses that convey causality are postposed. The default position is more frequent in younger informants (also with less years of formal education).

References

- Aries & Johnson (1983) Close friendship in adulthood: Conversational content between same -sex friends. In *Sex Roles*, 9 (12), pp. 1183—1196.
- Brito, A.M., & Matos, G. (2003). Subordinação adverbial. In Mateus et al. (Eds.) *Gramática da Língua Portuguesa*. 5ª edição, revista e aumentada (p. 695-728). Lisboa: Caminho.
- Cheshire, Jenny (2003) Social dimensions of syntactic variation: the case of *when* clauses. In Britain & Cheshire (eds.) *Social Dialectology*. Amsterdam: Benjamins, pp. 245-261.
- Cheshire, Jenny (2005) Syntactic variation and beyond: gender and social class variation in the use of discourse-new markers. In *Journal of Sociolinguistics* 9, pp. 479-507.
- Cheshire, Jenny (2009) Syntactic variation and beyond. In Coupland & Jaworski (eds.) *The New Sociolinguistics Reader*. Basingstoke: Palgrave Macmillan, pp. 119-135.
- Diessel, H. (2004). *The Acquisition of Complex Sentences*. Cambridge: Cambridge University Press.
- Haegeman, L. (2004). The syntax of adverbial clauses and its consequences for topicalisation. In M. Coene, G. de Cuyper & Y. d’Hulst (Eds.), *Antwerp Papers in Linguistics -Current Studies in Comparative Romance Linguistics*, 107 (pp. 61-90). Antwerp: University of Antwerp.
- Herring, Susan & John Paolillo (2006) Gender and genre variation in weblogs. In *Journal of Sociolinguistics*, 10 (4), pp. 439-459.
- Hopper, P., & Traugott E. C. (2003). *Grammaticalization*. 2nd edition. Cambridge, UK: Cambridge University Press.
- Kortmann, Bernd (2006) Syntactic Variation in English: A Global Perspective. In Aarts & McMahon (eds.) *Handbook of English Linguistics*. Oxford: Blackwell Publishing. pp. 603-624.
- Kroch, A. (2001) Syntactic change. In Baltin & Collins (eds.) *The handbook of contemporary syntactic theory*. Oxford: Blackwell Publishing, pp. 699-729.
- Lavandera, Beatriz 1978. “Where does the sociolinguistic variable stop?” *Language in Society* 7, 171-182.
- Lobo, M. (2003) *Aspectos da Sintaxe das Orações Subordinadas Adverbiais*, Dissertação de Doutoramento, Lisboa, Universidade Nova de Lisboa.

- Lopes, H. C. (2004). *Aspectos Sintáticos, Semânticos e Pragmáticos das Construções Causais. Contributo para uma Reflexão sobre o Ensino da Gramática*, Dissertação de Doutoramento. Porto: Faculdade de Letras da Universidade do Porto.
- Lust, B., Foley, C., & Dye, C.D. (2009). The first language acquisition of complex sentences. In E.L. Bavin (Ed.), *The Cambridge handbook of child language* (pp. 237-257). Cambridge: Cambridge University Press.
- Macaulay, Ronald (2005) *Talk That Counts – Age, Gender, and Social Class Differences in discourse*. Oxford University Press.
- Matos, G. (2004) Coordenação Frásica vs. Subordinação Adverbial. In T. Freitas, & A. Mendes (Orgs.) *Actas do XIX Encontro Nacional da Associação Portuguesa de Linguística* (pp. 555-567). Lisboa: APL.
- Mithun, M. (1988). The grammaticization of coordination. In J. Haiman & S. Thompson (Eds.), *Clause combining in grammar and discourse* (pp. 331-59). Amsterdam: John Benjamins.
- Mondorf, B. (2002) Gender Differences in English Syntax. *Journal of English Linguistics* Vol. 30: 2, pp. 158-180.
- Mondorf, Britta (1996) Why Women Use More Postposed Adverbial Clauses. *Working Papers in Language, Gender and Sexism* 6 (2): 5-29.
- Noordman, L. G. M., & Blijzer F. (2000). On the processing of causal relations. in E. Couper-Kuhlen & B. Kortmann (Eds.), *Cause, Condition, Concession and Contrast. Cognitive and Discourse Perspectives* (pp. 35-56). Berlin/ New York: Mouton de Gruyter.
- Paiva, M. C. (1998) Variação e especificidades funcionais no domínio da causalidade. in *Revista de Estudos da Linguagem*, 7(2), 9-28.
- Peres, J. A., & Mascarenhas, S. (2006). Notes on sentential connections (predominantly) in Portuguese. *Journal of Portuguese Linguistics*, 5, 113-169.
- Pintzuk, Susan (2003) Variationist approaches to syntactic change. In Joseph & Janda (eds.) *The Handbook of Historical Linguistics*. Oxford: Blackwell Publishing, pp. 509-528.
- Silvano, M. P. (2010) *Temporal and Rhetorical Relations: the Semantics of Sentences with Adverbial Subordination in European Portuguese*. PhD Thesis. Porto: Faculdade de Letras da Universidade do Porto.
- Sweetser, Eve (1990) *From etymology to pragmatics: metaphorical and cultural aspects of semantic structure*. Cambridge University Press.
- Tannen, D. (1990) Gender differences in topical coherence: Creating involvement in best friends' talk. In *Discourse Processes*, 13, 73-90.
- Winford, Donald (1996) The problem of syntactic variation. In Arnold *et al.* (eds.), *Sociolinguistic variation. Data, theory and analysis*. Selected papers from NWAV23 at Stanford, pp. 177-192.

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Texts written upon request (120 texts / 25.720 words)

Education level	ongoing								completed									
	4 th grade		6 th grade		9 th grade		11 th -12 th grade		9 th grade		11 th -12 th grade		BA/MA					
Age Interval	< 10		10- 12		13-15		16-19		20-45		> 45		20-45		> 45			
Gender	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
No Inf.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Blog entries (48 texts / 22.789 words)

Education level	11 th -12 th grade				BA/MA			
	20-45		> 45		20-45		> 45	
Age Interval	20-45		> 45		20-45		> 45	
Gender	F	M	F	M	F	M	F	M
No Inf.	3	3	3	3	3	3	3	3

