DPs Syntax in acquisition

A case study on Italian L2 by Czech ad Slovak learners

Marco Petolicchio

Czech and Slovak are languages which don't exhibit a manifest position for the Articles in the Determiner Phrase. The aim of this paper is to show how this structure is accessed during the learning of Italian, a language which presents the articles as for the standard behavior for nouns.

Keywords: Determiner Phrase, Italian L2, Second Language Acquisition, Syntax

Contents

1 Introduction

Czech (`ces`) and Slovak (`slk`) are languages of the Slavic branch in the Indo-european family. Alongside a certain morphological complexity in noun declension systems, these languages –except for Bulgarian (3b) and Macedonian (Dryer, 2013)– don't show an overt realization of the Determiner position inside the noun phrase (1) (Harkins, 1953). Conversly, Italian (`ita`) and the other romance languages explicit that position as a default behaviour, usually with a free morpheme preceding the noun (2) or by cliticization of the definite article (3a):

(1) Articleless

    a. `ces` (Veselovská, 2014, 14)
       Chlapec/Marie/Ona/každý miluje   ryby/ {své   rodiče}.
       Boy/Marie/She/Everyone Love.3sg Fish/ {POSS parent}
       "SUBJ loves [the] fish/ his parents"

    b. `slk` (Kamenárová, 2007, 113)
       Večer   čítam   knihy,   píšem   referaty...
       Evening Read.1SG Book.PL Write.1SG Paper.PL
       "In the evening I read [the] books, I write (school) papers ..."

(2) Proclitic

    a. `ita` (Bianco, 2017, 60)
       Il   terremoto   ha   distrutto   la   città.
       ART.DEF Earthquake AUX.3sg Destroy.PTCP.PST ART.DEF City
       "The earthquake destroyed the city"

    b. `fro` (Dufournet and Lecoy, 2008, 3261)
       La   dame estoit   devant la   sale.
       ART.DEF Girl   Be.3sg ADV   ART.DEF Room
       "The *dame* was in front to the room"

(3) Enclitic

    a. `ron` (Cojocaru, 2003, 45)
       Prieten=ul   meu este   aici.
       Friend=ART.DEF POSS Be.PRES.3sg Here
       "My friend is here"

    b. `bul` (Leafgren, 2011, 37)
       Къде   е   книга=та   ми?
       Where Be.3SG Book=ART.DEF POSS.1SG
       "Where is my book?"

The general idea of this paper is to address the question of how linguistic structures which are not overtly marked in L1 can be accessed during the acquisition of a target language that show them. While doing this can be either both purely speculative as grounded on actual data, I will show how the usage of a target collection of linguistic corpora can be useful to test the main hypotheses

into narrower facts. The language under observation are indeed a few: on one side ces and slk as native languages–with no overt position for the articles–on the other ita as target language.

The section 2 provides a theoretical discussion on the top of different theories inside the Generative framework (Chomsky, 1995) on the status of DP and NP. The section 3 is twofold: firstly I present the methods used into the current analysis in terms of *reproducibility* of the research, the policies of data-collection and an analysis of the expected results; while the second subsection is built upon a case study made off to test some hypotheses about the categorial differences of DPs during the acquisition of ita by ces and slk native speakers involved in the test. A summary conclusion (Section 4) closes the paper.

2 Theoretical background

By a generative-oriented point of view, the human language is a computational procedure which relies on a hierarchical organization of structures, and language variations are reconducted to a parametrizing of choice among them (Adger, 2013; Chomsky, 1995, 1998, 2013, 2015; Rizzi, 2013):

> We are concerned, then, with states of the language faculty, which we understand to be some array of cognitive traits and capacities, a particular component of the human mind/brain. The language faculty has an initial state, genetically determined; in the normal course of development it passes through a series of states in early childhood, reaching a relatively stable steady state that undergoes little subsequent change, apart from the lexicon. To a good first approximation, the initial state appears to be uniform for the species. (Chomsky, 1995)

In this perspective, the possibility of comparison is offered either by different languages than among different states of language acquisition: structures can be compared and analized into a coherent grid in order to perform analyses and reveal the similarity and the differences in the parametrizing of syntax.

2.1 The role and the study on interlanguage

Amongst many scholar the role of the native language (L1) has been raised as a factor of possible conditionation in the way which the target language (L2) is acquired during the learning path: an emblematic case is the *transfer* of

the knowledge about the structures of the L1 to the target, revealing the intermediate steps of the acquisitional path defined with the term *interlanguage* (Selinker, 1972), that we can refer as to **Interlanguage Hypothesis** (IlH). One of the main area of research in Generative studies on Second Language Acquisition (GenSLA) regards the investigation about how the linguistic structures can be accessed in L2 and how the transitional stages of acquisition work into the learning continuum (Rothman and Slabakova, 2017).

Since the last 20 years, a considerable part of linguistic activity is involved in developing some sort of models to describe how the faculty of language can work, in its biological (Hauser et al., 2002), computational (Fodor, 2001) and cognitive components in a highly interdisciplinary environment. Studies on SLA is a fertile field, which relies on comparative and contrastive analyses of linguistic phenomena, either both from an applied view (Ellis, 1994) than by theoretically grounded perspective focused on GenSLA (Guasti, 2002; Hawkins, 2001; Rothman and Slabakova, 2017; Sorace, 2011).

2.2 The position of DP and NP

There are striking differencies amongst languages that display an overt D position and those that do not do it in respect to the syntactic behaviour of NP, as such as Left Branch Extraction allowing, scrambling or adjective extraction. Those are properties are summarized in the table below (in Salzmann, 2018, from Bošković (2009)):

Table 1: Syntactic differencies amongst overt/covert D languages

	overt D	covert D
allow adj extraction from NP	no	yes
allow LBE	no	yes
allow Neg-raising	yes	no
allow scrambling	no	yes
allow the majority superlative reading	yes	no
allow trans. nominals with 2 non-lex. genitives	yes	no
can be polysynthetic	no	yes
island sensitivity in head-internal relatives	no	yes
superiority effects in wh-mvt	yes	no

Since the seminal work of (Abney, 1987) there have been established two hypothesis to represent this structure: (i) NP-over-DP, for which the DP is at the edge of NP as specifier; (ii) DP-over-NP, where the DP dominates the NP:
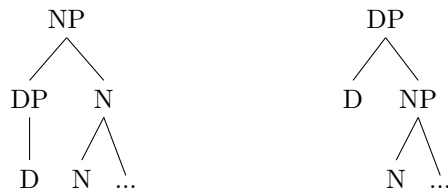
Figure 1: Structural comparison between NP-over-DP and DP-over-NP Hypotheses

	Texts		Tokens	
	ces	slk	ces	slk
Czech-IT	212	74	11129	4440
Merlin	1	0	256	0
Valico	107	17	16250	3316

Table 2: Amount of data in the collection

2.2.1 Implications for the DP-Hypothesis in Italian

Symmetries amongst the DP/NP phrase and the whole sentence are often referenced in terms of structure building and phase-related properties (Chomsky, 2013, 2015).

2.2.2 Implications for the DP-Hypothesis in Czech

3 Case Study

3.1 Retrieve the linguistic data

This analysis relies on 3 corpora of Italian L2, subsetted for the current purposes of having Czech and Slovak L1.

3.2 Perform a test

Provide 10 noun phrases with different referential structure in terms of animateness with a neutralized article. The students are invited to write full sentences for each one.
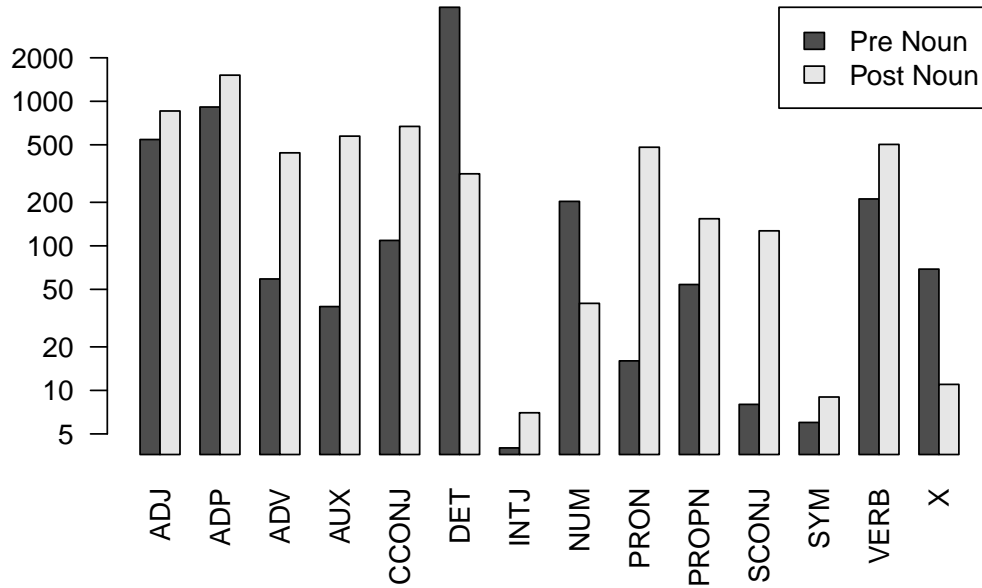
Goals:

Figure 2: Bi-grams distribution of elements near Nouns

- Test the syntactic distribution of phrases (SUBJ vs OBJ)
- Test the distribution of DETs ([+def], [-def], Ø)

4 Conclusion

Financial coverage

This work was partially supported by the funding grant XXX.

Abbreviations

Languages are indicated by the abbreviations provided in the ISO 639-3 format (SIL International, 2009). Morphological glosses styles adher to the widespreadly recognized *Leipzig Glossing Rules* (Comrie et al., 2008), while other abbreviations respect (Boeckx, 2012).

References

Abney, S. P. (1987). *The English Noun Phrase in Its Sentential Aspect*. PhD thesis.

Adger, D. (2013). *A Syntax of Substance*. Linguistic inquiry monographs. MIT Press.

Bianco, F. (2017). *Breve guida alla sintassi italiana*. Pillole. Linguistica. Cesati.

Boeckx, C. (2012). List of abbreviations and symbols. In Boeckx, C., editor, *The Oxford Handbook of Linguistic Minimalism*, pages xv–xx. Oxford University Press.

Bošković, Z. (2009). More on the no-dp analysis of article-less languages. *Studia Linguistica*, 63:187–203.

Chomsky, N. (1995). *The Minimalist Program*. Current studies in linguistics series. MIT Press.

Chomsky, N. (1998). *Minimalist Inquiries: The Framework*. MIT occasional papers in linguistics. MIT Working Papers in Linguistics, MIT, Department of Linguistics.

Chomsky, N. (2013). Problems of projection. *Lingua*, 130:33 − 49. SI: Syntax and cognition: core ideas and results in syntax.

Chomsky, N. (2015). *Problems of projection: Extensions*, volume 223 of *Linguistic Aktuell*, pages 1–16.

Cojocaru, D. (2003). *Romanian Grammar*. Slavic and East European Language Research Center (SEELRC), Duke University.

Comrie, B., Haspelmath, M., and Bickel, B. (2008). The leipzig glossing rules: Conventions for interlinear morpheme-by-morpheme glosses.

Dryer, M. S. (2013). Definite articles. In Dryer, M. S. and Haspelmath, M., editors, *The World Atlas of Language Structures Online*. Max Planck Institute for Evolutionary Anthropology, Leipzig.

Dufournet, J. and Lecoy, F. (2008). *Le roman de la rose ou de Guillaume de Dole par Jean Renart*. Champion Classiques. Champion.

Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford applied linguistics. Oxford University Press.

Fodor, J. (2001). *The Mind Doesn't Work that Way: The Scope and Limits of Computational Psychology*. Bradford book. MIT Press.

Guasti, M. T. (2002). *Language Acquisition: The Growth of Grammar*. The MIT Press.

Harkins, W. E. (1953). *A Modern Czech Grammar*. King's Crown Press, New York.

Hauser, M. D., Chomsky, N., and Fitch, W. T. (2002). The faculty of language: What is it, who has it, and how did it evolve? *Science*, 298:1569–1579.

Hawkins, R. (2001). *Second language syntax: A generative introduction*. Wiley-Blackwell.

Kamenárová, R. (2007). *Krížom-krážom: Slovenčina A1*. Number sv. 1 in Studia Academica Slovaca. Univerzita Komenského.

Leafgren, J. (2011). *A Concise Bulgarian Grammar*. SEELRC.

Rizzi, L. (2013). Introduction: Core computational principles in natural language syntax. *Lingua*, 130(Supplement C):1 – 13. SI: Syntax and cognition: core ideas and results in syntax.

Rothman, J. and Slabakova, R. (2017). The generative approach to sla and its place in modern second language studies. *Studies in Second Language Acquisition*, page 1–26.

Salzmann, M. (2018). Revisiting the np vs. dp debate.

Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics in Language Teaching*, 10(1–4):209–232.

SIL International (2009). Iso 639-3 - codes for the representation of names of languages.

Sorace, A. (2011). Pinning down the concept of "interface" in bilingualism. *Linguistic approaches to bilingualism*, 1(1):1–33.

Veselovská, L. (2014). Universal dp-analysis in articleless language: A case study in czech. In Veselovská, L. and Janebová, M., editors, *Nominal Structures: All in Complex DPs*, Olomouc modern language monographs, pages 12–28. Palacký University, 1 edition.