

# Exploring the L2 syntax/morphology interface in the DP domain: a study on the L2 acquisition of German nominal inflectional morphology by Italian adult learners

SIMONA MATTEINI

University of Siena  
[matteini3@unisi.it](mailto:matteini3@unisi.it)

This work is mainly concerned with the acquisition of some aspects of the morphosyntax of German possessive constructions by a group of 18 Italian adult L2 learners with different levels of proficiency (Beginners, Intermediate, Advanced learners). In the present study, I address the issue of morphological variability more in details with the attempt to define a fine-grained scenario of L2 strategies adopted by Italian learners when facing the process of morphological insertion. Specifically, the morphosyntactic domains investigated are possessive constructions of the *-s Genitive* type. Overall, findings indicate a substantial dissociation between syntax and morphology (i.e. Parodi et al 2004 for L2 acquisition of German nominals by Romance learners). As for syntax, L1 transfer seems to operate in a 'selective' way (i.e. discrepancy between early production of L2 AP-NP order vs gradual use of *-s Genitive* constructions). As for morphology, different strategies emerged depending on the item involved in the inflectional process (*-s Genitives* vs APs) as well as on the syntactic configuration in which it is licensed (strong vs weak inflectional contexts). More generally, it emerges an interesting L2 tendency to simplify the morphological architecture of the German AP inflectional paradigm through the substitution of 'default' simpler forms.

Keywords: Morphosyntax, DP, morphological variability, German, Italian

## 1. Introduction

Since the pioneering studies on morpheme acquisition orders of the 1970s (i.e. Dulay & Burt a.o.), the phenomenon of variable use of inflectional morphology has been widely attested in the literature on L2 acquisition. In the last decade, many works have investigated this topic in a generative perspective with the aim of identifying the source of such difficulties, basically within a parameter-resetting paradigm<sup>58</sup>.

---

<sup>58</sup> According to this view, adult learners' failure to reach a native-like proficiency is mostly due to the inability to reset parameter values from L1 to L2.

Lardiere's (1998a, b) study on Patty's L2 acquisition of the morphosyntax of English finite verbs reveals a strong dissociation between a target L2 syntax (i.e. target finite verb placement; target case assignment on subjects) and a non-target inflectional morphology (i.e. omission of inflection on finite verbs) which is found even in the endstate grammar. Prévost and White (1999, 2000) examine variability in the use of verbal inflection in L2 French and German. They observe that L2 learners have difficulties in the overt realization of morphology although this fact does not correlate with lack of syntactic reflexes of finiteness (i.e. non-target placement of finite verbs in the clause, non-target case assignment on subjects). Based on these findings, the authors argue that the problem of variable use of inflectional morphology lies in "learner's imperfect mapping" of specific morphological forms to abstract categories (Missing Surface Inflection Hypothesis).

Recently, Lardiere (2005) has stressed that accounting for morphological variability in terms of a parameter-resetting paradigm is too simplistic. She proposes that it is the way in which grammatical features are morphologically combined in L1 vs L2 that may affect their overt realization during the course of acquisition. According to this view, L2 learners have to acquire a kind of *morphological competence* - the knowledge of which forms 'go with' which features - which enable them to (re)assemble features into new/different formal configurations (Feature Assembly Hypothesis).

A slightly different approach has been formulated by Slabakova (2009), who, on the basis of Lardiere's hypothesis, points out that an alternative way of looking at L2 acquisition of the morphological component is to focus on the universal constraints of feature (re)assembly in L2 grammars. Slabakova argues that 'a cline of difficulty' in grammatical feature acquisition should be predictable on the basis of the 'gradient' of mismatch of grammatical features' (re)assembly between L1 and L2. This scenario entails three hypothetical 'learning situations' as briefly schematized in (1):

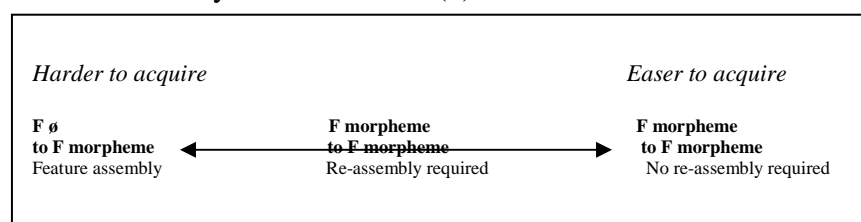


Figure 1: Cline of difficulty in grammatical feature acquisition (adapt. by Slabakova 2009)

Taking as case point the L2 acquisition of grammatical gender, Slabakova (2009) illustrates the three different learning situations: learning a language which encodes gender represents a difficult task for speakers of a language which does not, like, for example, English. On the contrary, learning a language where only some re-assembly of the gender feature is necessary may not be problematic, whereas simple gender mapping is supposed to represent the easiest learning situation. These predictions are well captured in Sabourin et al. (2006)'s work on the L2 acquisition of grammatical gender in Dutch (three-gender system marking) by speakers of English (no gender marking), German

(three-gender system marking), Romance languages (two-gender system marking). Overall, the L2 population shows a high grade of accuracy in assigning L2 gender. However, interesting diverging interlanguage tendencies emerged, as predicted by Figure 1: German speakers are the most accurate; English speakers the less accurate, whereas Romance languages' speakers perform right in the middle. More interestingly, Slabakova underlines the fact that, even the easiest learning situation of grammatical feature acquisition where no feature re-assembly is supposed, may involve difficulties for L2 learners. This is exactly what emerges, for example, in Slabakova & Gados' (2008) study on the L2 acquisition of person and number features of the German auxiliary *sein* by speakers of English. Despite the fact that the two languages in this particular case use the same features, hence, in principle, no re-assembly across categories is necessary, results confirm that beginners and intermediate learners are highly inaccurate in performing the task. As pointed out by Slabakova (2009), these findings suggest that the Feature (re)Assembly Hypothesis is unable to capture all the problematic aspects of acquiring the L2 inflectional morphology and that, arguably, other additional factors (i.e. processing) have to be taken into consideration.

The present study looks at L2 acquisition of the morphosyntax of German nominals by Italian adult L2 learners. Specifically, possessive constructions of the *-s Genitive* types and adjectival phrases were investigated with the aim of assessing L2 accuracy both in the syntactic component (target placement of possessors and adjectives with respect to nouns) and in the morphological component (insertion/omission of target inflectional morphology). As already reported in the literature on L2 acquisition of nominals<sup>59</sup>, results indicate a substantial dissociation between syntax and morphology. Acquisition of bound morphology seems to pose major problems for L2 learners, in particular commission errors prevail over missing inflection, a finding which is not surprising given that knowledge of agreement categories should be available via L1 transfer in Italian L2 learners of German. Hence, a fine-grained analysis of the non-target patterns concerning L2 production of *-s Genitives* and AP agreement morphology will be conducted and some conclusions on the basis of the recent hypotheses on L2 acquisition of morphology sketched so far will be drawn.

The paper is organized as follows: in section 2, based on a comparative approach between German and Italian nominal morphosyntax, some predictions for the L2 acquisition of the topics investigated for this study will be formulated; section 3 focus on the experimental paradigm adopted and on the populations participating in the research project; section 4 is devoted to qualitative and quantitative analysis of the results; section 5 concludes the paper with a general discussion of the main findings.

## **2. On the Morphosyntax of German and Italian (possessive) DPs: some comparative remarks**

In this study I focus in particular on the interaction between two different kinds of parametric variation that differentiate the (morpho)syntax of Italian and

---

<sup>59</sup> Parodi et al (1999), (2004) investigate the L2 acquisition of different aspects of German nominal morphosyntax (use of determiners, plural marking, adjective placement) by Korean, Turkish and Romance speakers. They find that, whereas L2 syntax is clearly vulnerable for L1 transfer, inflectional morphology causes major acquisition difficulties regardless of learners' L1 inflectional system.

German possessive DPs, namely (i) the different position of NP with respect to adjectives and (ii) the different position of bare proper name possessors (henceforth BPN Poss) with respect to NPs and APs. The relevant patterns are exemplified in (1) and (2) respectively:

- (1)a La            borsa            rossa  
 the.Fem.Sg bag.Fem.Sg red.Fem.Sg  
 “The red bag”
- (1)b \*La            rossa            borsa  
 the.Fem.Sg red.Fem.Sg bag.Fem.Sg
- (1)c \*Die            Tasche            rote  
 the.Nom.Fem.Sg bag.Fem.Sg red.Fem.Sg.Weak
- (1)d Die            rote            Tasche  
 the.Nom.Fem.Sg red.Fem.Sg bag.Fem.Sg
- (2)a Ilse            rote            Tasche  
 Ilse.Gen red.Nom.Fem.Sg bag.Fem.Sg  
 “Ilse’s red bag”
- (2)b \*di Ilse            borsa            rossa  
 of Ilse bag.Fem.Sg red.Fem.Sg  
 “Ilse’s red bag”
- (2)c la/una            borsa            rossa            di Ilse  
 the.Fem.Sg/a.Fem.Sg bag.Fem.Sg red.Fem.Sg of Ilse  
 “Ilse’s red bag/one of Ilse’s bags”
- (2)d la/una            sua            borsa  
 the.Fem.Sg/a.Fem.Sg her.Fem.Sg bag.Fem.Sg  
 “Her bag/one of her bags”

As for (i), assuming Cinque’s proposal (1995, 2005) that adjectives are organized in a universal hierarchy based on their semantic properties, the variation in noun placement with respect to APs has been interpreted as a result of NP movement inside the nominal functional projection<sup>60</sup>; NP obligatory targets an intermediate specified position in Italian but not in German. As for (ii), assuming the traditional analysis that possessors are inserted in the lexical layer since they bear a theta-role assigned by the head noun, the fact that in German BPN Poss precedes adjectives and does not occur with any determiner suggests that the possessor is licensed in a high position outside the NP layer. Moreover, prenominal possessors of the type in (2)a force a definite interpretation of the whole DP in German. Contrary to German, Italian BPN Poss does not occur in prenominal position (2a vs 2b); instead it is licensed postnominally through the preposition *di* (2c) resulting in an analytic possessive

<sup>60</sup> Following Shlonsky (2003) and Cinque (2005a) and (2005b), I will adopt the proposal that the noun moves through the DP as a maximal projections (NP) rather than as a bare head (N).

construction. Only a pronominal possessor shows up in prenominal position and may co-occur with a definite or indefinite determiner (2d).

On the basis of the multi-layered, articulated DP structure proposed by Haegeman (2004), Giusti (2005), (2006), Cinque (2005a,b) a.o., I assume for the German –s Genitive construction in (2)a and the Italian analytic possessive construction in (2)c the following derivations:

- (3)a [<sub>SpecDFinP</sub> Ilse<sub>s</sub><sub>i</sub> [<sub>DFin</sub> [<sub>SpecIP</sub> <sub>t</sub><sub>i</sub> [<sub>I</sub> [<sub>SpecFP</sub> rote<sub>F</sub> [<sub>SpecFP</sub> Tasche<sub>j</sub> [<sub>F</sub> [<sub>SpecNP</sub> <sub>t</sub><sub>i</sub> [<sub>NP</sub> <sub>t</sub><sub>j</sub>]]]]]]]]]]]]]]]]]]]]
- b [<sub>DFin</sub> la [<sub>IP</sub> .. [<sub>SpecFP</sub> borsa<sub>j</sub> [<sub>F</sub> [<sub>SpecFP</sub> rossa<sub>F</sub> [<sub>SpecNP</sub> di Ilse [<sub>NP</sub> <sub>t</sub><sub>j</sub>]]]]]]]]]]]]]]]]]]]]

The derivation in (3)a illustrates the fact that, in German, BPN Poss with –s affix undergoes a two-step movement in the German DP: from its merge position (SpecNP) it raises to SpecIP in order to check the genitive case feature. Further movement to SpecDFinP is triggered by the requirement to check a semantic feature (definiteness). Furthermore, NP targets a SpecFP position just below the lexical layer. Contrary to German, BPN Poss is licensed in situ in Italian possessive constructions through preposition insertion whereas NP raises to an intermediate SpecFP position<sup>61</sup>. According to this proposals, insertion of inflectional morphology on Possessors and APs is interpreted as the ‘visible’ result of such agreement relations.

Concerning the morphological variation between German and Italian at the DP level, it should be stressed that both languages possess a rich inflectional paradigm for marking Gender, Number and, crucially for German, also Case. The most important difference involves the AP inflectional system. In German, Case, Gender, Number features as well as the Determiner choice interact in a very complex way<sup>62</sup> and determine the so called weak/strong inflection on adjectives. In general terms, when D appears as a bare form (4a) or there is no determiner introducing the nominal (4b), APs carry the strong inflection. Otherwise APs show up with the weak inflection (4c):

- (4)a Peter hat **ein** rote<sub>s</sub> Auto<sup>63</sup>  
 Peter has a.Acc.Neut.Sg red.Acc.Sg.Strong car.Neut  
 ‘Peter has a red car’
- (4)b Peters rote<sub>s</sub> Auto  
 Peter.Gen red.Nom.Sg.Strong car.Neut  
 ‘Peter’s red car’

<sup>61</sup> As proposed by Cinque (2005), a reason as to why NP has to move may lie in the licensing conditions imposed on adjective phrases, and namely the need to be endowed with a nominal feature in order to be licensed.

<sup>62</sup> The complete paradigm of German adjectival declension is given in the Appendix.

<sup>63</sup> The AP inflection paradigm used with indefinite determiner or possessive pronouns is called *Mixed Inflection*: it is mostly equivalent to the weak inflection, except in three contexts (Singular Masculine/Neuter Nominative and Singular Neuter Accusative) when it is equivalent to the strong inflection.

- (4)c **Das**                      rote                      Auto  
 the.Nom.Neut.Sing    red.Nom.Sg.Weak    car.Neut  
 ‘the red car’

It is worth noting that the opposition of Gender, Number and Case is marked through five different endings on APs (*-e*, *-en*, *-er*, *-em*, *-es*) in the strong paradigm of inflection, whereas in the weak paradigm of inflection such fine-grained distinction is neutralized and only the two endings (*-e/-en*) appear on nominal modifiers. Concerning *-s* Genitive constructions as in (4)b, they have a very restricted distribution. The *-s* affix does not inflect according to Gender and Number and attaches to singular bare proper names/kinship terms only.

Contrary to German, in Italian the declension is mostly reduced to the alternation *-a/e* (Feminine; Singular/Plural) vs *-o/i* (Masculine Singular/Plural) and nominal agreement surfaces on both determiners and APs<sup>64</sup>:

- (5)a **La/le**                      macchina/e                      rossa/e  
 the.Fem.Sg/Pl    car.Fem.Sg/Pl    red.Fem.Sg/Pl  
 ‘the red car(s)’
- (5)b **Il/i**                      nuovo/i                      libro/i  
 the.Masc.Sg/Pl    new.Masc.Sg/Pl    book. Masc.Sg/Pl  
 ‘the new book(s)’

With these very brief comparative remarks in mind, let us now consider the implications for the acquisition of *-s* Genitive constructions in Italian L2 learners.

At the level of syntax, this process implies the resetting of parameters responsible for the opposite linear order of non-pronominal possessors and APs in both languages. This might cause initial difficulties due to L1 transfer. Specifically, as far as AP placement is concerned, a L1 linear order NP-AP should be expected at least for Beginners L2 learners. Moreover, an initial preference for analytic possessives constructions over *-s* Genitives might emerge in L2 learners’ production of possessive DPs.

At the level of morphology, due to the fact that knowledge of L2 adjectival agreement categories is available via L1 Transfer, no missing inflection phenomena are expected. However, insertion of morphology on BPN Poss and APs by Italian learners of German represents an interesting case of L2 features (re)assembly in the sense of Lardiere (2005). Specifically, in Italian, Determiners, APs and NPs are morphologically marked for Gender and Number, whereas, contrary to German, a Case inflectional paradigm is preserved only in the clitic system in Italian. Hence, in addition to the fact that German has a three-gender system marking, a Case feature not morphologically realized in the L1 is involved in the L2 inflection of both BPN Poss and APs. Table (1) illustrates the main differences on the grammatical features involved in the DP morphology of German and Italian:

<sup>64</sup> An exception is represented by a group of APs ending in *-e* which inflect for number only (la ragazza/il ragazzo intelligente; le ragazze/i ragazzi intelligenti – *the smart girl(s)/boy(s)*).

	<b>Gender</b>	<b>Number</b>	<b>Case</b>
<b>German</b>	+ (Masculine, Feminine, Neuter)	+ (Singular, Plural)	+ (Nominative, Accusative, Dative, Genitive)
<b>Italian</b>	+ (Masculine, Feminine)	+ (Singular, Plural)	∅ (only on clitics)

Table (1): Grammatical features in German and Italian

Moreover, as already pointed out, the complex AP system of inflection interacts crucially with the syntactic component, in that the choice of the article (null D, (un)inflected D) determines the nature of the AP inflectional paradigm (weak vs strong).

Considering such differences, a (re)-assembly of how grammatical features (Gender, Number and Case) are combined in the L2 is then required and, in terms of Slabakova (2009)'s idea on the L2 cline of difficulty, this task should determine for Italian speakers a quite difficult learning situation.

### 3. The experimental procedure

The data analysed here are part of a large corpus collected by means of two different tasks and analysed in Matteini (2007). For the purpose of this study, I concentrate only on the oral Picture Description Task (henceforth PDT).

In the PDT, experimental subjects were asked to look at a drawing while listening to some information about the content of the picture and then to answer a question posed by the investigator<sup>65</sup>. Subjects were also advised to answer with sentences containing a verb. A total of 40 DPs with adjectives were elicited for each student; 25 out of 40 DPs were possessive constructions (10 with and adjective and 15 without). The corpus collected consists of 1170 tokens. The study presented here is based on the analysis of a total of 630 DPs containing attributive APs and –s Genitive possessors.

A group of 18 Italian learners of German and 8 native speakers participated in the experiment. All subjects were tested individually. Their production were recorded and then transcribed. The L2 population were attending classes at the University of Siena at the time of the experiment. Informants' ages ranged from 19 to 43; their level of proficiency was established through standardized proficiency tests running at the beginning of their courses. There were 4 Beginners; 10 Intermediate and 4 Advanced learners of German.

## 4. The Data

### 4.1 –s Genitive Constructions

Figure (2) and Table (2) indicate that the acquisition of –s Genitive Constructions is characterized by a clear developmental path. Beginners show a non-native like performance; they only resort to possessive constructions similar to their L1 (mostly Analytic Possessive Constructions: *Das ist das Buch von Peter* – This is Peter's book); in Intermediate L2 learners, the production of –s Genitive Constructions increases considerably with respect to Beginners, whereas in Advanced L2 learners –s Genitive constructions represent the

<sup>65</sup> Two samples of items are given in the Appendix.

favourite option for expressing the possession. These facts are represented in Table 1 and Figure 2 below:

<b>Beginners</b>	0/100 <b>(0%)</b>
<b>Intermediate learners</b>	91/250 <b>(36%)</b>
<b>Advanced learners</b>	65/100 <b>(65%)</b>
<b>Controls</b>	137/200 <b>(69%)</b>

Table 1 – Production of –s Genitive DPs

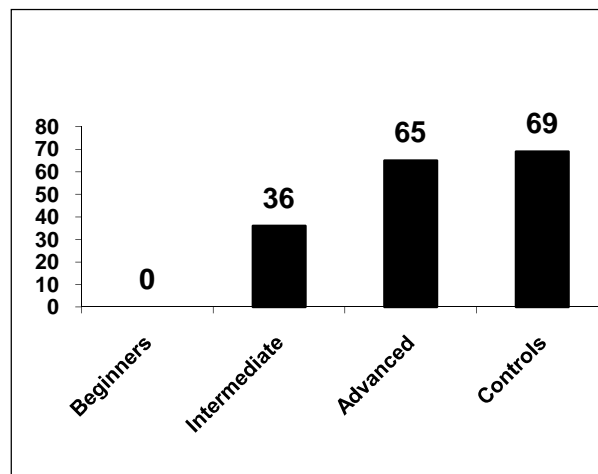


Figure 2 - PDT: -s Genitive DPs (%) according to Level of Proficiency

Concerning morphology suppliance on BPN Poss, –s insertion increases depending on proficiency level (Intermediate L2 learners (66/100); Advanced L2 learners (65/65). Figure (3) illustrates this:

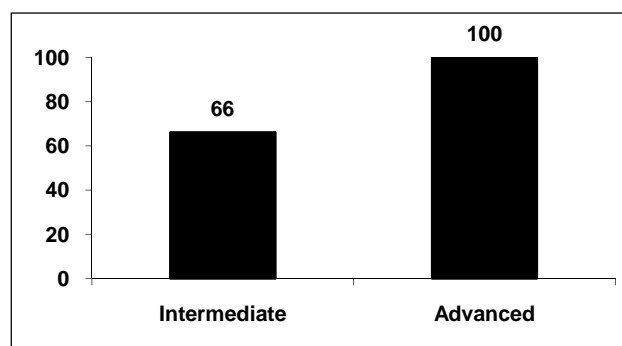


Figure 3: (%) Target morphology on BPN Poss

Missing inflection is the only non target pattern attested and it is restricted to Intermediate L2 learners only. It is worth noting that omission of –s affix is not optional/random in this group of learners. In analyzing the L2 patterns’ individually, it emerges that only 3 out of 8 subjects consistently avoids –s insertion, as clearly indicated by Figure 4:

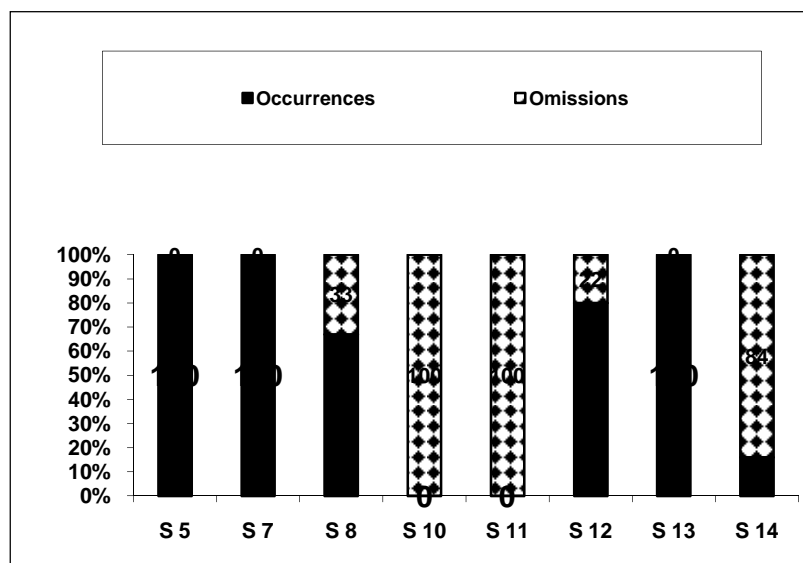


Figure 4 - (%) -s Genitive Morphology in Intermediate L2ers: Individual Tendency

Focusing on the correlation between BPN Poss placement and omission/insertion of inflectional morphology, it should be stressed that possessors occurring in postnominal position are always found introduced by a Case assigner (the preposition *von* – of), as in (6a):

- (6a) Das ist die blaue Bluse von Inge  
 This is the.Nom.Fem.Sg blue.Nom.Sg.Weak shirt.Fem of Inge  
 ‘This is Inge’s blue shirt’

or realized as a full DPs inflected in the Genitive case:

- (6b) Das ist das Buch \*[des Peters]<sup>66</sup>  
 This is the.Nom.Neut.Sg book.Neut.Sg the.Gen Peter.Gen  
 ‘This is Peter’s book’

Overall, it emerges that -s suffix is correctly supplied and, when omitted, this strategy is restricted to the prenominal position only.

<sup>66</sup> In this case the genitive declension of singular common nouns has been applied to proper names resulting in a non-target structure.

#### 4.2 DPs with adjectives

Concerning the tendency observed in the production of DPs with adjectives, it is worth observing that the L1 linear order NP-AP is not attested, whereas the L2 linear order AP-NP is produced at a high rate across L2 learners groups:

L2 Groups	AP-NP
<b>Beginners</b>	105/122 <b>(86%)</b>
<b>Intermediate learners</b>	280/300 <b>(93%)</b>
<b>Advanced learners</b>	119/120 <b>(99%)</b>
<b>Controls</b>	225/240 <b>(94%)</b>

Table 2 – Production of AP-NP linear order

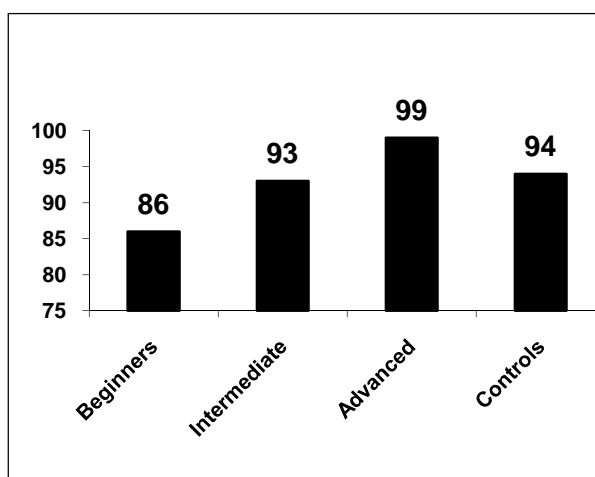


Figure 5 – L2 AP-NP linear order according to level of proficiency

Moreover, accuracy on target AP morphology is fairly low regardless of proficiency level (Beginners: 38% (46/122); Intermediate: 32% (95/300); Advanced 41% (49/120)). These findings are reported in Figure (6):

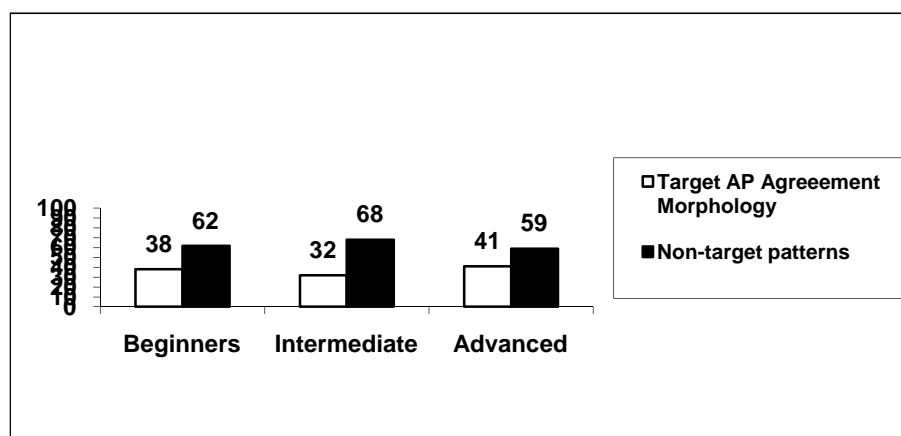


Figure 6 - (%) Accuracy on AP Agreement Morphology depending on L2 Proficiency Level

Concerning insertion/omission of inflectional morphology, several kinds of non-target patterns emerge:

(i) **Agreement Matching:** DPs surface with a non-target morphology on determiners and adjectives, although a Gender/Number/Case agreement matching between both elements is established:

(7)	De	Man	spric	mit	*[ <u>eine</u>	spanische <u>e</u>	Freund]
a	r	n	ht				
	the	man	talk	wit	a.Nom/Acc.Fem	spanish.Nom/	friend.Ma
				h	.Sg	Acc.	sc
						Fem.Sg.Weak	
				vs			
					<u>einem</u>	spanischen <u>e</u>	Freund]
b							
					a.Dat.Masc.Sg	spanish.Dat.M	friend.Ma
						asc.	sc
						Sg.Weak	

“The man is speaking with one of his Spanish friends”

(ii) **AP Ending Substitution:** non-target morphology is restricted to APs only, whereas determiners show up correctly inflected for Gender/Number/Case:

(8)	Da	is	[der	*gel <u>ben</u>	Rock]	der	Kari
a	s	t					n
	Thi	is	the.No	yellow.[-	skirt.Masc	the.Fem.	Kari
	s		m.	Nom].	.Sg	Dat/Gen.Sg	n
			Masc.	Masc.Sg.Weak			
			Sg				
			vs				
			der	gel <u>be</u>	Rock	der	Kari
b							n

the.No	yellow.Nom.	skirt.Masc	the.Fem.Dat/Ge	Kari
m.	Masc.	.Sg	n.Sg	n
Masc.	Sg.Weak			
Sg				

“ This is Karin’s yellow skirt ”

(ii) **Missing Inflection:** Agreement inflection on APs is dropped. On the contrary, determiners have target Gender/Number/Case morphology:

(9)	Da	Kin	nimmt	[ <u>eine</u>	*gelbØ	Blume]
a	s	d				
	Th	chil	take.Pres.	a.Acc.Fem	yellow.Ø	flower.Fe
	e	d	3Sg	.Sg		m.Sg
			vs			
				<u>eine</u>	<u>gelbe</u>	Blume
b				a.Acc.Fem	yellow.Acc.Fem.Sg	flower.Fe
				.Sg	.Weak	m.Sg

“ The child takes a yellow flower ”

(iii) **Agreement Mismatching:** In this case, contrary to the non-target pattern labelled as Agreement Matching, a feature clash between Ds and APs emerges. As a consequence, phi-features on both elements do not match. An example is given in (10)a, where the nominative masculine singular noun *Mantel* (coat) is introduced by the definite determiner *die* which mark nominative/accusative feminine nouns in the weak singular paradigm of inflection<sup>67</sup>. On the contrary, the suffix *-er* on the attributive adjective *weiss* (white) marks the target Gender/Number/Case features of the noun but in the strong paradigm of inflection instead of the weak one required by the morphology on the determiner<sup>68</sup>:

(10)a	Das	ist	*[ <u>die</u>	<u>weisser</u>	Mantel]	von	Albert
	This	is	the.Nom.	white.Nom.Masch.	coat.Masch	of	Albert
			Fem.Sg	Sg.Strong			
			vs				
			<u>der</u>	<u>weisse</u>	Mantel	von	Albert
b			the.Nom.	white.Nom.Masch.	coat.Masch	of	Albert
			Masch.Sg	Sg.Weak			

<sup>67</sup> With plural nouns, the determiner *die* is used in Nominative/Accusative contexts regardless of Gender distinction

<sup>68</sup> Hence, in addition to a “features clash” between D and AP, a mismatch regarding the weak/strong paradigm of inflection on APs also emerges here. In fact, according to the morphology on the determiner, the adjective *weiss* requires a weak inflectional morphology (*-e*) and not the strong inflectional marker (*-er*) supplied in this context by the L2 learner.

It is worth considering that, across L2 learners' groups, **Agreement Matching** and **AP Ending Substitution** prevail over **Missing Inflection** and **Agreement Mismatching**, which is restricted to Beginners and Intermediate learners. Furthermore, **Missing Inflection** is attested at a low rate in all the three groups. Figure (6) exemplifies these facts:

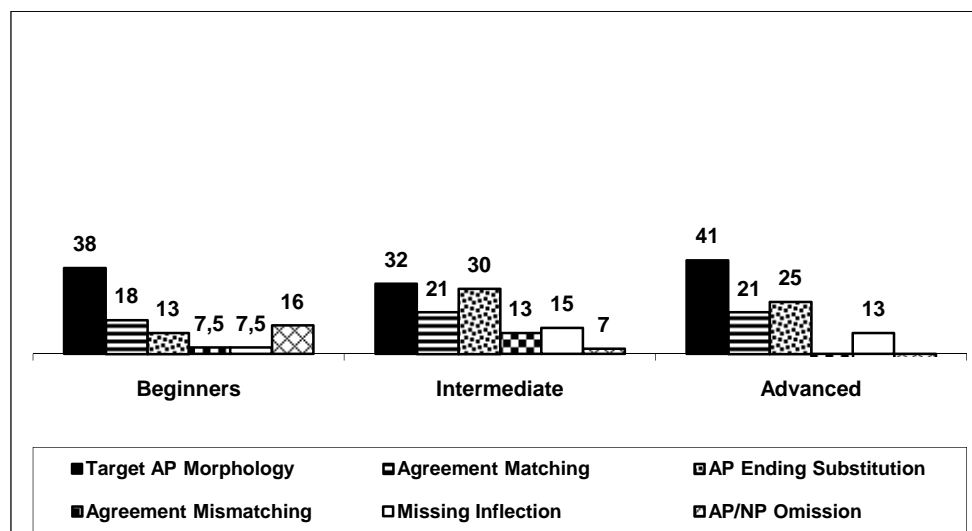


Figure 6 - L2 Morphological variability: Patterns across L2 learners' groups

Let us now turn more in details to the L2 strategies adopted in the non-target patterns. Concerning the **Agreement Matching** pattern, the data reveal an overuse of the agreement endings **-e/-e** on determiners and adjective. These endings mark Nominative/Accusative feminine singular DPs in German. As a consequence, nominals show up with a non-target Case/Gender morphology independently from the one required by the context (see 7a vs b). This strategy emerges in all the three L2 learners' groups (Beginners 18% - 21/120; Intermediate 21% - 63/120; Advanced 21% - 25/120). As far as the **AP Ending Substitution** pattern is concerned, I found an overuse on adjectives of the ending **-e/-en** (see 8a vs b) which have the largest distribution in the German AP (weak/strong) inflectional paradigm. This strategy mostly prevails in Intermediate and Advanced L2 learners (Beginners 13% - 16/120; Intermediate 30% - 36/120; Advanced 22% 30/120). Finally, **Missing Inflection** is mainly attested in weak inflectional contexts in Beginners (78% - 7/9) and Intermediate (73% - 33/45) L2 learners (see 9a), while Advanced L2 learners resort to this strategy only in **-s** Genitive constructions (60% - 9/15), which requires a strong inflectional morphology on APs (60% - 9/15). Example (11) illustrates this:

- (11)a Das ist Karls schwarzØ Kravatte  
 This is Karl.Gen blackØ tie.Fem.Sg
- vs
- b Karls schwarze Kravatte  
 Karl.Gen black.Nom. tie.Fem.Sg

Fem.Sg.Strong

“This is Karl’s black tye”

## 5. Discussion

Overall, findings indicate that L2 learners are very accurate as for BPN Poss/AP placement is concerned, whereas accuracy on inflectional morphology represents a problematic domain regardless of proficiency level. The data show a substantial dissociation between syntax and morphology, as already reported in previous L2 studies on this topic (i.e. Lardiere 1998a,b for clausal domain, Parodi et al. 1999, 2004 for nominal domain).

At the level of syntax, results on the production of –s Genitives constructions suggest that the interlanguage grammar is clearly influenced by L1 representation in the first stages of acquisition (Schwartz & Sprouse 1996). The L2 learners resort to the pattern they already know from their L1 (Analytic Constructions prevail over –s Genitives). Similar findings have been reported for L2 Dutch by Van de Craats et al. (2000). Concerning NP placement, no considerable differences emerge in learners’ performance, despite their different levels of proficiency in the L2. Resetting of the word-order parameter relevant for the different position of NP with respect to nominal modifiers in Italian and German seems to be an easier target to achieve (but see Parodi et al. 2004 for different findings in Italian untutored L2 learners of German). On the basis of the discrepancy that emerged between an early production of L2 AP-NP order and the gradual use of –s Genitive constructions, it seems reasonable to conclude that transfer phenomena operate in a ‘selective’ way. Hence, in this case, only BPN Poss Movement Parameter appears to be sensitive for L1 transfer.

At the level of morphology, the comparison between the acquisition of –s affix and the AP adjectival inflection reveals interesting asymmetries. As expected, **Missing Inflection** is a very limited phenomenon in both domains. However, while in –s Genitive constructions omission of –s affix prevails over commission errors and follows a developmental path, in AP contexts the opposite tendency emerges. In this case, L2 learners, regardless of their proficiency level, resort to the insertion of non-target morphology to a greater extent. Nevertheless, a fine-grained analysis of the L2 patterns show that the use of non-target AP agreement morphology obeys a principle of ‘morphological economy’. Specifically, a general tendency towards a ‘morphological reduction’ of the German AP inflectional paradigm emerges and seems to operate at different levels: (i) only on the AP node where inflection has to be inserted. In this case L2 learners reduce the AP inflectional system to the endings *-e/-en* which have the widest distribution in the German inflectional paradigm. Hence ‘**AP Ending Substitution**’ emerges; (ii) at the DP level (i.e. **Agreement Matching** pattern). L2 learners reduce the German Case/Gender system to the

Nominative/Accusative Feminine *-e/-e*, which seems to ‘reproduce’, from a morpho-phonological point of view, the paradigm of Italian nominal agreement system ending in vowels. On the contrary, evidence for a “feature clash” (i.e. Agreement Mismatching pattern) are quite limited and restricted to non-advanced levels of proficiency (Beginners and Intermediate learners). According to Lardiere’s Feature Assembly Hypothesis, these results suggests that the acquisition of morphological competence which enable L2 learners to assembly new features into different formal configurations seems to be possible, at least, for *-s* suffix, where a perfect ‘one-to one’ correspondence between the acquisition of a new feature and a new (invariable) morphological marker is established. A slightly different kind of consideration is needed for the acquisition of AP inflectional morphology, which, on the contrary, represents a more complex case of feature re-assembly due to the interplay of three different features (Gender, Number, Case) with their various morphological manifestations. The acquisition of a morphological competence seems to cause major problems here, although it should be stressed that inflectional morphology is not randomly assigned by L2 learners in these contexts. Further investigations on other L2 populations acquiring German and whose L1s possess a morphological paradigm more similar to the German one, would be interesting in order to assess whether the ‘morphological reduction’ strategy adopted by Italian L2 learners is affected by a morpho-phonological transfer or it reflects a more general economy principle driven by the requirement of ‘morphological uniformity’.

Finally, the picture that emerges partially support Slabakova’s idea on the cline of difficulty in grammatical feature acquisition. In fact, results on the acquisition of AP agreement morphology where a re-assembly of Case, Gender and Number features is involved, represents a problematic learning situation for Italian speakers of German even at advanced levels. On the contrary, *-s* Genitive constructions should fall under the most difficult learning situation, in that a new feature (i.e. Case ) which is not morphologically realized in the L1 has to be acquired. However, as observed in L2 learners’ paths of development, this task is gradually achieved. This last consideration seems then to strengthen the idea expressed by Lardiere’s (2005) that it is the way grammatical features are morphologically combined in the L2 vs L1 that affects their realization in the course of acquisition.

## References

- Cinque, G. (1995) On the evidence of partial N-movement in the Romance DP. In *Paths towards universal grammar: essays in honor of Richard S. Kayne*, C. Cinque, J. Koster, J. Pollock & R. Zanuttini (Eds.), (pp. 81-110). Georgetown University Press.
- Cinque, G. (2005a) Deriving Greenberg’s Universal 20 and its Exceptions. *Linguistic Inquiry* 36, 315-332.
- Cinque, G. (2005b) The dual source of adjectives and phrasal movement in the Romance DP, Manuscript, University of Venezia.
- Dulay, H. and M. Burt (1974) Natural sequences in child second language acquisition. *Language Learning* 24, 47-131.
- Gavrouseva, E. (2000) On the syntax of possessor extraction. *Lingua* 110, 830-772.
- Giusti, G (2005) At the left periphery of the Rumanian noun phrase. In *Proceedings of the Tense and Aspect Conference*, Martine Coene and Lilian Tasmowski (Eds.), Cluj: Clusium.
- Giusti, G (2006) Parallels in clausal and nominal periphery, in *Phases of Interpretation*, Frascarelli M. (Ed.), Mouton de Gruyter.

- Haegeman, L. (2004) DP-Periphery and Clausal Periphery: Possessor Doubling in West Flemish. In *Peripheries, Syntactic Edges and their Effects*, Adger D., De Cat C. and T. George (Eds.), (pp. 211-240). Kluwer Academic Publisher, Dordrecht, Boston, London.
- Lardiere, D. (1998)a Case and Tense in the “fossilized” steady state. *Second Language Research* 14, 1-26.
- Lardiere, D. (1998)b Dissociating syntax from morphology in a divergent end-state grammar. *Second Language Research* 14, 359-75.
- Lardiere, D. (2005) On Morphological competence. Proceedings of the 7<sup>th</sup> Generative Approaches to Second Language Acquisition Conference, Laurent Deydtspotter et al. (Eds.), (pp. 178-192). Somerville, Ma: Cascadilla Proceedings Project.
- Matteini, S. (2007) *On the morphosyntactic Acquisition of German DP by Italian adult L2 learners: Possessive Constructions, NP placement and inflectional morphology on nominal modifiers*, PhD dissertation, University of Florence.
- Parodi, T., Schwartz Bonnie D. & H. Clahsen. (2004) On the L2 acquisition of the Morphosyntax of German Nominals. *Linguistics* 42-3, 669-705.
- Sabourin, L. Stowe, L. and J. de Haan (2006) Transfer effects in learning a second language grammatical gender system. *Second Language Research* 22, 1- 29.
- Schwartz, B. & Sprouse R. (1996) L2 cognitive states and the full transfer/full access model. *Second Language Research* 12, 40-72.
- Slabakova, R. (2009) Features or parameters: which one makes second language acquisition easier, and more interesting to study? *Second Language Research* 25, 2, 313-324.
- Slabakova, R and Gajados, J. (2008) The Combinatory Variation Hypothesis in the second language, in Gavarrò, A. and João Freitas, M. (Eds.), Proceedings of the Generative Approaches to Language Acquisition conference, Barcelona, Cambridge Scholars Publishing.
- Van de Craats, I. Corver, N. & R. Van Hout. (2000) Conservation of Grammatical Knowledge: on the acquisition of possessive noun phrases by Turkish and Moroccan learners of Dutch. *Linguistics* 38-2, 221-3.

**Appendix**

**1. German AP Inflectional Paradigm**

**Table A - Strong Inflection on Adjectives (null determiners)**

		Masculine	Feminine	Neuter
<b>Singular</b>	Nominative	weiss- <b>er</b> Mantel 'white coat'	gut- <b>e</b> Frau	gut - <b>es</b> Kind
	Genitive	- <b>en</b> Mantels	- <b>er</b>	- <b>en</b> Kindes
	Dative	- <b>em</b>	- <b>er</b>	- <b>em</b>
	Accusative	- <b>en</b>	- <b>e</b>	- <b>es</b>
<b>Plural</b>	Nominative	weiss- <b>e</b> Mäntel	gut- <b>e</b> Frauen	Gut- <b>e</b> Kinder
	Genitive	- <b>er</b>	- <b>er</b>	- <b>er</b>
	Dative	- <b>en</b> Mänteln	- <b>en</b>	- <b>en</b> Kindern
	Accusative	- <b>e</b>	- <b>e</b>	- <b>e</b>

**Table B - Weak Inflection on Adjectives (i.e with Definite determiners, Demonstratives)**

		Masculine	Feminine	Neuter
<b>Singular</b>	Nominative	<b>Der</b> weiss- <b>e</b> Mantel 'white coat'	<b>Die</b> gut- <b>e</b> Frau	<b>Das</b> gut - <b>e</b> Kind
	Genitive	<b>Des</b> weiss- <b>en</b> Mantel- <b>s</b>	<b>Der</b> gut- <b>en</b> Frau	<b>Des</b> gut- <b>en</b> Kind- <b>es</b>
	Dative	<b>Dem</b> weiss- <b>en</b>	<b>Der</b> gut- <b>en</b>	<b>Dem</b> gut- <b>en</b>
	Accusative	<b>Den</b> weiss- <b>en</b>	<b>Die</b> gut- <b>e</b>	<b>Das</b> gut- <b>e</b>
<b>Plural</b>	Nominative	<b>Die</b> weiss- <b>en</b> Mäntel	<b>Die</b> gut- <b>en</b> Frauen	<b>Die</b> gut- <b>en</b> Kinder
	Genitive	<b>Der</b> weiss- <b>en</b>	<b>Die</b> gut - <b>en</b>	<b>Der</b> gut - <b>en</b>
	Dative	<b>Den</b> weiss- <b>en</b> Mäntel- <b>n</b>	<b>Den</b> gut - <b>en</b>	<b>Den</b> gut - <b>en</b> Kinder- <b>n</b>
	Accusative	<b>Die</b> weiss- <b>en</b>	<b>Die</b> gut - <b>en</b>	<b>die</b> gut - <b>en</b>

**Table C - Mixed Inflection on Adjectives (i.e with Indefinite Ds, possessives)**

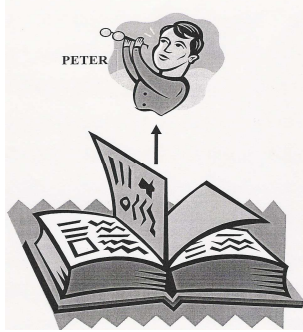
		Masculine	Feminine	Neuter
<b>Singular</b>	Nominative	<b>ein</b> weiss- <b>er</b> Mantel 'white coat'	<b>eine</b> gut- <b>e</b> Frau	<b>ein</b> gut - <b>es</b> Kind
	Genitive	<b>eines</b> weiss- <b>en</b> Mantel- <b>s</b>	<b>einer</b> gut- <b>en</b> Frau	<b>eines</b> gut- <b>en</b> Kind- <b>es</b>
	Dative	<b>einem</b> weiss- <b>en</b>	<b>einer</b> gut- <b>en</b>	<b>einem</b> gut- <b>en</b>
	Accusative	<b>einen</b> weiss- <b>en</b>	<b>eine</b> gut- <b>e</b>	<b>ein</b> gut- <b>es</b>

**2. The Picture Description Task: item samples**

- (i) Possessives constructions of the –s Genitive types in two structural conditions (15 simple DPs and 10 DPs with adjectives); all the question items were formulated through the wh-element *Wessen* (whose), as in (A);
- (ii) DPs with attributive adjectives (30 DPs); only APs of colour/nationality were included in the task, as in (B):

(iii)


**A**



Investigator:  
*Wessen Buch ist das?*  
„Whose book is his?“

Expected answer:  
*Das ist Peters Buch*  
„This is Peter’s Book“

**B**



Investigator:  
*Was trägt die Lehrerin?*  
„What’s the teacher  
wearing?“

Expected answer:  
*Eine blaue Bluse*  
„A blue shirt“