Morphosyntactic Interfaces in Spanish L2 Acquisition: the Case of Aspectual Differences between *Indefinido* and *Imperfecto*[*]

Lourdes Díaz[1], Aurora Bel[1], Ana Ruggia[1], Konstantina Bekiou[2] and Elisa Rosado[2]

[1]Universitat Pompeu Fabra and [2]Universitat de Barcelona

1. Introduction

The acquisition of form-meaning connections in the temporal-aspectual domain in general is an area of significant morphological variation across languages (Giorgi and Pianesi 1997, Binnick 1991). For this reason, it has been a major issue in the field for many SLA specialists, mainly for those interested in the acquisition of languages whose rich morphology allows the differentiation of temporal-aspectual forms. This is the case of Spanish *Pretérito Imperfecto* (PIM) and *Pretérito Indefinido* (PIN).

In this paper we present a preliminary analysis of experimental written data from 56 subjects at two different levels (intermediate and advanced). The students were asked to perform two different tasks: a cloze test (test 5) and a guided composition (tests 2, 3 and 4). Data show how learners with typologically different L1s, such as German, English, Japanese, Chinese, French, Brazilian Portuguese, Russian, Polish and Slovakian, acquire Spanish Imperfecto and Indefinido through *morphological features*. In particular, we analyze the differences observed in their process of acquisition. We postulate that these differences are due to the way in which learners analyze the information encoded in morphological features and use them as triggers for the acquisition of Spanish ASP-P (sentential ASP).

The functional category ASP is instantiated in languages like English and Spanish; however, languages vary with respect to the associated features and their morphosyntactic realization. These differences in morphosyntax [-/+ strong f-features] play a major role in accounting for subtle differences in the interpretation of Spanish past tenses by English learners. *Past tense* in English is always [+ perfective], bounded, in the *non progressive* forms; in Spanish, on the other hand, there are two non progressive forms: Imperfecto [- perfective], unbounded; and Indefinido [+ perfective], bounded (De Miguel 1992).

Since phenomena similar to that described for English are observed in other Germanic languages, we have grouped English and German learners together in the present study. Problems in the acquisition of both Spanish past forms have been largely attested for this language group (Montrul and Slabakova 2000; Salaberry 2000, etc.).

Concerning Romance languages, differences seem to be less remarkable, although performance errors are frequently attested in students even at very advanced levels, the reason being the lack of one-to-one correspondence of forms and meanings in past tenses. The richness of inflection in the paradigms of some languages does not appear to guide these students safely through the process of acquisition of native-like verbal morphology and meaning. For instance, Indefinido does not correspond to a simple past in French but to a periphrastic past (*passé composé*); likewise**,** Portuguese *mais que perfeito*, a simple form, corresponds to a periphrastic form in Spanish. Therefore, these kinds of discrepancies, among others, may mislead students in the early and final stages of their acquisitional process.

In Slavic languages, verb morphology signals aspectual interpretation through perfective *preverbs*. Aspectual differences in tenses, therefore, are not marked by "*paradigmatic"* clues (such as simple *vs*.

[*] This research was funded by a grant (DGES BFF2000-0928) from the Ministerio de Educación (Spain). It was also carried out with the support of the Department of Spanish of the Escuela Oficial de Idiomas de Barcelona-Drassanes.

 Proceedings of the 6th Generative Approaches to Second Language Acquisition Conference (GASLA 2002), ed. Juana M. Liceras et al., 76-84. Somerville, MA: Cascadilla Proceedings Project.

periphrastic forms). This strongly differentiates Slavic languages from Romance and Germanic languages. In Slavic languages, checking of aspectual features takes place in a higher position in the sentence structure. This may result in differences in the analysis of second language morphology, due to both the different role that Spanish verbal inflection may play in aspectual opposition and the difficulty of finding other (syntactic) clues. Evidence of these divergences and their influence in acquisition have been put forward in recent studies on the acquisition of English by speakers of Slavic languages (Slabakova 1999, 2001). Nevertheless, no study concerning Slavic and Romance languages has been conducted within the same framework.

In Oriental languages (Japanese, Chinese, Korean), inflectional marking is poorer than in all the other languages considered above (Shirai and Kurono 1998). Moreover, binding plays an important role because it affects certain domains different from those of English and Spanish, especially concerning the verbal inflection (Agr) and anaphor (monomorphemic/polymorphemic) domains. This may result in a higher sensitivity towards boundness on the one hand, and in a certain sensitivity towards inflection, irrespective of what the literature may say about it.

We hypothesize that the above-mentioned characteristics may cause visible differences in the acquisitional patterns of Spanish aspectual tenses. Morphology (but not only morphology) triggers the *aspectual* contrast among other possible contrasts such as *[+/-perfective]*, *[+/-bound]*, *[+/-cardinal], [+/- telic]*, all of them relevant for different reasons to the acquisition of aspect.

In order to address these issues, we present and analyze the semi-spontaneous and controlled written production of 56 subjects (34 intermediate and 22 advanced) who were Spanish L2 learners from the four types of languages discussed above. All of them were enrolled in regular classes at three different language schools in Barcelona.

2. Hypotheses

Based on the background outlined in the previous section, we formulate the following hypotheses to be tested against data:

2.1. Does the Spanish IL grammar of the different L1 groups of learners differ according to the similarity of L1 morphological features in strength and clausal architecture? If this is not the case, then access to UG would explain homogeneity in IL results. That is, coincidence would support the Full Access hypothesis while divergence would support Full Transfer or mediated access to UG.

2.2. If aspectual class plays a role (as the Aspect Before Tense Hypothesis states), then there are two possible consequences: a) the acquisitional patterns studied here should be similar for all four language types, and b) aspectual class would interact with the other factors/conditions involved, namely, cardinality, telicity, and boundness. Consequently, all learners should show similar behavior irrespective of the L1 mechanisms involved.

2.3. If [+/- cardinality] of the object plays a role in the selection of the feature [+/- telic] in a second language, then learners whose L1-type involves cardinality (e.g.: Slavic, Germanic) may use it as a clue for aspect selection. If this is the case, then these learners will perform better than the rest.

2.4. If it is possible – as has been suggested elsewhere (Wells 1998) – for the Chinese and Japanese speakers to extend binding from their L1 pronominal domain to the L2 verbal domain, then the Imperfecto/Indefinido distinction would rely on the [+/- boundness] opposition, differing somehow from the [+/- perfective] criterion postulated for the Germanic group of learners.

3. Methodology

The 56 subjects were recruited from the following three different languages schools in Barcelona: Escola d'Adults del Raval, Escola Oficial d'Idiomes-Drassanes and Universitat Pompeu Fabra.

The level of the subjects was determined via an SGEL placement test. 34 were placed in the intermediate level (labeled as 3rd level) and 22 in the advanced level (labeled as 5th level). They were selected randomly after the test within each language group so that we could have comparable groups (see Table 1). Tests were administered in class in all cases.

Data were elicited via two different questionnaires: one concerning personal data and another which elicited guided production via a list of sentences in which a verb was provided in the infinitive form and had to be used in a finite past form (*Imperfecto* or *Indefinido*) in order to build up a story

(see section 1 in the Appendix). Resulting data on narratives in the past were transcribed and coded in CHAT format according to the conventions of the CHILDES project (MacWhinney, 2000). The CLAN programs were used in order to analyze results. Tables and figures below reflect results for all groups and levels tested.

Table 1. Subjects

Level	**ROMANCE**	**SLAVIC**	**GERMANIC**	**ORIENTAL**	*Total*
3rd	6	10	6	12	*34*
5th	5	5	7	5	*22*
Total	*11*	*15*	*13*	*17*	***56***

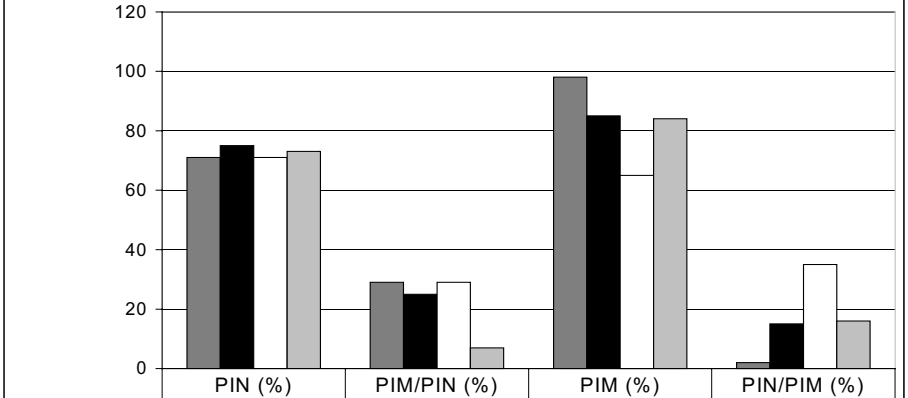
3,124 verbal forms analyzed

4. Descriptive results by aspectual classes

In this section we present the overall results of the four language groups for the different aspectual classes we considered: states, achievements, accomplishments and activities (Vendler 1967, Smith 1993). Each figure displays separately the counting for each of the tenses involved. Under the single label, namely PIN or PIM, are the correct results; under the double one, namely PIN/PIM or PIM/PIN are the errors consigned.

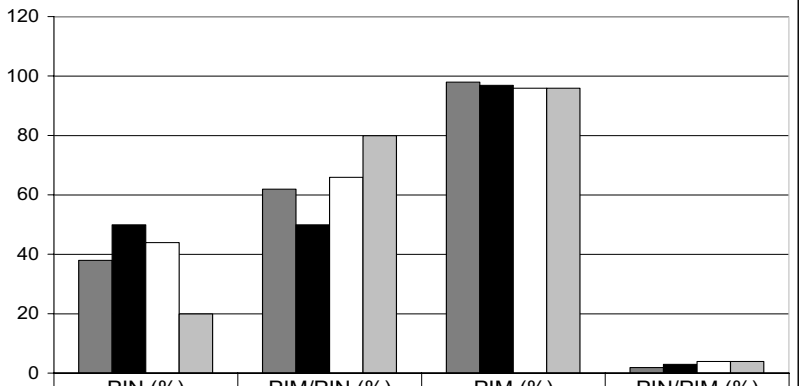
Concerning State verbs, the data analysis shows that L1 proximity clearly helps the Romance group at the intermediate level, as Figure 1 illustrates. This factor, however, does not seem to play a role at the advanced level in any group, as global results in Figures 1 and 2 show. Consider the results for Imperfecto, the expected form with State verbs. If we check the number of PIM (Imperfecto) associated with States in both levels of proficiency, there is a progression towards the highest score (100%). However, in the case of Indefinido with State verbs – an unexpected but possible combination in our example – if we consider the number of mismatches (PIM/ PIN) at both levels, errors increase significantly. This may be due to the strength of the association between lexical and grammatical aspect, which seems to play a role even in late stages.

Figure 1. State verbs. Third level



	PIN (%)	PIM/PIN (%)	PIM (%)	PIN/PIM (%)
ROMANCE	71	29	98	2
SLAVIC	75	25	85	15
GERMANIC	71	29	65	35
ORIENTAL	73	7	84	16

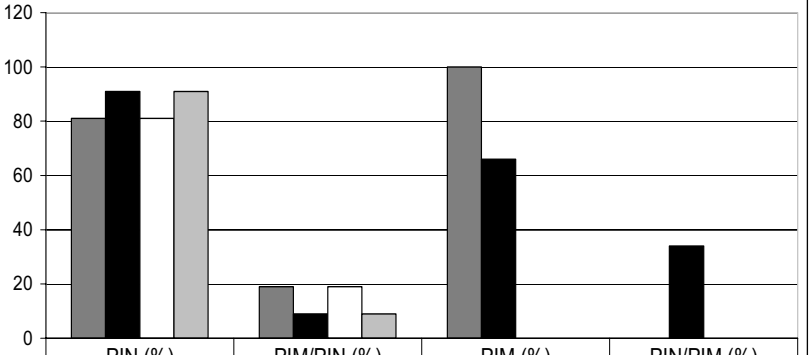
Figure 2. State verbs. Fifth level



	PIN (%)	PIM/PIN (%)	PIM (%)	PIN/PIM (%)
ROMANCE	38	62	98	2
SLAVIC	50	50	97	3
GERMANIC	44	66	96	4
ORIENTAL	20	80	96	4

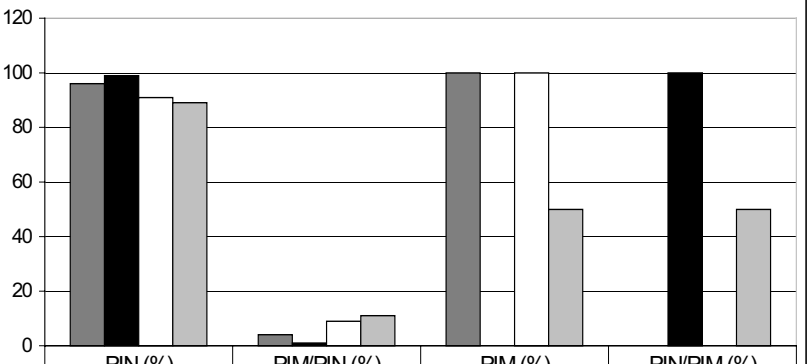
Achievements, in turn, are the other aspectual class in which results also show homogeneity among language groups, as Figures 3 and 4 indicate. Once again, the strength of the association of lexical and grammatical aspect accounts for the high accuracy of student production across levels and groups. We do not discuss deviant data (PIM instead of PIN) due to the low number of tokens attested.

Figure 3. Achievement verbs. Third level



	PIN (%)	PIM/PIN (%)	PIM (%)	PIN/PIM (%)
ROMANCE	81	19	100	0
SLAVIC	91	9	66	34
GERMANIC	81	19	0	0
ORIENTAL	91	9	0	0

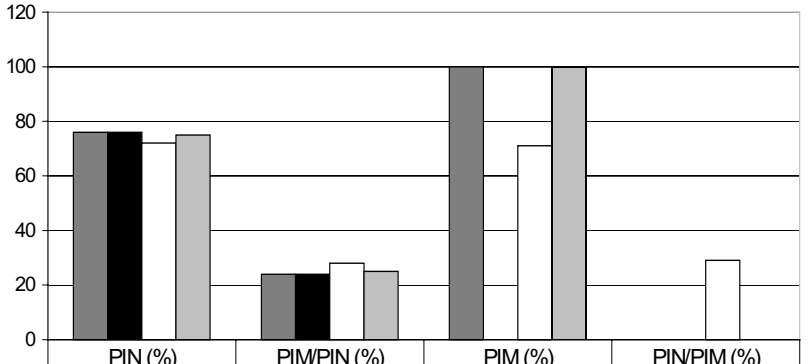
Figure 4. Achievement verbs. Fifth level



	PIN (%)	PIM/PIN (%)	PIM (%)	PIN/PIM (%)
ROMANCE	96	4	100	0
SLAVIC	99	1	0	100
GERMANIC	91	9	100	0
ORIENTAL	89	11	50	50

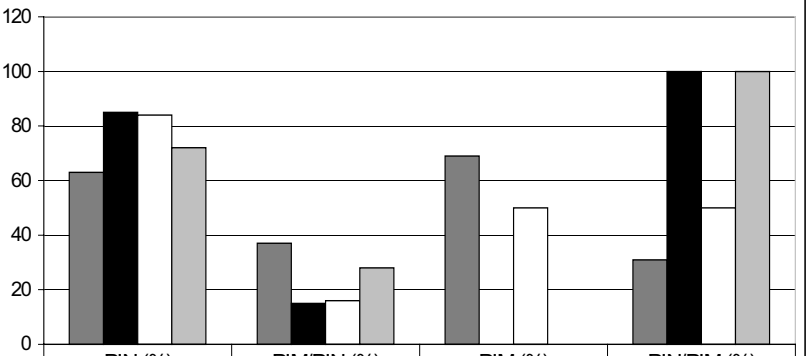
Cardinality does play a role in both Accomplishments and Activities (Figures 5-8). However, the presence of an object affects Accomplishments – which semantically need a direct object (DET+N) – differently than Activities, where the optional object is always a plural bare noun (see section 2 of the Appendix). Accordingly, students whose L1 is typologically similar to Spanish at the DET level (the Romance and Germanic groups) may use determiners as clues for marking cardinality, while the Oriental group may find their lack of DET to be a handicap when trying to associate aspect and cardinality, due to the absence of a DET in their L1 grammars. On the other hand, the Slavic group, whose languages do have DET (singular and plural), may not use it as a clue because in their L1 it turns out to be either irrelevant or redundant for cardinality since preverbs contribute distinct aspects (Kozlowska-Macgregor, 2002). With respect to the errors consigned under PIN/PIM and PIM, due to the low number of tokens obtained from elicited production, we de not draw any conclusions here.

Figure 5. Accomplishment verbs. Third level



	PIN (%)	PIM/PIN (%)	PIM (%)	PIN/PIM (%)
ROMANCE	76	24	100	0
SLAVIC	76	24	0	0
GERMANIC	72	28	71	29
ORIENTAL	75	25	100	0

Figure 6. Accomplishment verbs. Fifth level

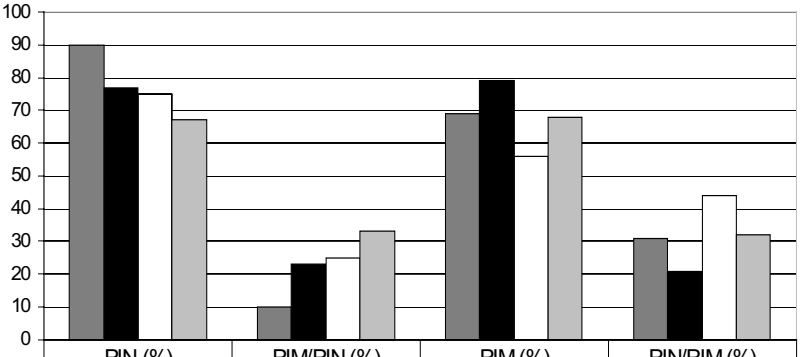


	PIN (%)	PIM/PIN (%)	PIM (%)	PIN/PIM (%)
ROMANCE	63	37	69	31
SLAVIC	85	15	0	100
GERMANIC	84	16	50	50
ORIENTAL	72	28	0	100

As for Activities across levels (Figures 7 & 8), learners seem to realize that the feature [-telic] is what characterizes this aspectual class, and consequently tend to combine it with *Imperfecto*, the [-telic] form of the past. This holds true for all language groups but Slavic. The reason may be that for this group the presence of an overt DET plus the [+ cardinality] feature of the direct object in Spanish is not a clue for differentiating Accomplishments from Activities. This explains why we found a large number of errors.

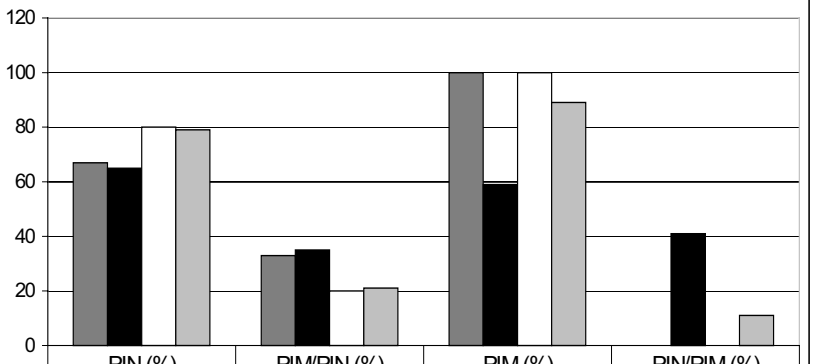
Similar to the Slavic group, the L1s of the Oriental group do not guide them in their process of acquisition of aspectual distinctions. Nevertheless, a difference in performance at the advanced level between the two language groups is observed. According to hypothesis 2.4, Oriental learners may take advantage of their L1 binding mechanisms, spreading them to verbal domain.

Figure 7. Activity verbs. Third level



	PIN (%)	PIM/PIN (%)	PIM (%)	PIN/PIM (%)
ROMANCE	90	10	69	31
SLAVIC	77	23	79	21
GERMANIC	75	25	56	44
ORIENTAL	67	33	68	32

Figure 8. Activity verbs. Fifth level



	PIN (%)	PIM/PIN (%)	PIM (%)	PIN/PIM (%)
ROMANCE	67	33	100	0
SLAVIC	65	35	59	41
GERMANIC	80	20	100	0
ORIENTAL	79	21	89	11

5. Discussion and conclusions

With regard to the above-mentioned hypotheses, data analysis shows that L1 proximity greatly helps Romance learners. However, concerning the other language types, our data show a large homogeneity in all groups for the two clearest aspectual classes (i.e., States and Achievements), which differ with respect to the other two classes. Although at the intermediate level States are less homogeneous with the Germanic-type group, Accomplishments are quite homogeneous when combined with Indefinido, and all language groups but the Germanic group have high scores with Imperfecto. Activities are less homogeneous, with Romance learners being the best placed (90%) and Orientals the worst when Indefinido is expected. However, when Imperfecto is expected, the Germanic group is, again, the last (56%).

The advanced group shows no variability with respect to States and Achievements, the expected tenses. With Activities requiring an Indefinido, all language groups perform similarly; however, when the target tense is Imperfecto, Slavic subjects show the worst results.

Thus, the evidence presented here is not clear enough to support the Full Access/Full Transfer hypothesis. According to Full Access, the interlanguages of all the groups should follow the same patterns. According to Full Transfer, errors of transference should be abundant and should be differentiated by language type. However, the variation we see is not in line with either of these two options, but rather can be explained in terms of a selection of different triggering mechanisms by the various groups.

Concerning hypothesis number 2.2, the data show that aspectual class matters. There is a strong correlation between States and PIM, and between Achievement and PIN (Figures 1-2 & 3-4). It has also been demonstrated that an Accomplishment verb together with its direct object carrying the [+ *cardinality*] feature play a role in the erroneous selection of *Imperfecto* instead of *Indefinido* (PIM/PIN).

Activities remain the least clear aspectual category, cardinality being a central element for morphological selection across groups and levels (see Section 2 in Appendix & Figures 7-8). Nevertheless, more research is needed due to the low number of different objects used in the tasks proposed, in relation to cardinality.

Our data contradict those of Finger (2001) – who does not deal with objects – and Montrul and Slabakova (in press), among the most recent research.

With respect to hypothesis number 3, cardinality (more than [+/- *boundness*]) seems to play a role in the acquisition of aspectual past tenses in Spanish. At least this is what we conclude from our analysis for the Germanic, Oriental, Slavic and Romance groups. This contradicts previous research on the topic (see Montrul and Slavakova (in press), among others, for English speakers). Data show that boundness in itself does not seem to help students to decide whether or not a PIM applies. Relevant for the difference may be the fact that, in our study, tasks were designed so that context, and not only A*ktionsart*, could guide students in the selection of PIM or PIN.

Our Germanic subjects show mastery of tense marking with Accomplishments, Achievements and States, while Activities continue to be the more problematic aspectual class. Consistent with what we stated above, more research on this particular class is needed.

Concerning Oriental speakers, data suggest a somewhat different pattern: they do not show more problems with verbal inflection than average, and they perform like the others with the clearer aspectual classes (Accomplishments, Achievements) in the cloze test (see section 2 of the Appendix). Nevertheless, they have more problems than the rest with Activities (emotion and movement) (see Section 2 in Appendix). According to hypothesis 2.4, any effects of binding in the interlanguage of the Oriental speakers would have shown up in subordinate clauses. Since our test did not favor the production of subordinates, we are unable to an adequate measure of binding effects.

APPENDIX

Section 1. Test sample

1. ¿Por qué no contáis una historia con estos verbos?
(Empieza siempre con: *El martes pasado* y no añadas más información a tu historia.)
Historia 1: EN CASA..
(yo) ESTAR en casa toda la tarde.
Mientras (yo) VER la tele, TOMAR un vaso de leche.
De repente, SONAR el teléfono
SER el portero
ESTAR absolutamente histérico
(yo) DECIDIR llamar a los bomberos
(nosotros) OIR las sirenas
(nosotros) ECHAR agua
Al final, los bomberos SOFOCAR el incendio
Todo QUEDAR en un susto

Section 2. Results from task 5 (*cloze*)

ACCOMPLISHMENTS												
	OBJECT TYPE		**EXPECTED FORM**	**OK (%)**								
				ROM		SLAV		GERM		ORIEN		
				3rd	5th	3rd	5th	3rd	5th	3rd	5th	
Instalar el microondas	DEF	NCS	*PIM*	83	100	70	80	67	100	75	80	
Dibujar una línea	INDEF	NCS	*PIM*	83	100	90	40	33	100	100	80	
Colgar la lámpara	DEF	NCS	PIN	83	80	90	100	100	100	100	80	
Hacer una radiografía	INDEF	NCS	PIN	100	100	50	100	50	100	75	80	
Ir a la sala	GOAL		PIN	83	100	100	100	83	17	100	100	

ACTIVITIES

OBJECT	TYPE	EXPECTED FORM	OK (%) ROM 3rd	ROM 5th	SLAV 3rd	SLAV 5th	GERM 3rd	GERM 5th	ORIEN 3rd	ORIEN 5th
Arreglar las tuberías	DEF NPL	*PIM*	100	100	90	100	67	100	100	80
Cortar madera	MASS	*PIM*	100	100	80	80	50	100	75	80
Mezclar colores	BARE NPL	*PIM*	100	100	80	100	67	100	100	80
Dar mucha lástima	Q MASS	*PIM*	33	80	30	40	33	60	33	20
Bajar por la escalera	PP	PIN	50	30	90	100	67	43	58	20
Ver + NP	$NP	PIN	100	100	100	100	83	86	100	100

ACHIEVEMENTS

OBJECT	TYPE	EXPECTED FORM	OK (%) ROM 3rd	ROM 5th	SLAV 3rd	SLAV 5th	GERM 3rd	GERM 5th	ORIEN 3rd	ORIEN 5th
Llevar al hospital	GOAL	PIN	67	100	90	100	100	100	92	100
Torcerse el pie	DEF NCS	PIN	50	100	80	100	100	100	100	80
Tropezar	∅	PIN	83	100	80	100	100	100	100	80
Diagnosticar fractura de...	BARE NS	PIN	67	100	80	100	100	100	83	80

DEF = Definite Det. NS = noun, sg PIM = *Imperfecto*
INDEF = Indefinite Det. **NPL = noun; pl** **PIN = *Indefinido***
NCS = noun; countable; sg **MASS = noun; mass**

References

Binnick, R.1991. *Time and the verb.* Oxford: Oxford University Press

De Miguel, E. 1992. *El aspecto en la sintaxis del español: perfectividad e imperfectividad.* Madrid: Ediciones de la Universidad Autónoma de Madrid.

Finger, I., 2001. "The Aspect Hypothesis. Early Development of Verb Morphology in L2 English", in Do, A. H.-J., L. Domínguez and A. Johansen (Eds.) *BUCLD 25: Proceedings of the 25th annual Boston University Conference on Language Development*. Sommerville, MA: Cascadilla Press, 272–283.

Giorgi, A & F. Pianesi, 1997. *Tense and Aspect: From Semantics to Morphosyntax.* Oxford: Oxford University Press.

Kozlowska-Macgregor, M. 2002."The nature of incompleteness of the end-state grammar", paper presented at Gasla 6, Ottawa, Canada.

Mac Whinney, B. 2000. *The Childes Project.* Hillsdale, NJ: LEA.

Montrul, S. & R. Slabakova (in press) "The L2 Acquisition of Morphosyntactic and Semantic properties of the Aspectual Tenses Preterite and Imperfect", in: Liceras, J. and Pérez-Leroux, A. T. (Eds) *The acquisition of Spanish morphosyntax: The L1/L2 Connection.* Dordrecht: Kluwer.

Salaberry, M.R. 2000. *The development of past tense morphology*. Amsterdam: Benjamins.

Shirai, Y.- Kurono, A. 1998. The Acquisition of Tense-Aspect marking in Japanese as a Second Language, *Language Learning 48:2*, pp. 245-279.

Slabakova, R. 1999. The parameter of Aspect in Second Language Acquisition*. SLR 15,3*, pp. 283-317.

Slabakova, R 2001. *Telicity in the Second Language*, Amsterdam: Benjamins.

Smith, C.S.1993. *The parameter of Aspect*. Amsterdam: Kluwer.

Vendler, Z.1967. *Linguistics in Philosophy*. Ithaca: New York.

Wells, T. L. (1998) "L2 Acquisition of English binding domains", in: Beck, M. L.(Ed.) *Morphology and its Interfaces in Second Language Knowledge.* Amsterdam/Philadelphia: John Benjamins, 227-256.

Proceedings of the 6th Generative Approaches to Second Language Acquisition Conference (GASLA 2002): L2 Links

edited by Juana M. Liceras,
Helmut Zobl, and Helen Goodluck

Cascadilla Proceedings Project Somerville, MA 2003

Copyright information

ISBN 1-57473-401-6 library binding

Ordering information

Orders for the library binding edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, e-mail: sales@cascadilla.com

Web access and citation information

This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:

Díaz, Lourdes, Aurora Bel, Ana Ruggia, Konstantina Bekiou, and Elisa Rosado. 2003. Morphosyntactic Interfaces in Spanish L2 Acquisition: The Case of Aspectual Differences between *Indefinido* and *Imperfecto*. In *Proceedings of the 6th Generative Approaches to Second Language Acquisition Conference (GASLA 2002)*, ed. Juana M. Liceras et al., 76-84. Somerville, MA: Cascadilla Proceedings Project.

or:

Díaz, Lourdes, Aurora Bel, Ana Ruggia, Konstantina Bekiou, and Elisa Rosado. 2003. Morphosyntactic Interfaces in Spanish L2 Acquisition: The Case of Aspectual Differences between *Indefinido* and *Imperfecto*. In *Proceedings of the 6th Generative Approaches to Second Language Acquisition Conference (GASLA 2002)*, ed. Juana M. Liceras et al., 76-84. Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #1031.