FEATURE CHECKING AND OBJECT CLITIC OMISSION IN CHILD CATALAN AND SPANISH¹

KEN WEXLER*, ANNA GAVARRÓ** and VICENÇ TORRENS*** *Massachusetts Institute of Technology **Universitat Autònoma de Barcelona ***Universidad Nacional de Educación a Distancia

In this paper we set out to substantiate by reference to two closely related languages, Catalan and Spanish, the claim that object clitic omission in child grammar has a non-accidental correlation with participle agreement. We argue that the correlation follows from the fact that in participle agreement languages objects need to double check with two functional projections; this double checking is at the source of clitic omission, following Wexler's (1998, to appear) Unique Checking Constraint (UCC). Catalan and Spanish constitute a relevant term of reference as their grammars are very similar except that Catalan is a participle agreement language while Spanish is not. Therefore, if our assumptions on participle agreement are correct, the UCC leads us to expect differences between the two in object clitic omission in child language development. According as our expectations are born out, we are able to claim that variation in the development of the two languages under scrutiny can be accounted for on the grounds of a universal principle, the UCC, together with the parroquial properties of the languages the child is exposed to.

1. Basic assumptions: clitics and the UCC

We assume that clitics are verbal agreement morphemes (Uriagereka, 1995) that are base generated to the left of the verb. The evidence presented in this paper does not help us distinguish between syntactic theories of clitic doubling; the base-generation theory seems to cover a great deal of syntactic ground, and we assume that theory for concreteness. Following Sportiche (1996), clitics are heads of their own projection. We assume them to be

¹ ACKNOWLEDGMENTS. We would like to thank Susagna Tubau for her help in running the experiment in Catalan, and the direction, teachers and children of the Escola Decroly de Barcelona for their collaboration; we would also like to thank Almudena Zurdo for her help in running the experiment in Spanish, Marisé Gil de Gómez for helping us find schools in the Madrid area, and the primary schools of Gallipatos and La Cañada. We are grateful for helpful comments to two anonymous reviewers and to the audiences of the workshop on language acquisition of Going Romance 2002 and the 5th Conference on the Acquisition of Spanish and Portuguese at the University of Iowa. The second and third author acknowledge the financial support of project BFF2000-0403-C02-02 and Generalitat de Catalunya respectively.

embedded in a clause structure like that in (1) below (where ClP = Clitic Phrase, and $Agr_{O}P = Agreement Object Phrase)$.



The specifier of the clitic phrase is a landing site of the coreferent DP, which is XP^1 at the base-generated position; XP^1 moves to the specifier of the clitic projection, XP^2 . The XP matches on features (person, number, gender, Case) with the coindexed clitic.²

With regard to the central hypotheses in the paper, we follow Wexler's (to appear) UCC principle:

(2) Unique Checking Constraint (on children in Optional Infinitive stage): the D-feature of DP can only check against one functional feature.

The UCC acts in conjunction with Minimise Violations:

(3) *Minimise Violations*: Given an LF, choose a numeration the derivation of which violates as few grammatical properties as possible. If two numerations are both minimal violators, either one may be chosen.

 $^{^{2}}$ Crucially, with accusative clitics – which are the object of this paper – the specifier of the Acc ClP is an A-bar position (under Sportiche's 1996 assumptions this is not so for e.g. dative clitics). So, *pro* raising to Spec, ClP is an instance of A-bar movement, leading to no minimality violations. As pointed out by an anonymous reviewer, Catalan and Spanish are (to varying degrees) clitic doubling languages, where sentences such as Catalan *Jo la veig a ella* (I cl-see her) are well-formed. The strong pronoun in such constructions would not raise to Spec, ClP; the possibility of clitic doubling is parameterised – see Sportiche 1996 for details.

Together, (2) and (3) grant the Optional Infinitive Stage (see Wexler 1998 for a full account), and also the possibility of object clitic omission for the same developmental period, as detailed below.

The UCC and Minimise Violations interact in the following way. An accusative DP in a language without participle agreement only has to check an uninterpretable D-feature (a feature of definiteness) in ClP (Clitic Phrase); thus the pro object, in a clitic construction, raises through Agr₀ onto ClP where the definiteness feature is eliminated, and the derivation converges. In such a language no object clitic omission is expected. On the other hand, in a participle agreement language, a pro object has two D-features against which it must check: one in Agr₀ (a case feature), one in Cl (the definiteness feature). In a given derivation, if double checking occurs, the UCC is violated (and the clitic then surfaces as in the adult grammar). If, on the contrary, the UCC is not violated and no double checking occurs, the derivation cannot converge with two unchecked uninterpretable features in CIP and Agr_OP: the only way for the derivation to converge is that one of the functional categories is not projected. Supposing CIP is eliminated, the derivation does not crash, but no clitic can be spelled out in CIP; pro moves to Agr_Q and checks against the case features there - and clitic omission results, the only violation having taken place being the interface condition on the projection of ClP.

Comparing the two converging derivations, one involves a violation of the UCC, the other the interface condition that projection of CIP must occur; thus both derivations involve one violation. By Minimise Violations, the two derivations are equally bad – or equally good; both derivations are in competition and, as a consequence, optionality of clitic omission is granted.³

With respect to the languages under scrutiny, it should be pointed out that Catalan and Spanish clitic placement follows the same pattern: clitic pronouns precede finite verbs (4a, 5a) and follow non-finite verbs (4d, 5d):

(4)	a.	la pentino	b.	*pentino-la	(Catalan)
		Cl comb-1s		comb-1s Cl	
	c.	*la pentinar	d.	pentinar-la	
		Cl comb-INF		comb-INF Cl	

³ The UCC is conceived as a developmental principle, which dies out in the process towards an adult grammar; as expressed in Wexler (1998). This runs contrary to the common assumption that aspects of grammar that are innate are present from very early on (Elman et al., 1996; Quartz and Sejnowski, 1997). Rather, it is possible that innate mechanisms emerge late due to maturation.

(5)	a.	la peino	b.	*peinola	(Spanish)
		Cl comb-1s		comb-1s Cl	
	c.	*la peinar	d.	peinarla	
		Cl comb-INF		comb-INF Cl	

As indicated, in Catalan, unlike in Spanish, there is (optionally) participle agreement with a preceding direct object clitic in the perfect tenses. In most Catalan dialects there is no participle agreement for unaccusative verbs (for more details, see Cortés 1992).

(6)	La Marta les ha trobades/trobat.	(Catalan)
	Marta cl-fem-pl has found-fem-pl/found	
	"Marta has found them."	
(7)	Marta las ha encontrado/*encontradas.	(Spanish)
	Marta cl-fem-pl has found/found-fem-pl	
	"Marta has found them."	

Example (6) illustates agreement with a feminine, plural object clitic; the morphologically unmarked form of the clitic is masculine, singular. In the Barcelona dialect, spoken by the subjects of our experiment, overt participle agreement is not as pervasive as in other varieties, but is certainly retained as a possibility, especially with femenine plurals. We follow Kayne in considering agreement between direct object and past participle as an instance of Spec-Head agreement (Kayne, 1987). To account for participle agreement in Catalan, we assume that the head of Agr_0P has an active uninterpretable feature. In Spanish, lack of participle agreement with a preceding direct object clitic results from the object passing through an Agr_0 projection with no uninterpretable features.

2. An experiment on clitic elicitation

In order to test whether children produce or omit clitics in Spanish and Catalan, and whether children produce the correct clitic forms in both languages, we performed an elicitation task with 31 monolingual Catalan speaking children and 28 monolingual Spanish speaking children. We have grouped the children in 3 age groups: 2 year-olds, 3 year-olds and 4 year-olds, on a cross-sectional design. This is the distribution of children by language and age:

(8)	Catalan			
	age		age range	mean age
	1-2 year-olds:	8	1;10 to 2;11,24	2;3,5
	3-year-olds:	11	3;0,8 to 3;11,29	3;6,7
	4-5 year-olds:	12	4;3,1 to 5;1,0	4;6,27
	total:	31		
(9)	Spanish			
	age		age range	mean age
	2-year-olds:	8	2;6,7 to 2;11,6	2;8,18
	3-year-olds:	10	3;5,2 to 3;11,13	3;7,14
	4-year-olds:	10	4;4,9 to 4;11,23	4;8,13
	total:	28		

The Catalan-speaking children lived in Barcelona and the Spanish-speaking children lived in outlying suburbs of Madrid. All the children spoke the standard variants of their language. The age range is considered relevant because it is known that at these ages children speaking other languages like Italian omit clitic pronouns, a period which coincides with the Optional Infinitive Stage.

The elicitation task, closely resembling that of Schaeffer (2000), comprised a tale performed with puppets, where an experimenter introduced the characters and told a story to the child. A second experimenter gave an incorrect continuation of the story, which the child was to correct. Following is the Catalan version of the task – the Spanish version was the same, only some characters were changed, but we kept the number and gender of the characters. The context given strongly favoured a clitic object, rather than a full DP object: the object was known and had just been mentioned.

(10) Object clitic elicitation task for present tense

- · · · ·				
Experimenter 1:	– Aquí hi tenim la Caputxeta Vermella. El rei la			
	troba i pensa: "Mira si va despentinada!". I com			
	que té una pinta, mira què fa.			
Experimenter 2:	– Ja sé què fa: renta la Caputxeta.			
Experimenter 1:	– No! Digues-l'hi tu: Què li fa el rei a la			
	Caputxeta?			
EVDECTED DESD	NISE: Lo panting			

EXPECTED RESPONSE: – La pentina.

Experimenter 1:	– Here we have Little Red Ridinghood. The king finds her and thinks: "Look what a mess her hair
	is!". And as he has a comb, look what he does.
Experimenter 2:	- I know what he does: he washes Little Red
	Ridinghood.
Experimenter 1:	- No! You tell her: What is the king doing to
	Little Red Ridinghood?
EXPECTED RESPO	NSE [.] – He is combing her

EXPECTED RESPONSE: – He is combing her.

(11) Object clitic elicitation task for present perfect

Experimenter 1:	– Aquest matí el cuiner ha començat a preparar el
	dinar. Ha agafat el trencanous i les nous i mira
	què ha fet.
Experimenter 2:	– Ja sé què ha fet: s'ha menjat les nous.
Experimenter 1:	– No! Digues-l'hi tu: Què ha fet el cuiner amb les
	nous?
EXPECTED RESP	ONSE: – Les ha trencades.

Experimenter 1:	– This morning the cook started preparing lunch.
	He took the nutcracker and the walnuts and look
	at what he did.
Experimenter 2:	– I know what he did: he ate the walnuts.
Experimenter 1:	– No! You tell her: What did the cook do with the
	walnuts?
EVDECTED DECDO	NCE. He hashe them

EXPECTED RESPONSE: – He broke them.

For each language two sentence types were tested: sentences in the present tense (4 items), and sentences in the present perfect (4 items). Verbs were transitive, and all the expected responses for the child consisted in a clitic pronoun and a verb. For the Catalan version, the clitics triggered optional participle agreement for gender and number. All children of all ages went through the same items.

3. Experimental results

In this section the results of the experiment are considered with respect to (i) the placement of clitics, (ii) the frequency of clitic presence vs. clitic omission, (iii) the actual production of participle agreement in the present perfect task in Catalan, and (iv) the morphosyntactic shape of the clitics

produced by the children when compared to the adult target. For all statistical analysis we used the Chi Square test.

3.1 Clitic placement

As has been shown for quite a number of languages now (see e.g. Pierce 1992 for French, Guasti 1993/94 for Italian), our results show that children speaking Catalan and Spanish can distinguish correctly between finite and non-finite contexts: children place correctly the clitic pronoun before finite verbs and after non-finite verbs. There is a significant difference between the number of correct and incorrect contexts (P < 0.001). The table below shows the number of utterances produced by the children for each context.

(12) Catala	in		
	clitic + finite V	inf + clitic	*clitic + gerund
2-year-olds:	12	1	
3-year-olds:	57	4	1
4-year-olds:	72	2	
5-year-olds:	14	1	
total	155	8	1
% correct	163/164 (99.4%) co	orrect $1/164$	4 (0.6%) incorrect
(13) Spanis	sh		
(15) Spans	clitic + finite V	infin	itive + clitic
2 11		1111111	
2-year-olds:	53		9
3-year-olds:	71		7
4-year-olds:	72		8
total	196		24
% correct	196/196 (10	0%) correct	48/48 (100%) correct

Pre-verbal placement of clitics with finite verbs and post-verbal placement with non-finite verbs occurs with virtually no errors in Catalan and Spanish; the child is therefore sensitive to finiteness features from the earliest record and raising of finite verbs to T occurs systematically.

3.2 Clitic presence vs. clitic omission

Regarding the rate of clitic omission in present tense, we found that there is a significant difference in the number of sentences with an omitted clitic between Catalan and Spanish (P < 0.001). Children speaking Catalan omit clitics more frequently than children speaking Spanish: in Spanish we found almost no omissions compared to Catalan. The differences between the two languages are found when all ages are collapsed (P < 0.001), and also for 2 year olds (P < 0.001), 3 year olds (P < 0.001) and 4 year olds (P < 0.001) separately. Below are the frequencies we found in Catalan and Spanish:

(14) Catalan, prese	ent tense	
clitic	clitic omis	sion full DP
1-2 year-olds: 7/31 (2	22.6%) 23/31 (74.2	2%) 1/31 (3.2%)
3-year-olds: 30/44	(68.2%) 11/44 (25%	⁶) 3/44 (6.8%)
4-5 year-olds: 45/47	(95.7%) 2/47 (4.2%)	b) 0
(15) Spanish, pres	ent tense	
clitic	clitic omis	sion full DP
2 year-olds: 32/32	(100%) 0	0
3-year-olds: 39/40	(97.5%) 1/40 (2.5%)	b) 0
4 year-olds: 40/40	(100%) 0	0

These results for Spanish are consistent with those found in a study of spontaneous speech: Lyczskowski (1999) studied three Spanish speaking children (María, from 1;8 to 3;11; Juan from 2;6 to 4;11; Koki, from 1;7 to 2;11) and also found that these children very rarely omitted object clitics and rarely produced malformed or misplaced object clitics. The results of his study are summarised in (16).

(16)	Spanish, spor	ntaneous speec full DP	h (Lyczskowsk double obj	ti 1999) missing obj	other
D.O.	364	610	29	20	34
	34.44%	57.71%	2.74%	1.89%	3.22%
I.O.	355	10	35	2	16
	61%	2.39%	8.37%	0.48%	3.83%

With respect to the rate of clitic omission in present perfect tense, we found that Catalan speaking children omit clitics more frequently than Spanish speaking children. The number of sentences with omitted clitics is significantly different between Catalan and Spanish (P < 0.001). In Spanish we found only omissions for 2 year-olds. We have found differences between these languages when we collapsed all ages (P < 0.001), and also for 2 year olds (P < 0.001), 3 year olds (P < 0.001) and 4 year olds (P < 0.001) separately.

(17) Catalan, present perfect		
clitic	clitic omission	full DP
1-2 year-olds: 4/31 (12.9%)	26/31 (83.9%)	1/31 (3.2%)
3-year-olds: 30/42 (71.4%)	8/42 (19%)	4/42 (9.5%)
4-5 year-olds: 40/47 (85.1%)	3/47 (6.4%)	4/47 (8.5%)
(18) Spanish, present perfect		
clitic	clitic omission	full DP
2 year-olds: 26/32 (81.25%)	5/32 (15.62%)	1/32 (3.12%)
3-year-olds: 39/40 (97.5%)	0	1/40 (2.5%)
4-year-olds: 40/40 (100%)	0	0

Clearly, there is no contrast between present and present perfect either in Catalan or in Spanish. And Catalan patterns with Italian with respect to clitic omission: the rate of object clitic omission is very high in both languages at the at the early stages, in contrast to Spanish. Omission remits sharply at the age of 3 both in Catalan and Italian, to disappear by the age of 4, a strong age effect absent in Spanish.

3.3 *Participle agreement*

With regard to the present perfect task, we consider whether children speaking Catalan prefer to produce agreement between the participle and the direct object clitic, or whether they prefer to produce the default masculine singular form for the participle. We find instances of participle agreement, but overall children prefer the construction without agreement: the number of sentences without agreement is higher than the number of sentences with agreement (P < 0.001). The actual percentage of participle agreement found in the children's productions is relatively low – as it is for many adult speakers of this variety. The table below shows the frequencies:

(19) Participle	agreement	
no	overt agreement	agreement w/ participle
1-2 year-olds: 16/	/21 (76.1%)	5/21 (23.8%)
3-year-olds: 25/	/28 (89.3%)	3/28 (10.7%)
4-5 year-olds: 27	/38 (71.1%)	11/38 (28.9%)
total 68/	/87 (78.2%)	19/87 (21.8%)

There are altogether six children who produce some (or all) participles displaying agreement. In the following table the rate of clitic omission for present and present perfect are collapsed:

(20) Partic	iple agreement and rat	e of clitic omission	
	clitic	clitic omission	DP
2-year-olds	w/ agr 6/16 (37.5%)	10/16 (62.5%)	
	w/o agr 5/40 (12.5%)) 34/40 (85%)	1/40 (2.5%)
3-year-olds	w/ agr 5/7 (71.4%)	2/7 (28.5%)	
	w/o agr 55/79 (69.6%	6)17/79 (21.5%)	7/79 (8.9%)
4-year-olds	w/ agr 23/24 (95.8%) 1/24 (4.2%)	
	w/o agr62/66 (93.9%)4/66 (6%)	

The results in (20) indicate that, regardless of whether they produce agreeing participles or not, all children seem to behave in the same way with respect to clitic omission: there is no statistically significant difference between the clitic omission rate in children who produce some (or consistent) participle agreement and those who do not. This has implications for the characterisation of optionality of participle agreement in Catalan: under one interpretation, even though some children's productions display no overt agreement, the structure generated may still involve an Agr_oP projection with an uninterpretable feature to be checked, as assumed above for participle agreement languages.

3.4 Clitic forms

Finally, let us consider the clitic form produced by the children. In the present tense task, at all ages children produce a percentage of target clitic forms in both Catalan and Spanish above-chance level (P < 0.001). Spanish-speaking children produce virtually no non-target forms. We have found a significant difference in the number of non-target clitics between Catalan-speaking children and Spanish-speaking children (P < 0.05), although this difference occurs only for 3 year olds (P < 0.05).⁴

⁴ In Catalan, in the present tense task, the errors attested involved in two out of three cases the masculine instead of the feminine. We come back to this fact in the next section and the discussion.

(21) Catalan clitic form, present tense				
	target	[li] [+animate]	non-target	
2-year-olds:	4	3	0	
3-year-olds:	17	10	3*	
4-year-olds:	30	8	0	
5-year-olds:	6	1	0	
total	57/82 (69%)	22/82 (26.8%)	3/82 (3.6%)	

(21) gives indication that a new pronominal system may be emerging in Catalan, in which animacy is marked in the pronominal system, rather than the opposition between accusative/dative (*li* is otherwise a dative clitic in standard Catalan). The children in our experiment who produced *li* as an accusative clitic produced it systematically for animate objects, in no case for inanimates. What may be a new system, illustrated in (22), is not unique to children, and can be found in adult varieties, specially by Spanish native speakers; there is no study available of this phenomenon in adult language, but sentences such as (22) have not been included in the non-target class.

(22) *Li pentina*. Cl combs "He combs him/her (animate)."

(23) Spanish clitic form, present tense				
	target [la]	target [le]	target [lo]	non-target
2-year-olds:	14/32	13/32	5/32	0
3-year-olds:	17/39	21/39	2/39	0
4-year-olds:	18/40	21/40	1/40	0
total	111/111 (10	0%)0	0	0

Depending on the variety the children had been exposed to (*leista* or not), they produced *le* or *lo* as clitics; they can both be regarded as target.

Also in the present perfect tense, collapsing all ages children produce target clitic forms at above-chance level in Catalan (P < 0.05) and Spanish (P < 0.001). The percentage of errors found in Catalan appears in (24)

(24) Catalan clitic	form, present perfect	
	target (<i>les</i>)	non-target [1]
1-2 year-olds:	0	3/3 (100%)
3-year-olds:	6/25 (24%)	19/25 (76%)
4-5 year-olds:	31/35 (88.6%)	4/35 (11.4%)

Interestingly, all the errors found in Catalan are of the types illustrated in (23): [1] for *les*, that is, the masculine, singular (unmarked) form instead of the feminine, plural form in (26).⁵

(25)	a.	L'ha menjat.
		acCLhas eaten (target Les ha menjat/des)
	b.	L'ha menjades.
		acCL has eaten-fem-pl
		(found marginally)
(26)		<i>Les ha menjades</i> . (target) acCL-fem-pl has eaten-fem-pl "S/he has eaten them(fem.)."

In Spanish an apparently similar phenomenon is taking place: target *las* cooccurs with *la* or [1], with no feminine marker:

(27) Spanish clitic form, present perfect				
	target las	la	[1] other	
2-year-olds:	7/19 (36.85%)	0	11/19 (57.9%) 1/19	
			(5.2%)	
3-year-olds:	8/32 (25%)	8/32 (25%)	14/32 (43.75%) 2/32	
			(6.25%)	
4-year-olds:	24/33 (72.7%)	7/33(21.2%)	2/33 (6%) 0	

In the case of Spanish, it is possible to argue that these early reduced forms result from a phonological process of coda deletion (la for las) or simplification of the syllabic structure ([1] [a] for [1a] [a] la ha); these phenomena are well attested in early Spanish, although there is considerable individual variation in their occurrence (Conxita Lleó, p.c.). Statistically, there isn't a significant difference between target and non-target clitic forms in Spanish-speaking children. Nor do we find a significant difference in the number of non-target clitics between Catalan-speaking children and Spanishspeaking children. However, the source of the non-target clitics is not necessarily the same in Catalan and Spanish: although it can be argued that the

⁵ In the present tense task, no errors were produced in Spanish, but as mentioned three errors were attested in Catalan, of which two correspond to a masculine instead of a feminine form. As the target forms in the present tense task weren't always the same, no further analysis will be pursued, but the general pattern coincides with that in the present perfect.

non-target forms stem from a phonological process in Spanish, similar processes do not seem to be so readily available to Catalan-speaking children of the same age (rather, Catalan-speaking children appear to develop a more complex syllable structure at an earlier age). That leaves the possibility that the clitic forms exemplified in (25) are different in nature from those in Spanish.

In her study of clitic omission in child Italian, Schaeffer (2000) also found what she termed "contracted plural object clitics", which appeared in the proportion indicated in (28) and are exemplified in (29b). We turn to the interpretation of the Catalan and Italian cases in the discussion.

(28)	Proportions of ta	rget direct object cli	itics and contracted plural
	object clitics (Ital	ian)	
	age	target clitic	contracted pl clitic
	2-year-olds:	62%	38%
	3-vear-olds.	77%	230/2

2-year-olus.	02/0	30/0
3-year-olds:	77%	23%
4-year-olds:	90%	10%
5-year-olds:	92%	8%

(29) a. Li ha pettinati. CL-m.pl has combed-m.pl "(He) has combed them."
b. L'ha pettinati.

CL has combed-m.pl

4. Discussion

The results of our experiment allow us to corroborate for Catalan and Spanish one of the findings of previous studies regarding the development of object clitics in child grammar: object clitics appear in the right position with respect to the verb. Preverbal placement with finite verbs and post-verbal placement with non-finite verbs occurs with virtually no errors, and that indicates that the child is sensitive to finiteness features from the earliest record, and that raising of finite verbs to T occurs systematically. We do not expect children to have any problems identifying the morphosyntactic features of functional categories, and that is indeed what we find.

Second, Catalan object clitics are omitted in structures in which they are obligatory, as was found by Schaeffer (2000) for Italian (30), and for the same period: roughly the same stage in which Optional Infinitive effects are found in non-null-subject languages. Up until the age of three, Catalan speaking children

resort to omission, rather than clitic production, and omission does not disappear entirely until the age of four; this can be compared with the results for child Italian:

(30) Italian	object clitic omissior	n (Schaeffer 2000)	
	clitic	clitic omission	full DP
2-year-olds:	22%	64%	14%
3-year-olds	62%	15%	23%
4-year-olds:	89%	0%	11%
5-year-olds	91%	0%	9%

The results of Catalan sharply contrast with those of Spanish, since Spanish-speaking children produce obligatory object clitics from the first age group studied. The contrast attested between Catalan and Spanish is as predicted by the UCC (together with Minimise Violations), given a feature of the grammars of Catalan and Spanish: while the first is a participle agreement language, the second is not. The optionality of object clitics in Catalan (and Italian) is as predicted by the UCC for a language displaying participle agreement, i.e. with checking of more than one uninterpretable feature by the object DP. On the other hand, the very low clitic omission rate found in Spanish is as predicted by the UCC if we assume that Spanish objects check against only one uninterpretable feature.

In the third place, the optional character of participle agreement in the variety of Catalan tested is of no consequence. We have to argue, then, that although participle agreement does not always occur, in the target grammar the *pro* object must check in all circumstances against two uninterpretable D-features, one in Agr_oP, one in ClP. The same holds for object clitics in the present tense: while participle agreement is only visible in the perfect tenses, the rate of clitic omission is the same in the present and the present perfect: so double checking must occur in a parallel fashion in both cases (this lack of contrast between different tenses is found not only in Catalan, but also in Italian; see Schaeffer 2000).

Finally, let us consider the form of the clitic in the children's productions. As pointed out in section 3.4., the clitics produced for Catalan were not always the target feminine, plural in the present perfect task; rather, they were systematically the unmarked clitic form (corresponding to the masculine, singular); the data available for Italian follow the same pattern. In Wexler (to appear) the suggestion is made that just as object clitic omission may be the result of a convergent derivation under the UCC, clitics with a default case may also result from it. If the default case in Romance is the

accusative⁶, then the unmarked clitics found in child Catalan (and Italian) may correspond precisely to such default forms. So under the UCC, we can explain these deviant forms found in Catalan and Italian by the inability of the child to double D-check: the default clitic [1] occurs when ClP is projected and Agr_0 is not projected. This default clitic has as verbal counterpart the root infinitive. Thus we extend previous work on clitic development and argue that omission may not be the only outcome of the interaction of the properties of participleagreement languages and the UCC.

5. References

- Cortés, Corinne. 1992. Issues in Catalan Syntax. Unpublished thesis. University of California, Los Angeles.
- Elman, J.L., E.A. Bates, M.H. Johnson, A. Karmiloff-Smith, D. Parisi, and K. Plunkett. 1996. *Rethinking innateness: A connectionist perspective on development*. Cambridge, MA: MIT Press.
- Guasti, Maria Teresa. 1993/94. "Verb syntax in Italian child grammar: finite and nonfinite verbs". *Language Acquisition* 3. 1–40.
- Jakubowicz, C., N. Müller, O.-K. Kang, B. Biemer and C. Rigaut. 1996. "On the acquisition of the pronominal system in French and German". *BUCLD* 20, ed. by A. Stringfellow et al., 374-385.
- Kayne, Richard. 1987. Facets of Romance Past Participle Agreement. M.I.T. unpublished manuscript. Cambridge, MA..
- Lizsckowski, D. 1999. On the acquisition of pronominal object clitics. Unpublished thesis. Harvard University.
- Pierce, Amy. 1992. Language Acquisition and Syntactic Theory: A Comparative Analysis of French and English Child Grammars. Dordrecht: Kluwer.
- Quartz, S.R., & T.J. Sejnowski . 1997. "The neural basis of cognitive development: A constructivist manifesto". *Behavioral and Brain Sciences*, 20, 537-596.
- Schaeffer, Jeannette. 2000. *The Acquisition of Direct Object Scrambling and Clitic Placement*. Amsterdam/Philadelphia: John Benjamins.
- Sportiche, Dominique.1996. "Clitic constructions". *Phrase Structure and the Lexicon* ed. by J. Rooryck & L. Zaring. Dordrecht: Kluwer.

⁶ The assumption that accusative is the default case in Romance may be questionable, as pointed out by an anonymous reviewer. However, to our knowledge the only evidence that can be adduced to back up nominative as the default case is provided by hanging topic constructions, where a non-agreeing topic is nominative:

⁽i) Jo, m'agrada anar a la platja.

¹sNom 1s-acc apreciate go-inf to the beach. 'Me, I like going to the beach.'

- Uriagereka, Juan. 1995. "Aspects of the syntax of clitic placement in western romance". *Linguistic Inquiry*, 26, 79-123.
- Wexler, Ken. 1998. "Very early parameter setting and the unique checking constraint: A new explanation of the optional infinitive stage". *Lingua*, 106. 23-79.
- Wexler, Ken . To appear. "The Unique Checking Constraint as the explanation of clitic omission in SLI and normal development". Ed. by Jakubowicz, C., L. Nash and K. Wexler.