Agreement inflection in child L2 Dutch

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1. Introduction

Grammaticality judgement tasks show that second language learners of English who started to learn English during childhood are significantly more accurate on judging English inflection than learners who started after puberty (Johnson and Newport, 1989, 1991; McDonald, 2000). Focussing on the acquisition of (inflectional) morphology, Goldowsky and Newport (1993: 236) observe that: "Native speakers make very few errors; they are characterized by extremely consistent use of the rules of the language. […] Adult learners, in contrast, are characterized by variable and inconsistent use of rules; much of their behavior appears to be probabilistic." In her case study of a Chinese L2 learner of English, Lardiere (1998) found that the production of English 3rd person singular *–s* remains problematic even though knowledge of English syntax is advanced and stable. A comparison of the types of errors in English L2 learners of German indicates that adults substitute the inflectional suffix *–en*, which is not used as a finite substitute by child (L1 and L2) learners of German (Prévost, 2003).

The above observations suggest that acquisition of inflection is influenced by age. There is, however, no study that focuses on this particular issue. In this contribution, we compare child L2 learners of Dutch to child L1 and adult L2 learners of Dutch in order to investigate effects of age on the acquisition of verbal and adjectival inflection.[1] We compare the amount of errors, types of errors and between as well as within subject variability in the three learner groups. Our empirical basis consists of results obtained in a series of production experiments.

2. Participants

We crucially focus on child L2 learners, and compare a sample of this population to child L1 and adult L2 learners (Schwartz, 2004; Unsworth, 2005). Assuming that the critical period ends around the age of 6/7 (DeKeyser, 2000; Johnson and Newport, 1989, 1991), child L2 learners are like the child L1 learners exposed to the target language within the critical period, but they do not learn Dutch from birth and Dutch is their second language. For the adult learners, Dutch is their second language as well. Thus, child L2 and adult L2 learners may show similar effects of L1 transfer. The child L2 and adult L2 learners differ in that the children started to learn Dutch within the critical period, whereas the adults started after the critical period (after puberty).

The (cross-sectional) L1 data are taken from Polišenská (2005), who tested monolinguals with an experimental design that is highly similar to the design described in sections 3.1 and 4.1. L2 participants are selected from the two largest

immigrant populations in the Netherlands: Turks and Moroccans (mainly Berbers that speak Tarifit). The adults received no Dutch input before puberty. The children were born in the Netherlands, but had hardly any Dutch input before the age of four i.e. when they start to attend primary school.[2] All participants have Dutch lessons, either at school or at specific courses. To test the level of Dutch proficiency, each subject participated in a sentence-repetition task (Verhoeven et al, 1986, 2002). As there are still too little data per proficiency level for valid comparisons, we have collapsed results from different levels.[3] All samples contain Turks and Moroccans, except for adult L2 high, which is restricted to Turkish participants.

Table 1: Participants

Sample	Proficiency Level	Age of Arrival	Starting Age	Testing Age	Instructed learning	N
Child L1 (n = 31)	not tested	0	0	3-6	not relevant	31
Child L2 (n = 31)	Low	0	4	5	12 mos	2
	Moderate	0	4	5-7	24-36 mos	15
	High	0	4	5-8	24-36 mos	14
Adult (n = 18)	Low	21-39	>15	22-58	12-36 mos	9
	Moderate	23-31	>15	24-35	12-24 mos	7
	High	16-24	>15	25-32	12-36 mos	2

3. Finite verbal inflection (IP)

In standard Dutch declarative main clauses, the finite verb moves to second position where it precedes the object, negation, particles, etc. The Dutch infinitive remains in final base position. The infinitival verb is morphologically similar to finite plural verbs and is marked with the suffix *–en*.[4] Table 2 gives the Dutch finite verbal paradigm:

Table 2: Dutch finite verbal paradigm

Context	Suffix	Example
1SG	-ø	Ik loop (I walk)
2/3SG	-t	Jij/hij loopt (you walk/he walks)
1/2/3PL	-en	Wij/jullie/zij lopen (we/you/they walk)

3.1. Method

All participants have been tested with a sentence-completion task. We collected data on 1SG, 2SG, 3SG, 1PL and 3PL contexts in declarative main clauses. Embedded clause and inversion conditions tested knowledge of Dutch verb

placement, which is relevant for distinguishing between finite and non-finite verbs. We targeted on verbs denoting the actions of calling, cleaning, drinking, painting, playing, pulling, reading and stirring. To control for lexical storage of unanalyzed finite verbs (Peters, 1983; Pinker, 1984) – which is relevant in case participants make very few errors - we included the nonsense verbs *pieren*, *zippen* and *kluken*. Verbal inflection items and verb placement items were presented in random order. Items of the adjectival inflection test (see section 4.1) have been included as filler items.

3.2. Data analysis

The counts are limited to responses in the main clause conditions containing simple, i.e. non-periphrastic, lexical verbs. Various participants, especially children of the youngest age groups, used periphrastic verbs that consisted of auxiliary + infinitive to denote ongoing actions (Jordens, 1990; Van Kampen, 1997; Zuckerman, 2001). We excluded such responses: the finite auxiliaries, being highly frequent verbs, may be stored as unanalyzed vocabulary items.

We performed two accuracy analyses and a substitution analysis. The question of the first accuracy analysis is: how many errors do learners make? In the second accuracy analysis, we compare conditions. The question that underlies the substitution analysis is: if learners make errors, what types of errors do they make? Via the substitution analysis, the preferred substitute ("default") can be determined.

With regard to errors, the common strategy in child L1 research is to distinguish between incorrect finiteness marking or absence of finiteness marking as in so called root infinitives. In a language like Dutch (which is OV +V2), the finite verb stands in second position whereas the non-finite verb is placed sentence-finally. For L1 Dutch it has repeatedly been shown that verb placement is acquired early (De Haan, 1987; Jordens, 1990; Zuckerman; 2000). The child L2 learners show also good performance on the verb placement task (Blom and Polišenská, to appear). Thus, in child Dutch, verb placement is a reliable criterion for singling our finite verbs. We nevertheless analysed verbal inflection regardless of verb placement: nearly all adults performed poorly on the verb placement task, and therefore we cannot distinguish between finite and non-finite verbs in this sample.[5]

3.3. Results

The child L1 learners show an accuracy of 96% correct usage (n=334), the Turkish child L2 learners (child L2T) show an accuracy of 83% (n=260) and verbal inflection is in 85% of the cases correctly used (n=485) by Moroccan child L2 learners (child L2M). The difference between the child L1 and child L2 samples is not statistically significant ($\chi^2 = 0.45$). High accuracy in the child groups reflects productivity of rules: nonsense verbs are correctly inflected in respectively 93% (n=256), 78% (n=67) and 82% (n=127) of the cases. The adult learners show an

accuracy of 57% correct (n=166) and 56% correct (n=392) for respectively the Turks and Moroccans. The difference between the child L2 and adult L2 sample is statistically significant ($\chi^2 = 69.005$, $p \leq 0.001$).

Table 3: Accuracy and substitutions per condition, child L2 (existing verbs)

Child L2 T				**Child L2 M**			
	–ø	**-t**	**-en**		**–ø**	**-t**	**-en**
1SG	**73 %**	9 %	18 %	1SG	**72 %**	11 %	17 %
2SG	4 %	**77 %**	19 %	2SG	11 %	**75 %**	14 %
3SG	10 %	**75 %**	15 %	3SG	7 %	**85 %**	8 %
1PL	5 %	0 %	**95 %**	1PL	2 %	2 %	**97 %**
3PL	2 %	7 %	**91 %**	3PL	2 %	11 %	**87 %**

Table 4: Accuracy and substitutions per condition, adult L2 (existing verbs)

Adult L2 T				**Adult L2 M**			
	–ø	**-t**	**-en**		**–ø**	**-t**	**-en**
1SG	**67 %**	20 %	13 %	1SG	**73 %**	6 %	20 %
2SG	50 %	**35 %**	15 %	2SG	20 %	**55 %**	25 %
3SG	42 %	**35 %**	23 %	3SG	34 %	**33 %**	33 %
1PL	8 %	0 %	**92 %**	1PL	5 %	5 %	**89 %**
3PL	19 %	4 %	**78 %**	3PL	23 %	13 %	**64 %**

Tables 3-4 give the accuracy per condition. We did not perform this analysis on the child L1 learners, because their errors are too marginal. The bold-faced percentages represent target-like responses. At first glance, 2SG and 3SG (that both require *–t*) are more difficult than the other conditions (that either require *–ø* or *-en*). The two adult groups, although they differ in L1, show a similar patterning. In the adult sample, the difference between singular and plural ($\chi^2 = 13.45$, $p \leq 0.001$), and the difference between 1SG, on the one hand, and 2/3SG, on the other hand, is significant ($\chi^2 = 20.57$, $p \leq 0.001$). For the child groups, there are no significant differences between conditions.

Given the Dutch paradigm, a learner can substitute the suffix *–en* in 1SG, 2SG and 3SG contexts, substitute the suffix *–t* in 1SG, 1PL and 3PL contexts and/or substitute the suffix *-ø* in 2SG, 3SG, 1PL and 3PL contexts. In the experiment, the conditions in which *–en*, *-t* or *–ø* can be substituted are not equally distributed. To compare the three suffixes, we calculated therefore the number of conditions in which this suffix is substituted as a proportion of the number of conditions in which this suffix can be substituted. A comparison of the obtained proportions tells us which suffix is most frequently used as a substitute ("default").

Table 5: Probabilities of substitution of suffixes *–en*, *-t* and *-ø*

Substitute	**–en**		**-t**		**-ø**	
Context	**SG**		**1SG, PL**		**2/3 SG, PL**	
Child L1	3 %	n=437	2 %	n=267	1 %	n=337
Child L2 T	17 %	n=211	3 %	n=172	6 %	n=271
Child L2 M	11 %	n=396	8%	n=286	5%	n=548
Adult L2 T	57 %	n=305	4 %	n=161	18 %	n=360
Adult L2 M	40 %	n=405	6 %	n=232	22 %	n=479

Adults substitute *–en* significantly more often than the children. The child L2 learners substitute *–en* more often than the child L1 learners. If we delimit the counts in the child samples to *–en* substitutions in second (i.e. finite) position,*–en* substitutions drop to nearly 0%.[6] Thus, child overuse of *–en* reflects use of root infinitives. In the adult data, *-en* substitutions may or may not be root infinitives.

Figure 1: Variability in probabilities of substitutions of suffixes *–en*, *-t* and *–ø* (T=Turkish, M=Moroccan, lower numbers within a group correspond to lower proficiency, higher numbers within a group to higher proficiency).

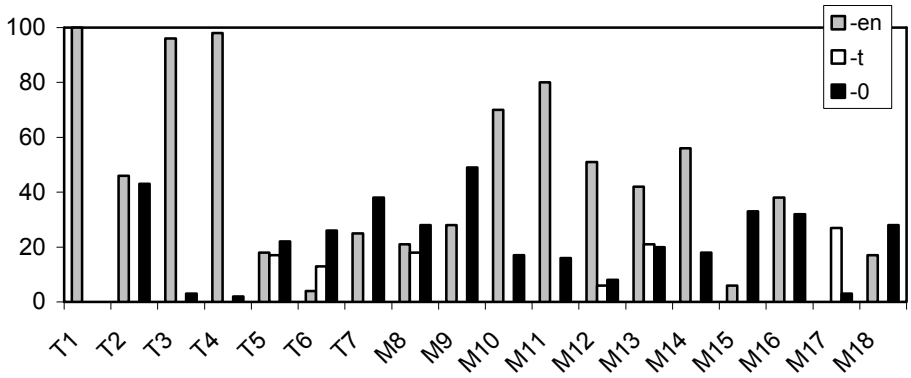


Table 5 masks the amount of variation, as shown in Figure 1: some adults prefer *–en* as a substitute (T1, T3, T4, M11, M14), others prefer *–ø* (M9, M15) or *–t* (M17). There are also participants that use two (T2, T7, M16, M18) or three (T5, M8, M13) different substitutes. Individual variation seems unrelated to level of proficiency. For instance, M10 has a low level of proficiency, whereas T7 has a high level of proficiency. Figure 1 indicates that particularly the Turks with a low level of proficiency substitute *-en*. Substitution of *–en* seems to decrease with increasing proficiency. Few adult learners substitute *–t*.

3.4. Interpretation of results

Differences in variability and accuracy suggest effects of age in the acquisition of verbal inflection. This is partially supported by a comparison of error types: the adults substitute *–t* infrequently. If children "substitute" *–en*, this is a root infinitive. The child L2 learners use more root infinitives than the child L1 learners, which is expected given their relatively short period of exposure to Dutch in combination with the observation that root infinitives in child L1 Dutch characterize early developmental stages (Wijnen and Bol, 1993; Blom, 2003). It is unclear if the adult *–en* substitutions are root infinitives. A first impression does suggest that *–en* substitutions negatively correlate with level of proficiency.

If the adult *–en* substitutions are root infinitives, adult development resembles child development (Jordens and Dimroth, to appear). Such a similarity does not necessarily contradict the occurrence of age effects. Wijnen et al. (2000) argue that the early across the board use of *–en* by Dutch children is the effect of input frequency, semantic transparency, information load and insertion of *–en* in a perceptually salient (i.e. final) position. Frequency is important in adult as well as in child language acquisition (Ellis, 2002). All other factors mentioned by Wijnen et al. represent general learning strategies that are applied by children and adults. By implication, *–en* is picked up early by children as well as adults. In the light of this, the early frequent overuse of *–en* in especially the Turkish adult L2 learners can be understood as an effect of focus on the final position in Dutch due to L1 transfer. In Dutch main clauses, this final position is filled by the infinitive (Lalleman, 1986; Klein and Perdue, 1997).[7]

4. Attributive adjectival inflection (DP)

The rule is: always add a schwa (*-e*) except in [indefinite, neuter, singular] contexts. In this special case, the bare adjective (*-ø*) must be used:

Table 6: Attributive adjectival inflection in Dutch

Context	**Suffix**	**Example**	
DEF, NEUT, SG	-e	Het mooie huis	'the nice house'
INDEF, NEUT, SG	-ø	Een mooi huis	'a nice house'
DEF, COM, SG	-e	De mooie auto	'the nice car'
INDEF, COM, SG	-e	Een mooie auto	'a nice car'
DEF, NEUT, PL	-e	De mooie huizen	'the nice houses'
INDEF, NEUT, PL	-e	Mooie huizen	'nice houses'
DEF, COM, PL	-e	De mooie autos	'the nice cars'
INDEF, COM, PL	-e	Mooie autos	'nice cars'

4.1. Method

The sentence completion task contained 16 singular nouns: 8 neuter and 8 common gender nouns. Each noun is tested in definite and indefinite conditions. Previous work on L1 and L2 Dutch indicates that gender is problematic (Van der Velde, 2005; Snow and Hoefnagel-Höhle, 1978; Sabourin, 2003). Therefore, we included a control test for gender attribution to the nouns in the adjectival inflection test. In this control test, we elicited for each noun a gender-marked definite determiner: *de* for common nouns, and *het* for neuter nouns. Gender attribution was tested at the beginning of each session. The same test, with differently ordered items, was repeated at the end of the session.

4.2. Data analysis

Results that are not corrected for gender attribution (Table 7) are followed by results that are corrected (Table 8). The corrected results are restricted to nouns with stable gender. To determine if a noun's gender is stable, we excluded nouns for which we collected less than two overt gender markings. Since we collected maximally three "gender responses" (twice in the gender attribution test and once in the adjectival inflection test), stable gender marking comprises four possibilities: *de/de* or *de/de/de* (=common gender) and *het/het* or *het/het/het* (=neuter gender). Instable gender marking comprises *de/het*, *de/de/het* and *het/het/de*.

4.3. Results

A learner can substitute *–e* in [indefinite, neuter] condition and/or substitute *–ø* in [definite, common], [indefinite, common] and [definite, neuter] conditions.

Table 7: Accuracy (% correct) in adjectival inflection test

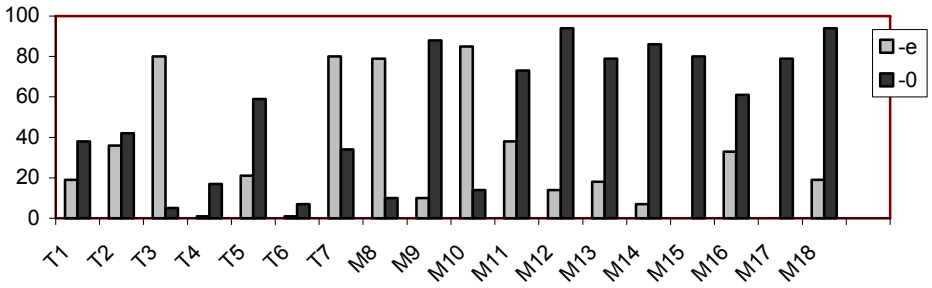
	Target –ø		**Target –e**	
Child L1	33	50/152	96	353/368
Child L2T	16	21/132	93	267/287
Child L2M	11	30/263	97	568/585
Adult L2T	46	38/82	70	133/191
Adult L2M	68	80/117	33	94/283

Table 8: Accuracy (% correct) in adjectival inflection test, corrected results

	Target –ø		**Target –e**	
Child L1	73	27/37	93	341/367
Child L2T	*		94	211/224
Child L2M	11	1/9	97	360/371
Adult L2T	*		61	49/80
Adult L2M	83	5/6	28	28/101

With regard to the correct realization of *–e*, the children are highly accurate, before as well as after corrections for gender attribution. Hence, they hardly substitute *–ø*. The adults are less accurate and do substitute *–ø*, particularly the Moroccans. Correct realization of *–ø* shows a different picture. A * indicates the absence of responses, due to absence of stable neuter nouns, which is, in turn, an effect of the overuse of the common gender definite determiner *de*. This overuse characterizes all groups. Only the (older) child L1 learners use a fair number of stable neuter nouns. If the child L1 learners use stable neuter nouns, they also use most often the correct adjectival suffix in the special case (*–ø*).[8] The low percentage of 33% correct in Table 7 comes from neuter nouns that are common according to the child: after corrections accuracy goes up to 73% correct. For the adults, corrections do not lead to any improvement. Adult responses in all conditions show substitutions in both directions. The Turks tend to substitute *–e* whereas the Moroccans substitute *–ø* most frequently.

Figure 2: Variability in probabilities of substitutions of suffixes *–e* and *–ø*



4.4. Interpretation of results

The children are more accurate than the adults, they make different errors and show hardly any variability between and within participants. Children's errors with adjectival inflection are in fact errors in gender attribution that are caused by the "overattribution" of common gender. For adjectival inflection this results in application of the default rule, and, hence, *–e* substitutions. Thus, in the child sample adjectival inflection is consistent with gender attribution. The adults also overattribute common gender. However, unlike the children, they substitute both *–e* and *-ø*. In the adult sample adjectival inflection and gender attribution are inconsistent. The Moroccans' preference to substitute *–ø* may be an effect of the impossibility to have a final unstressed vowel in their L1. Although the L1 of the Moroccans marks gender, and Turkish does not, the Moroccans do not profit from their L1; this may be because their masculine-feminine system does not map unto the Dutch common-neuter gender system.

5. Conclusion

If there are age effects in the acquisition of inflection, it is expected that that child L2 learners behave like child L1 learners and unlike adult L2 learners. This prediction is borne out by our data. Child and adult learners differ in the amount of errors, types or errors, consistency of gender in determiner and inflection and variability between and within participants. Differences between children and adults can only partially be related to L1 transfer. The other differences indicate that the two groups acquire inflectional morphology in a different way.

6. Discussion: child L2 learners and ultimate attainment

We have seen that child L1 and child L2 learners follow a similar developmental path. Results of a pilot study suggest that the two groups differ in ultimate attainment of adjectival inflection, though. Our tentative hypothesis is that the acquisition of gender (lexical and/or grammatical) is responsible for this two-way asymmetry between learners groups and inflectional domains.

Laloi et al. (2005) tested 15-16 year-old adolescents: 8 Moroccan child L2 learners of Dutch and 7 Dutch monolingual controls. Verbal inflection, adjectival inflection and gender attribution have been tested with the methods described here. With respect to finite verbal inflection the two groups performed at ceiling. Results of the adjectival inflection/gender attribution tasks revealed a significant difference: the special case still posed a problem for the child L2 learners. In child L2 learners aged 15-16, overuse of definite determiner *de* still correlates with overuse of the suffix *–e* in the special case. Thus, ten years of extra systematic exposure to Dutch did not suffice for catching up with the child L1 learners.

Three types of factors may play a role: (i) external factors i.e. a learner's input situation, (ii) internal factors i.e. does a learner start within or after the critical period? and (iii) linguistic factors i.e. properties of a particular linguistic variable. The assumption that there is no difference between the child L1 and child L2 learners with regard to the internal factor is supported by the observation that both groups make the same types of errors. The child L1 and child L2 learners differ with regard to the external factor: the child L2 learners receive later -from four onwards- and less -only outside their homes- Dutch input. We may now hypothesize that the difference in input situation causes early age effects. However, only in combination with linguistic factors, since early age effects are limited to adjectival inflection. Adjectival inflection, in contrast to verbal inflection, requires knowledge of gender: acquisition of the special case involves mapping of *-ø* to [indefinite, *neuter*, singular]. What makes gender so problematic? In the special case, indefiniteness and singular are overtly marked on resp. indefinite determiner and noun. Gender is *not* overtly spelled out. Dutch indefinite determines are not marked for gender, and a noun's gender is neither phonologically nor semantically transparent. Hence, to deduce the special case a learner must know lexical gender.

In Dutch, gender of simple nouns is to a large extent unpredictable. Therefore, the acquisition of this piece of indirect evidence may take long. We may now speculate that in the case of adjectival inflection external factors magnify the effect of linguistic factors (or vice versa). As a consequence, child L2 learners do not reach a certain critical mass of input or threshold within the critical period and fossilize in the default stage (Locke, 1997; Hulk and Cornips, in press).

Notes

[1] We use the notion 'acquisition' here in a broad way. It may include possible effects of storage or selection; our production tests do not enable us to make a distinction.
[2] Inquiries have been made with the teacher(s), who, in turn, consulted the parents of the children in case of uncertainty. For the inquiries we used a questionnaire. The criterion for inclusion is that the parents did/do not speak Dutch to the child, so that the home-situation is clearly pre-dominant monolingual Turkish or Moroccan Arabic/Tarifit. If the children heard Dutch at home, this was via siblings and/or television. In our task, we did not find any significant differences between oldest children and children with older siblings (and who may have heard Dutch at home from their siblings). Moroccan Arabic and Tarifit have been collapsed because often the parents speak both languages, and with respect to the linguistic variables in our study, the two languages do not differ.
[3] Overall, the children represent a higher proficiency level than the adults. Consequently, qualitative analyses of errors may be more telling than comparisons of the amounts of errors. Also, effects of L1 transfer may be more present in the adult sample than in the child sample.
[4] The two syntactically dissociated morphemes *–en* may, morphologically, be one and the same underspecified vocabulary item.
[5] The adults showed effects of L1 transfer in combination with a general tendency to overuse the SVO order (Clahsen and Muysken, 1986; Meisel, Clahsen and Pienemann, 1981).
[6] 0% (n=424) for child L1, 0% (n=176) for child L2T and 2% (n=358) for child L2M.
[7] The Turkish base order is head-final (resulting in OV), and contrasts in this respect with the Moroccan-Arabic/Tarifit base order (VO).
[8] The 27% incorrect responses come from the younger L1 learners.

References

Blom, E. (2003) *From root infinitive to finite sentence*, Doctoral dissertation, Utrecht University.
Blom, E and D. Polišenská (2005) "Verbal inflection and verb placement in first and second language acquisition", *Proceedings of the 39th Linguistic Colloquium*, Free University Amsterdam.

Clahsen, H. and P. Muysken (1986) “The availability of Universal Grammar to adult and child learners: a study of the acquisition of German word order”, in *Second Language Research* 2, 93-119.
DeKeyser, R (2000) “The robustness of critical period effects in second language acquisition”, in *Studies in Second Language Acquisition* 22, 499-533.
Ellis, N. C. (2002) “Frequency effects in language acquisition: A review with implications for theories of implicit and explicit language acquisition”, in *Studies in Second Language Acquisition*, 24, 143-188.
Goldowsky, B.N. and E. Newport (1993) “Modeling the effects of processing limitations on the acquisition of morphology: The less is more hypothesis”, in J. Mead (ed.), *The Proceedings of the 11th WCCFL,* Stanford, CA: CSLI.
Haan, G. de (1987) “A theory-bound approach to the acquisition of verb placement in Dutch”, in G. de Haan and W. Zonneveld (Eds.) *Formal parameters of generative grammar: OTS Yearbook 1987*, Dordrecht: ICG.
Hulk, A. and L. Cornips (in press) “Neuter gender determiners and interface vulnerability in child L1/2L1 Dutch”, in S. Unsworth, T. Parodi, A. Sorace and M. Young-Scholten (eds.) *Paths of Development in L1 and L2 acquisition*, Amsterdam: John Benjamins.
Johnson, J. and E. Newport (1989) “Critical period effects in second language learning: the influence of maturational state on the acquisition of English as a second language”, in *Cognitive Psychology* 21, 60-99.
Johnson, J. and E. Newport (1991) “Critical period effects on universal properties of language: the status of subjacency in the acquisition of a second language”, in *Cognition* 39, 215-258.
Jordens, P. (1990) “The acquisition of verb placement”, in *Linguistics* 28, 1407-1448.
Jordens, P. and C. Dimroth (to appear) “Finiteness in Children and Adults learning Dutch”, in D. Bittner and N. Gagarina (eds.), *Acquisition of Verb Grammar and Verb Arguments*, Kluwer.
Kampen, J. van (1997) *First steps in WH movement*, Doctoral Dissertation, Utrecht University.
Klein, W. and C. Perdue (1997) “The Basic Variety (or: Couldn’t natural languages be much simpler?)”, in *Second Language Research* 13 (4), 302 – 347.
Lalleman, J. (1986) *Dutch language proficiency of Turkish children born in the Netherlands*, Doctoral dissertation, University of Amsterdam.
Laloi, A., R. Spanjaard and J. Styczynska (2005) “Verbal and adjectival flexion by child L2 learners of Dutch”, Ms. University of Amsterdam.
Lardiere, D. (1998) “Dissociating syntax from morphology in a divergent end-state grammar”, in *Second Language Research* 14, 359-375.

Locke, J. (1997) “A Theory of Neurolinguistic Development”, in *Brain and Language* 58: 265-326.
McDonald, J. (2000) “Grammaticality judgements in a second language: influences of age of acquisition and native language”, in *Applied Psycholinguistics* 21, 395-423.
Meisel, J., H. Clahsen and M. Pienemann (1981) “On determining developmental stages in natural second language acquisition”, in *Studies in Second language Acquisition*, 3 (2), 109-135.
Peters, A.M. (1983). *The Units of Language Acquisition*, Monographs in Applied Psycholinguistics, Cambridge University Press.
Pinker, S. (1984) *Language Learnability and Language Development*, Harvard University Press, Cambridge MA.
Prévost, P. (2003) “Truncation and missing surface inflection in initial L2 German”, in *Studies in Second Language Acquisition* 25, 65-97.
Polišenská , D. (2005) “Dutch children’s acquisition of inflection”, paper presented at IASCL 2005, Berlin.
Sabourin, L. (2003) *Grammatical Gender and Second Language Processing*, Doctoral dissertation, Groningen University.
Snow, C. and M. Hoefnagel-Höhle (1978) “The critical period for language acquisition: evidence from second-language learning”, in *Child Development* 49, 1114-1128.
Schwartz, B. (2004) “Why child L2 acquisition?”, in J. van Kampen and S. Baauw (eds.) *Proceedings of GALA 2003*, Utrecht University.
Unsworth, S. (2005) *Child L2, adult L2, child L1: differences and similarities*, Doctoral dissertation, Utrecht University.
Velde, M. van der (2005) “Gender acquisition across languages: Dutch and French compared”, paper presented at IASCL 2005, Berlin.
Verhoeven, L., Vermeer, A. and C. van de Guchte (1986, 2002) *Taaltoets allochtone kinderen: diagnostische toets voor de mondelinge vaardigheid Nederlands bij allochtone kinderen van 5-9 jaar (TAK onderbouw)*. Tilburg: Zwijsen.
Wijnen, F. and G. Bol (1993) “The escape from the optional infinitive stage”, in A. de Boer, J. de Jong and R. Landeweerd (eds.) *Language and cognition 3: Yearbook of the research group for theoretical and experimental linguistics of the University of Groningen*.
Wijnen, F., M. Kempen and S. Gillis (2000) “Bare infinitives in Dutch early child language: an effect of input?”, in *Journal of Child Language* 28(3), 629-660
Zuckerman, S. (2001) *The acquisition of “optional” movement*, Doctoral dissertation, Groningen University.