Christine Dimroth, Peter Jordens (Editors)

# Functional Categories in Learner Language

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*Editor*

Peter Jordens

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# Preface

*Christine Dimroth and Peter Jordens*

Language acquisition is a developmental process. Research on spontaneous processes of both children learning their mother tongue and adults learning a second language has shown that particular stages of acquisition can be discriminated. Initially, learner utterances can be accounted for in terms of a language system that is relatively simple. In studies on second language acquisition this learner system is called the Basic Variety (Klein and Perdue 1997). Utterance structure of the Basic Variety is determined by a grammar which consists of lexical structures that are constrained, for example, by semantic principles such as "The NP-referent with highest control comes first" and a pragmatic principle such as "Focus expression last". At some point in acquisition this lexical-semantic system is given up in favour of a target-like system with morpho-syntactic features to express the functional properties of finiteness, topicality, the determiner system, etc. Insights into *how* this process evolves may also provide an answer to the question of *why* it takes place. Within this functional perspective on language acquisition research focuses on questions such as the following.

1. What is the driving force behind the process that causes learners to give up a simple lexical-semantic system in favour of a morpho-syntactic functional category system?
2. What is the added value of morpho-syntactic properties of inflection, word-order variation, definiteness and agreement?
3. Why is it that in cases of specific language impairment it is mainly morpho-syntactic properties of the target language that are affected?

These were the leading questions of a workshop organized by the present editors within the framework of a conference on "System und Variation" which was held by the Deutsche Gesellschaft für Sprachwissenschaft (DGfS) from 28 February to 2 March 2007 in Siegen (Germany). The workshop was entitled "Functional elements. Variation in learner systems". This volume contains an edited selection of the papers presented.

Our dear friend and colleague Clive Perdue, who also participated in our workshop, was among the first who saw the relevance of studying

learner language in its own right. Over the years we benefitted a lot from his suggestions and ideas. Clive died in 2008.

In "Convergence on finite V2 clauses in L1, bilingual L1 and early L2 acquisition" *Rosemarie Tracy* and *Dieter Thoma* discuss the results of a longitudinal case study with children from migrant families who are acquiring Turkish, Russian, and Arabic as their L1 and who were first exposed to German as their second language between the ages of 3 to 4;5. They show that the way in which finiteness features and correlating word-order phenomena emerge in the youngest children in this group, closely resembles the developmental pattern familiar from the acquisition of German as L1. The children rapidly develop target-like finite clauses and a whole range of V2 effects. Furthermore, it was found that none of the children showed evidence of L1 interference. Hence, early L2 acquisition occurs independently of the specific properties of the L1 and thus it differs significantly from adult L2 acquisition. Finally, it is argued that the acquisition process may benefit from intervention programs that are geared particularly to the acquisition and use of lexical verbs both in verb-final and in verb-second position.

In his paper "The acquisition of functional categories in child L1 and adult L2 Dutch" *Peter Jordens* argues that both in child L1 and in adult L2 Dutch, learner varieties develop from a lexical system to a functional system. At the lexical stage, functional categories are absent. Utterance structure is determined by the lexical projection of a predicate-argument structure. Furthermore, topicalization cannot be expressed with the functional means of the target system. However, it can be expressed with the structure of an agentive lexical projection as in *disse hoeniet meeneme* (this-one have-to-not withtake) which has the object in initial position and the agent implicit in the head. At the relevant stage, the agent can also be expressed with a clitic as in *doett**ie** omdraaie*. Reanalysis of the clitic as a pronoun establishes an external argument position for the agent. With an external argument position for the agent and a functional position for the topic, the learner grammar has two specifier positions. The external argument position is projected by the lexical category Pred, the topic position by the functional category F. As a carrier of finiteness F also provides a position for non-root modals, auxiliary verbs and later in the acquisition process also for the lexical verb. As a functional position, Spec-F is available for contextual embedding. That is, it is both a position for topicalization and a position for the expression of *wh-* and *yes/no*-questions.

The paper by *Steffi Winkler* deals with "The acquisition of syntactic finiteness in German L1. A structure-building approach and its cross-

linguistic implications". The study is carried out against the background of recent functional approaches to the development of finiteness in children learning their mother tongue and in adults acquiring a second language (Dimroth et al. 2003; Jordens 2002, 2006, 2008; Jordens and Dimroth 2006). These studies suggest a uniform acquisition path for learners of Germanic languages and propose a stage-model for the development of the finiteness category. Based on the analysis of two child corpora Winkler proposes a developmental path for the category of finiteness in German child language, providing a functional as well as a formal interpretation of the relevant corpus data. She formulates her findings in terms of a structure-building approach. That is, the emergence of the syntactic properties of finiteness can be described as a stepwise process that is accompanied by the establishment of the target-like functional category system. For this process, five successive stages can be identified. Finally, she shows that the proposed syntactic approach can also account for structural variation concerning the investigated phenomenon within the learner system.

In "Stepping stones and stumbling blocks. Why negation accelerates and additive particles delay the acquisition of finiteness in German", *Christine Dimroth* discusses the crucial role of negative particles like *nein* (no) and *nicht* (not) and the additive particle *auch* (also) in the early development of child L1 and adult L2 German. These particles differ from the purely lexical expressions that learners initially use. They specify the relation between other pieces of information given in the utterance and the (non)-verbal context. In the majority of cases, utterances containing *auch* and utterances containing negation have different information structures, i.e. different parts of the information are affected by the particle's negative or additive meaning. Dimroth addresses the question of how these devices are integrated into elementary learner utterances, and what the consequences are for utterance organization.

In "Does finiteness mark assertion? A picture selection study with native speakers and adult learners of German" *Sarah Schimke* discusses the result of a comprehension experiment on the acquisition of finiteness. According to the functional analysis of finiteness as presented in Klein (1998), the finite verb form in a sentence is used to express the functional properties of assertion. Dimroth et al. (2003) have shown that in early second language acquisition finiteness does not yet play a role. Second language learners who acquire German in an immersion setting first form morphologically and syntactically infinite sentences such as *Peter einen Brief schreiben* (Peter a letter to-write). In the experiment Turkish learners of German were divided into two groups: a less advanced and a more ad-

vanced group. The results for the less advanced learners provide evidence in favour of the hypothesis put forward in Dimroth et al. The results for the more advanced group on the other hand show that while finiteness is used to express assertion, learners become uncertain how to interpret the infinite form.

The study by *Josje Verhagen* on "Light verbs and the acquisition of finiteness and negation in Dutch as a second language" focuses on the relevance of auxiliaries and agreement for the acquisition of verb raising. In earlier studies on L2 German it has been found that the acquisition of light verbs is crucial for the acquisition of finiteness and verb-raising. That is, post-verbal negation with lexical verbs (raising) only occurs after the acquisition of light verbs. For L1 Dutch (Jordens 2002) similar findings have been reported with respect to the acquisition of auxiliary verbs. Verhagen however, argues that it is the acquisition of subject-verb agreement that is most relevant. Experimental evidence from Moroccan and Turkish learners of Dutch shows that subject-verb agreement occurs with auxiliaries before it appears with lexical verbs. Furthermore, she shows that subject-verb agreement on lexical verbs is a prerequisite to the acquisition of verb-raising.

In "Finiteness in children with SLI: a functional approach" *Anke Jolink* presents longitudinal speech data of two Dutch SLI children and four normally developing children. The study describes the children's development of finiteness from both a functional and a formal perspective and discusses the extent to which SLI children's development differs from that of normally developing children. When taking a purely formal approach and looking at the morpho-syntactic marking of finiteness only, there are differences between normally developing children and SLI children. SLI children seem to acquire the assertion marking properties of finiteness, however they do not always succeed in applying the target-like grammatical means to express these properties.

The paper by *Natalia Gagarina* on "Functional and modal elements in child and adult Russian" deals with the role of morpho-syntactic complexity in the acquisition of inflectional verb morphology in Russian. It investigates the uses of analytical finite and non-finite constructions in early speech production of three monolingual children and their caregivers. In particular, it examines the acquisition of functional and modal elements in analytical constructions and relates the present results to previous findings that showed the fast acquisition of the synthetic finite verb forms in child Russian. The findings suggest a different timing in the acquisition of finite marking on lexical verbs within synthetic structures and on the auxiliary

and modal verbs within analytical structures. It is proposed that the acquisition of verb morphology within the domain of finite lexical verbs and of the functional and modal elements in child Russian relates to the combination of grammatical and cognitive factors, such as morphological transparency and uniformity of verb inflection on the one hand, and saliency of infinitives in analytical constructions on the other hand.

*Karen Ferret* and *Clive Perdue* build on the results from studies on the acquisition of L1 Dutch and German by Jordens (2002), Dimroth et al. (2003), Nederstigt (2004) and Gretsch and Perdue (2007). In their study "How much (morpho-)syntax is needed to express finiteness?" Dimroth et al.s' three stages are reanalysed as steps along the path to mastering the V2 phenomenon. On the basis of the syntactic analysis of V2 of Adger (2003) for adult German the authors propose that the functional head C° contains two strong features – *Topic* and *Decl* – which both provoke the movement of constituents, respectively of an XP to initial position and of the finite verb to C°. Feret and Perdue argue that the first two stages identified by Dimroth et al. reflect development towards V2: semantically, elements with the function of linking predicates to topics mark the illocutionary force of the utterance; syntactically, they occupy a structural position, preparing the acquisition of V2. Thus stage 2 sees the activation of the strong feature [Topic] on C°, provoking movement of the topic constituent to [Spec, C''']. The implications of this proposal are claimed to be (at least) twofold: (1) It leads to reassess two models proposed in generative work on acquisition: the Full Competence Hypothesis and the Minimal Tree Hypothesis; (2) It also leads to re-examine the acquisition of the finite verb's position from a cross-linguistic perspective, i.e. the acquisition of non-V2 languages such as English and French.

*Tanja Kupisch* and *Natascha Müller* show in their paper "Relating Italian articles and clitic object pronouns in bilingual children acquiring Italian and German" that the acquisition of object clitics and determiners in bilingual children acquiring Italian and German is interdependent. In particular, the point in acquisition when the children start to produce object clitics in Italian coincides with the moment in which they cease to omit determiners. The authors propose that there is a particular property of determiners that triggers the obligatory use of object clitics, namely the morphological distinction between indefinite and definite marked noun phrases, which signals whether the hearer's familiarity of the referent can be presupposed. It is shown that the triggering process is very robust and occurs across different learner types, balanced and unbalanced bilinguals.

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# Contents

Preface v
*Christine Dimroth and Peter Jordens*

Convergence on finite V2 clauses in L1, bilingual L1 and early L2 acquisition 1
*Rosemarie Tracy and Dieter Thoma*

The acquisition of functional categories in child L1 and adult L2 Dutch 45
*Peter Jordens*

The acquisition of syntactic finiteness in L1 German. A structure-building approach 97
*Steffi Winkler*

Stepping stones and stumbling blocks. Why negation accelerates and additive particles delay the acquisition of finiteness in German 135
*Christine Dimroth*

Does finiteness mark assertion? A picture selection study with native speakers and adult learners of German 169
*Sarah Schimke*

Light verbs and the acquisition of finiteness and negation in Dutch as a second language 203
*Josje Verhagen*

Finiteness in children with SLI: a functional approach 235
*Anke Jolink*

Functional and modal elements in child and adult Russian 261
*Natalia Gagarina*

How much (morpho-)syntax is needed to express finiteness? 283
*Karen Ferret and Clive Perdue*

Relating Italian articles and clitic object pronouns in bilingual children acquiring Italian and German 307
*Tanja Kupisch and Natascha Müller*

Index 343

# Convergence on finite V2 clauses in L1, bilingual L1 and early L2 acquisition[1]

*Rosemarie Tracy and Dieter Thoma*

## 1. Introduction

We have all been remarkably good at acquiring our first language(s). In contrast, native-like competence and performance remain exceptional for languages acquired later in life. With age and quite possibly due to a variety of other factors, like motivation, learning environment, and intensity of exposure, chances dwindle that we approximate native speakers on all linguistic levels and in all types of behavioural tasks. Yet, some subsystems or interfaces between subsystems, e.g. phonology, morphology, syntax, and processing, are clearly more affected than others. The question of why this may be so and how this could be related to the way our brain matures and to how our ability to process language changes across the lifetime has fascinated the scientific community for at least fifty years (Penfield and Roberts 1959; Lenneberg 1967; Johnson and Newport 1989; Newport 1990; Long 2005; Hyltenstam 1992; Schwartz and Sprouse 1996; White and Genesee 1996; Birdsong 1999; Singleton 2005, to name but a few). While the precise role of maturational factors remains controversial, it is by now widely acknowledged that questions relating to critical or sensitive periods will most likely receive different answers for different subsystems (cf. Sorace 2003; Clahsen and Felser 2006; Indefrey 2006; Hopp 2007; Nitsch 2007).

This wider issue forms the overall backdrop for our own pursuit of the question dealt with in the present paper of how children acquiring German as their first language (L1), as one of two first languages (2L1) and as an early second language (L2) discover crucial properties of German clause structure. We therefore only take a cursory glance at differences between children and adults, and we limit our discussion to evidence from production data. Our main focus will be on L2 children who have been first exposed to German as a second language at the ages of three to five, ages when their L1 grammar is already well in place. Essentially, we will argue for the (null-) hypotheses that, at least for crucial areas of German gram-

mar, early L2 acquisition is just as robust as L1 acquisition, and that, in contrast with natural L2 learning in adults, young L2 children proceed along the milestones known from L1 German. In addition, we will show that young L2 learners can be remarkably fast in acquiring the L2.

We will start with the identification of relevant properties of German clause structure (Section 1) and with a short as well as (relatively) uncontroversial summary of how these properties are acquired by monolingual and bilingual L1 children (Sections 2 and 3). After briefly considering adult L2 acquisition, we present five longitudinal case studies with L2 children who first encountered German in kindergarten (Section 4). As should become clear from the developmental paths sketched in Section 4 and the discussion in Section 5, both qualitative and quantitative analyses indicate that just like L1 children, young L2 learners are very good at working out grammatical rules or schemata. Section 6 summarizes and concludes.

## 2. A brief look at the target: German clause structure

Like all its Germanic sisters apart from English, German is a V2 (verb second) language. In main clauses the finite verb surfaces in second position (cf. 1a), or in first position whenever the so-called preverbal field (indicated by XP, a symbol representing any phrasal constituent) remains unfilled, as, for instance, in *yes/no* questions. Non-finite parts of the verbal complex (particles, infinitives, participles) are restricted to final position (VE, verb end). In subordinate or complement clauses introduced by a complementizer, the VE position is the only one available for finite verbs, cf. (1b). Together, the positions of the finite verb in (1a) and of the complementizer in (1b) at the left sentential periphery and of the non-finite and of the finite verbs at the right periphery in both patterns form the so-called *sentence bracket* ("Satzklammer", cf. Duden 2006), a metaphor we will rely on quite heavily in the discussion of our data.

(1) (a) (XP) V2{+fin} ……..VE {-fin}
(b) COMP ……..…….VE {+fin}
⇑____ SENTENCE BRACKET ____⇑

The sentences in (2) serve for illustration of these configurations. (2a)-(c) are main clauses, (2d) is a complement clause. Whenever necessary, we provide interlinear translations and glosses of German examples.

(2) (a) *Der Mann hat die Tür aufgemacht.*
the man has the door open-made
'the man has opened the door.'

(b) *Die Tür hat der Mann aufgemacht.*
the door has the man open-made
'the man has opened the door.'

(c) *Hat der Mann die Tür aufgemacht?*
has the man the door open-made?
'has the man opened the door?`

(d) *..., dass der Mann die Tür aufgemacht hat.*
..., that the man the door open-made has
'… that the man has opened the door.'
(also possible as an independent exclamation as in "(I can't believe) that he opened the door!")

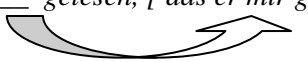
The question of how to map the topological pattern of (1) onto a hierarchical phrase structure tree is far from trivial and has led to a number of proposals differing in the number and types of structural layers proposed (e.g. Weerman 1989; Haider 1993; Hoekstra 1993; Grewendorf 1995). Since nothing in the following discussion hinges on a particular descriptive model, though, we forgo this discussion and assume that learners will eventually have to reconstruct at least the following layers of phrase structure: VP (headed by verbs), Focus Particle Phrases (FPP, the home base of various particles, including negation), IP (projected by inflectional heads) and CP (headed by complementizers).[2] Furthermore, we assume that the child's natural curriculum consists in the successive (re-)construction or spell-out of these phrasal layers and that each developmental step (or "milestone") is triggered by the discovery of new lexical and/or functional heads.

While Schema (1) captures the canonical word order of German, superficial structural variation may well obscure these patterns. This affects, for instance, the left periphery of German main clauses, where connecting particles such as *und/oder* ('and/or'), *denn* ('since'), *sondern/aber* ('but') appear to push the verb out of its second position (*denn/aber er hat das Buch gelesen*, 'since/but he has read the book'). This also includes *weil* in the sense of *denn* ('since'), which can be adjoined to main clauses (*weil er hat das Buch gelesen*, 'since he has read the book'), while *weil* in the sense

of 'because' takes on the C-head position in subordinate VE clauses. So the learners' task is to figure out the canonical state of V2 word order despite seemingly contradictory evidence.

Structural ambiguities arise at the right-sentential periphery as well. The domain following both non-finite verbal elements in main clauses and finite verbs in subordinate/embedded clauses (the postverbal field, "Nachfeld"), is reserved for "exbraciated" relative clauses and other heavy constituents, cf. (3a)-(b).

(3) (a) *Ich habe das Buch ___ gelesen, [ das er mir gegeben hat].*



I have the book ___ read which he me given has
'I have read the book which he gave me'

(b) *Ich habe das Buch ___ gelesen [über die dramatische Bildungskrise in Deutschland].*
I have the book___ read about the dramatic educational crisis in Germany
'I have read the book about ….'

However, in colloquial German, the post-verbal field offers itself to all sorts of adjuncts, which may then be hard to tell from (elliptical) afterthoughts, cf. (4a)-(c).

(4) (a) *Ich hab das Buch gelesen am Freitag.*
I have the book read on Friday
'I have read the book on Friday.'

(b) *Ich hab das Buch gelesen mit großem Vergnügen.*
I have the book read with great pleasure
'I have read the book with great pleasure.'

(c) *Ich hab das Buch gelesen. Sogar mit Vergnügen.*
I have the book read. Even with pleasure
'I have read the book. Even with pleasure.'

In addition, some German dialects allow or even require verb-projection raising, which may make it hard for learners to identify the underlying canonical word order with the verb in final position, cf. (5).[3]

(5) *…dass sie ihn ____ hat [sehen wollen].*
... that she him ___ has seen want
'… that she wanted to see him'

In sum, then, learners of German have to cope not just with the asymmetry of main and subordinate/embedded clauses (V2 finite vs. VE finite) but, in addition, with the fuzziness created by adjunctions at both sentential peripheries. Nevertheless, L1 learners are only marginally affected by such variation in the input. Adults acquiring German as a second language, however, have a much harder time coming to grips with it (cf. Section 4 below). Hence, it will be interesting to see who very young L2 children resemble in this respect.

## 3. Right on target: German as a first language[4]

Children acquiring German as their first language are highly efficient at identifying the right sentential bracket, that is they produce constructions headed by verbal particles or other non-finite verb forms by the time they are 18-20 months old (cf. Mills 1985; Miller 1976; Clahsen 1988; Weissenborn 2000; Schulz 2007). By that age they have also picked up a useful repertoire of holistically stored expressions and partially productive formulas tied to specific lexical items, such as in precursors of (later) interrogatives (*wose X,* from *Wo is(t) X, 'Where's X?*'; cf. Kaltenbacher 1990; Tracy 1991). Many of these expressions already mimic simple V2 clauses.

According to Penner, Tracy and Wymann (1999) and Penner, Tracy and Weissenborn (2000) particles like *auch*, which already figure in children's two-word combinations, can also be looked upon as heads projecting their own minimal subsystem (a Focus Particle Phrase, FFP). Once focus particles merge with VPs, VP-internal arguments may raise across the particle. The examples in (6) illustrate various options with and without an FFP on top of VP. The data selected for illustration in (6) and (7) are all from the Julia-corpus of Tracy (1991:154ff).

(6) (a) $[_{VP} \ldots ]$ *tür auf, bus fahrn, Julia treppen gehn.*
door open, bus ride, Julia stairs go
'Julia (wants to) walk (up) the stairs.'

| | | | |
|---|---|---|---|
| (b) | [$_{FPP}$ ...] | *da auch, auch rein, mama auch kette.* | there also, also in-there, mummy also necklace<br>'Mummy (is) also (wearing) a necklace.' |
| (c) | [$_{FPP}$ *auch* [$_{VP}$...]] | *Tracy auch kinderzimmer gehn.* | Tracy also children's room come<br>'Tracy (should) also come to the children's room.' |

Around the age of two to two-and-a-half, structural layers associated with agreement/finiteness features emerge, and, soon after, precursors of subordinate clauses with finite verbs in VE position, cf. (7a-c).

| | | | | |
|---|---|---|---|---|
| (7) | (a) | [$_{IP}$ ...] | *eichhörnchen auch noch mehr steht.* | squirrel also still more stands<br>'a squirrel is standing there also.' |
| | (b) | [$_{CP}$...] | *ich bau ein turm mit ein Uhr.* | I build a tower with a clock |
| | (c) | [$_{CP}$...] | *wenn die Julia futter reintut, dann fressen die vögeln alles auf.* | if the Julia food in-puts, then eat the birds everything up<br>'if J. puts food in there (into the birdhouse), then the birds eat it all up.' |

The examples in (8) provide an overview of this development. We refer to the emergence of specific patterns and features as "milestones", ignoring the phase of single-words and formulaic expressions (Milestone I). Non-finite VPs and FFPs are grouped together under Milestone II, finite V2 clauses under Milestone III, and complementizer-introduced clauses are assigned to Milestone IV. We leave out translations and glosses since the table contains examples already discussed.

(8)

| | SENTENCE BRACKET → | | ← SENTENCE BRACKET | |
|---|---|---|---|---|
| | V2 | MIDDLE FIELD | VE | Mile-stone |
| | | *apfel* | ***raus*** | M II |
| | | *mama auch apfel* | | |
| | | *mama auch apfel* | ***essen*** | |
| *ich* | ***bau*** | *eichhörnchen auch ….*<br>*ein turm mit ein uhr* | ***steht*** | M III |
| *dann* | ***fressen*** | *die vögeln alles* | ***auf*** | |
| | ↓<br>**Complementizer** | | ↓ | |
| | ***wenn*** | *die Julia futter* | ***reintut*** | M IV |

This picture is, of course, highly simplified since it abstracts away from inter-individual variation, such as children's differential preferences for precursor structures, and from intra-individual variation (cf. Hohenberger 2002). This schema also ignores intermediary steps related to the emergence of auxiliaries and modals (cf. Jordens 1990, 2002; Hoekstra and Jordens 1994) and scrambling within the middle field (Nederstigt 2003; cf. also Unsworth 2007 for different learner types dealing with scrambling in Dutch). Marginal patterns, for instance those with redundantly spelled-out items, as in (9) below, which look like slips of the tongue provide us with useful insights into the state-of-the-art of learner systems – such as the child's awareness that the very same verb or thematic argument may surface in different positions – and inform us about on-line competition and monitoring failures.

(9) (a) *wo **is** das andere **is**?*
where is the other-one is
'where's the other one?'

(b) ***das** spiel ich**'s** auch.*
that play I-it also
'I'll play this (game) as well.'

Like children acquiring other languages, L1 learners of German are not just highly systematic in what they overgenerate, as in (9), but also in what they omit or at least consider optional (such as subjects, tense, agreement or

other functional categories). Temporarily they may also entertain hypotheses about form-function mapping which deviate from the target. Some learners, for example, initially reserve finite VE formats for *wh*-questions (cf. Fritzenschaft et al. 1990; Penner 1994; Tracy 1994). After what was said above about the "fuzzy" edges of German clause structure, it comes as no surprise that even L1 learners occasionally produce main clauses with the verb in third, not second, position, with adverbials like *dann* ('then') adjoined to what already look like complete CPs (*dann da kommt Rauch raus*, then there comes smoke out, 'then there's smoke coming out (of the chimney)'). Note that simply replacing *dann* with *denn* would transform these patterns into perfectly grammatical sentences.

By the time typically developing L1 children are about three-and-a-half to four years old, most of these differences have evened out. This convergence onto the canonical patterns of German main and subordinate clauses can also be seen in recent cross-sectional investigations. Schulz, Tracy and Wenzel (2008) tested 75 German L1 children between the ages of three to seven, among them 17 three-year-olds and 17 four-year-olds. 60% of the three-year-olds had mastered simple finite V2 clauses, and children aged four and older performed at ceiling with respect to elicited subordinate clauses.

While this general developmental picture is relatively uncontroversial, there is less agreement as to when and how children's early coexisting constructions might be linked by a set of derivational rules within a single grammar (cf. the articles in Meisel 1992). But couldn't a (supposedly) monolingual child initially behave like a bilingual and at least temporarily entertain coexisting and incompatible grammars (cf. Tracy 2002, Gawlitzek-Maiwald and Tracy 2005 for this "multiple roots hypothesis")? After all, we know that children simultaneously exposed to two or more languages are perfectly capable of constructing different grammars at a time, a point to which we turn in the next section.

## 4. Dual targets: the simultaneous acquisition of two first languages[5]

How good children are at detecting crucial and often quite abstract differences between structures and at NOT allowing grammars to converge can be learned from learners growing up with more than one first language. While many pioneers of childhood bilingualism research believed that children start out with a single, fused system (e.g. Leopold 1939-1949; Volterra and Taeschner 1978; cf. the overview in de Houwer 1990), there

is by now wide agreement in favour of early language differentiation, even though on the behavioural level children may go through intensive phases of mixing (cf. Nicoladis and Genesee 1996; Paradis and Genesee 1997; articles in Döpke 2000; Cenoz and Genesee 2001; overviews in De Houwer 2005; Tracy and Gawlitzek-Maiwald 2000; Meisel 2004, 2007; Müller, Kupisch, Schmitz and Cantone ²2007; Genesee and Nicoladis 2007). Differentiation "in principle" also does not preclude cross-linguistic interactions provoked, for instance, by (near-)homonymy and structural "grey zones"[6] shared by the languages involved (cf. Hulk and Müller 2000; Döpke 2000; Müller et al. ²2007). After all, this is what we would expect on the basis of what we know about co-activation known from adult bilinguals (Green 1998; Clyne 2003; Myers-Scotton 2006).

Early bilingual production data provide us with important insights into children's linguistic competence because they show us what from the learner's perspective looks equivalent, as in the following two illustrations involving complementizers.

(10) Stani 3;0 *das darf man if man will.*
that may one if one wants
'one may if one wishes to.'

(11) Adam 5;2 and his interlocutor pretend to be dinosaurs trying various kinds of food.
Adult: *hey, dinosaur, have you ever tried this horrible yellow thing*?
Adam: *mhm, I found that but I I see of it's ... if...of...ob des schmeckt*
..... 'whether it tastes well.'

Strong evidence for 2L1 children's ability to cope with the parallel construction of different grammars comes from developmental asynchronies, i.e. cases where one language may be significantly faster than the other, even though both may be well within corresponding monolingual norms, or even faster (cf. Gawlitzek-Maiwald and Tracy 1996; Tracy 1996; Genesee and Nicoladis 2007; Müller et al. ²2007). Despite the principal ability to develop separate linguistic systems, it remains an interesting question of whether this asynchrony could reach a degree where the acquisition of a "weaker" language looks more like L2 acquisition (e.g. Bernhardini and Schlyter 2004).

The way in which simultaneous bilinguals cope with analogous properties of their target grammars (for instance with the discovery of functional

categories, where both languages make them available) also provides us with insights concerning the relative transparency or complexity of specific linguistic options (a point already made by Slobin 1973), since specific coding devices that are, at least in principle, readily available in the input, do not necessarily emerge around the same time in both languages (cf. Gawlitzek-Maiwald and Tracy 1996; Müller et al. 2007²).

An interesting asynchrony can be found in the way children growing up with German and English master subject-verb-agreement/finiteness. As we have seen above in our discussion of L1, the German subject-verb agreement paradigm emerges more or less hand in hand with V2 (e.g. Clahsen 1988; Clahsen and Penke 1992). In general, it is fully productive by the time typically-developing children are about two-and-a-half-years to three years old, whereas monolinguals acquiring English as a first language are very sensitive to aspectual distinctions but require more time to discover the set of properties associated with subject-verb agreement and finiteness (cf. already Brown 1973; Fletcher 1981; Phillips 1995; Hoekstra and Hyams 1998).

A look at the evidence available to children may explain the contrast: In German, L1 children profit from a "strong", i.e. relatively explicit, inflectional paradigm as well as from auxiliaries that are more salient than the proclitic and enclitic pronominals merging with them into phonological words (compare [ç'abn] in *ich hab(e) ihn geseh(e)n,* 'I have seen him/it'). English, on the other hand, confronts children with both an impoverished inflectional inventory (for the present tense only the 3rd ps. sg. –s) and with cliticized, hence less salient modal and non-modal auxiliaries (cf. *I've found him, He'd tell me*), not to mention local ambiguities involving cliticized copula and auxiliary *be*, as in *He's ….(ill?running late?found guilty?been beaten?*).

This imbalance may well be behind the asynchrony in favour of German in 2L1 children exposed to both English and German from birth, even in bilingual children who are predominantly addressed in English by their parents. (12 a, b) lists utterances from a bilingual girl, Hannah, in interaction with a German-speaking interlocutor; (12 c, d) illustrates a conversation with her English-speaking mother the same day.

(12) Hannah (2;2) to a German-speaking adult.

(a) *wer hat das gemacht?*
who has that made?
'who did this?'

(b) *ich will was spielen.*
I want something play
'I want to play something.'
Hannah (2;2) to her English-speaking mother.
(c) *Mama picking flowers inə garden*
(d) *no cars on street*

Since Hannah received plenty of English input at home (cf. the discussion of the case study in Gawlitzek-Maiwald and Tracy 1996), this asynchrony comes as a surprise. In the case of Adam (13), on the other hand, in whose home environment German was more prominent, this discrepancy would be expected (see also Gawlitzek and Tracy 2005). Here, too, both recordings were obtained on the same day.

(13) (a) Adam (3;7) to a German-speaking adult.
*ich kann nicht alleine machen.*
I can not alone make
'I can't do this on my own.'
*das hat die Laura gemacht.*
that has the Laura made
'it was Laura who did this.'
(b) Adam (3;7) to an English-speaking adult.
*it go like that.*
*that one called də Tom Engine book.*

There are considerable differences in the extent to which children mix their languages and in the ways in which they fill temporary gaps in one language by cross-linguistic borrowing or other forms of transfer (cf. Gawlitzek-Maiwald and Tracy 1996; Hulk and Müller 2000; Döpke 2000; Tracy and Gawlitzek-Maiwald 2000, 2005; Cenoz and Genesee 2001; Unsworth 2003; de Houwer 2005; Müller et al. 2007[2]; Genesee and Nicoladis 2007; Cantone 2007). Individual behaviour appears to depend on many factors, including parental style of dealing with the language choice of children (cf. Lanza 1997; Döpke 1992). As pointed out by Genesee and Nicoladis (2007: 325), bilingual first language acquisition "is impacted by all those factors that affect monolingual acquisition as well as bilingual-specific factors, such as different language combinations and differences in the amount, consistency, and contexts of language exposure."

Finally, it has to be borne in mind that the ability to cope with more than one language from birth does not entail that individual learners will

willingly, let alone enthusiastically, speak both languages to whoever chooses to address them in one or the other language. Children's cooperativeness depends on their personal views on who has the right or the obligation to speak one language rather than the other. Whether children exposed to a bilingual setting from the start turn into adults who actively employ these languages throughout their lives is a totally different matter. As in L2 acquisition, which we turn to shortly, 2L1 children are highly sensitive to the prestige of linguistic varieties and their roles within social contexts.

## 5. Fast on target: German as an early second language[7]

### 5.1. Problem and research design

More often than not, adults have protracted problems with exactly those properties of German that are fairly robust in monolingual and bilingual first language acquisition: the position of the head within VP (where it differs from the L1), V2 effects, subject-verb agreement, and the asymmetry of verb placement in main and subordinate clauses (cf. Clahsen and Muysken 1989; Hawkins 2001; Dimroth 2002; Müller 1998; Müller et al. 2007²; Meisel 2007). The following examples illustrate some of these problems: a missing right sentential bracket in (14), a misplaced left bracket in (15), and lack of overt agreement in (16).

(14) Non-finite verbs are not in VE:
**ich habe gelernt französisch drei Jahr* (from: Müller 1998)
I have learnt French three years
'I studied French for three years.'

(15) Lack of V2 when it is required:
**dann er schlaft noch* (from: Dimroth 2002)
then he sleeps still
'he's still asleep by then.'

(16) Lack of overt agreement (and lack of VE):(own data)
**ich müssen arbeiten Montag*
I must work Monday
'I've got to work Mondays.'

These data come from learners who were well past puberty when they were first exposed to German. The few case studies that are available for children exposed to German after entering elementary school show, at least temporarily, the same problems with verb placement and subject-verb agreement, even though chances of avoiding persistent fossilization appear better than for adults (cf. Wegener 1998; Siebert-Ott 2001; Haberzettl 2005; Dimroth 2007).

So what about early successive L2 acquisition, e.g. a scenario where German enters the scene around the time when children's L1 grammars already encompass quite complex clausal structures? Who do these children resemble: L1 learners? Adult L2 learners, who struggle with the sentential bracket and verbal inflexion? Or children with specific language impairment?[8] In the remaining sections we will argue that even under the condition of delayed and reduced access to relevant input, qualitative and quantitative analyses of the way in which young L2 learners tackle German clause structure support the null-hypothesis that there is no substantial qualitative difference between first and early second language acquisition for the specific set of grammatical features investigated.

Our claim is based on a longitudinal study with eight children speaking Arabic, Turkish or Russian as their first language. These languages differ significantly from German in morphological type, in word order, and in the availability of functional categories. Turkish and Russian, for instance, do not have articles; Arabic only has a definite article. The canonical word order of Turkish is SOV, VSO for Arabic. All these languages are well represented by large immigrant communities in Germany. In the following, we limit our discussion to five children with Arabic (one Tunisian Arabic-speaking girl, two brothers with Syrian Arabic as their L1) and Russian (two girls) as L1. Their ages at the beginning of our observation ranged from 3;0 to 4;7. Participants were recruited in different multilingual kindergartens in the Mannheim and Heidelberg area. In all these institutions, the majority of children came from non-German-speaking families and German served as the lingua franca. At the time, no special language training programs had been implemented within the kindergartens the children attended.

Our research design combined participant observation with some standardized data elicitation on segmental and suprasegmental phonology and vocabulary. We conducted bi-weekly recordings, with interlocutors visiting participants in their kindergarten and audio-recording conversations, each session lasting about 30-45 minutes. In addition, we recorded the children two to four times in their first languages and in their home environments.

All in all, we obtained 132 recordings that were transcribed (phonetically for the children's utterances) by native speakers. The transcripts were coded in a relational database and analyzed.

In all cases, the child's L1 also served as the family language. Our recordings of conversations in the L1, undertaken with the help of native speakers, produced no indication of delays or lack in proficiency, an impression supported in interviews conducted with the parents in the L1. All children were born in Germany, and no child had significant contact with German before entering kindergarten. No child had attended kindergarten for more than three months before their first encounter with our interviewers.

Table 1 provides an overview of the five children discussed here. The first letter in the alias corresponds to the L1, A for Arabic and R for Russian. None of these children produced more than one or two-word utterances in German when we recorded them for the first time. Their comprehension skills were probably more advanced, but we did not test them explicitly. Table 1 also provides the children's MLU in words as a mean value for the first three and the last three transcripts, respectively. Except for AMI, the MLU of all children increased over time. The development in AMI's MLU shows that the measure is not as reliable and informative as one might expect (for discussion, see Unsworth 2008). During the early stages, there were many within-utterance repetitions, which inflated the word count. Towards the end, AMI monitors his speech much more closely, which results in shorter utterances.

*Table 1.* Participants

| Alias | First language | Age during observation (L2-recordings) | MLU (words) | |
|---|---|---|---|---|
| | | | Mean; first 3 L2-transcripts | Mean; last 3 L2-transcripts |
| AHA | Arabic, Tunisian | 3;5 – 4;9 | 2.58 | 3.25 |
| RAS | Russian | 3;7 – 4;7 | 1.70 | 2.07 |
| RNV | Russian | 3;0 – 4;1 | 1.96 | 3.09 |
| AII | Arabic, Syrian | 4;7 – 5;8 | 2.50 | 3.98 |
| AMI | Arabic, Syrian | 3;3 – 4;4 | 3.01 | 2.19 |

Although the first two or three recording sessions were conducted by a native speaker of the child's L1, the children had no problem adjusting to the 'the rules of the game'. They knew that once the recording device was

turned on, it was German-speaking time. The fact that despite their relative cognitive maturity and – in most cases – their urge to communicate the children did not, on average, produce more than 2% of sentences that contained L1 borrowings demonstrates their cooperativeness and awareness of their interlocutors' limits. This also provides evidence of their high degree of online metalinguistic control. This finding confirms what we know about language choice and monitoring abilities in simultaneous bilinguals of the same age (Lanza 1997; Tracy and Gawlitzek-Maiwald 2000; Meisel 2004; Genesee and Nicoladis 2007; Müller et al. ²2007).

The following sections sketch our participants' development of verb placement in German clauses. For this purpose we differentiate between all verbs in a sentence (V) and a subset of verbs placed in the left sentence bracket (V2). V2 is then further subcategorized into those verbs that are finite although the morphological marking chosen may be inappropriate from the perspective of the target (V2fin), e.g. in *du *geht da rein*, 'you *goes in there', and into a category of finite verbs in V2 whose inflection conforms to the target morphologically (V2fin+), which would be *du gehst da rein*, 'you go in there', in the above example. The quantitative units referred to are relative frequencies based on the number of sentences identified in a transcript, where 'sentences' is used as a label for units corresponding to single and coordinated main clauses as well as nominal projections that constitute a single utterance.

## 5.2. Case study with the Tunisian Arabic L1 child AHA

The girl AHA is the youngest of three children of a Tunisian family, Arabic being her first language and the family language. Her older brothers also speak Arabic to each other; her parents mention that they themselves occasionally speak French to each other as well. From the beginning of our study, AHA has been communicating very actively with project members, both in her first language and, once we began our L2-recordings, in German. In kindergarten, she often plays with her German-speaking peers. About six to seven months into our data collection (by that time AHA has reached milestone III), the parents mention that AHA addresses them more and more in German at home as well, even though they cannot understand her.

At 3;5, when we started recording her in her L2, AHA's productive knowledge of German was limited. About one month after she entered kindergarten, she primarily produced one-word utterances and precursors

of determiner phrases (see (17a)). In addition, there were non-finite constructions containing verbs in final position (17b), verbless projections with and without focus particles (17c), and formulaic expressions involving the copula (17d). Subscripts in the glosses indicate potential gender mismatches. All these elementary constructions are fully consistent with the early milestones (I and II) of monolingual German-speaking children.

(17) (a) 3;5 *ja, nein, vogel, ein hund, ein maus.*
yes, no, bird, a dog, $a_{MAS/NEUT}$ $mouse_{FEM}$
(b) 3;5 *hier essen, nutella essen, ein vogel fliegen.*
here eat, Nutella $eat_{[-fin]}$, a bird $fly_{[-fin]}$
(c) 3;5 *ich auch auto, du auch haus, mädchen oben baum.*
I too car, you too house, girl up tree
(d) 3;5 *das is farbe, das is rot, is weg, is mein buch.*
this is color, this is red, is gone, is my book

Over the course of the following four to six months, finite V2 sentences emerge and milestone III is reached, see (18).

(18)

| | | | SENTENCE BRACKET ← | | → |
|---|---|---|---|---|---|
| (a) | 3;8 | | ***hab*** | *nich angst* | ***habe*** |
| | | | have | not fear | have |
| (b) | 3;8 | *diese elefant* | ***geh*** | *disko* | ***geht*** |
| | | $this_{[FEM]}$ $elephant_{[MAS]}$ | go | disco | goes |
| (c) | 4;0 | *ich* | ***hab*** | *kein platz mehr* | |
| | | I | have | no space more | |
| (d) | 4;0 | *keine platz mehr* | ***hab*** | *ich hier* | |
| | | $no_{[FEM]}$ $space_{[MAS]}$ anymore | have | I here | |
| (e) | 4;1 | *die junge* | ***will*** | *prinzessin* | ***holen*** |
| | | $the_{[FEM]}$ $boy_{[MAS]}$ | wants | princess | get |

By 3;8 AHA 'knows' that German has two positions for finite verbs even though she is uncertain as to which one to choose. Her behaviour represents an indication of the competition which we also observe in monolinguals (cf. above). At age 4, seven months after her first word combinations, the basic structural format of main clauses has been mastered: AHA now fills both the right and the left sentential bracket appropriately, and the preverbal field can be occupied by constituents other than subjects, as in (18d).

The quantitative development of verb frequencies over time is visualized in Figure 1. It corroborates the qualitative characterization outlined above. The top line in the chart represents the proportion of sentences that contain verbs, V, and serves as a reference line – if there are no verbs, V2 could not reasonably be expected. At the same time, the number of verbs may occasionally drop drastically for quite trivial reasons, e.g. the case of the *Memory* game played at 45 months, which accounts for the trough in the curve. The line with the filled rectangular represents the proportion of all V2 structures. The line with the triangle shows the subset of V2 structures which contain any form of finite V2. So the difference between the line with the rectangular and the line with the triangle represents the proportion of non-finite verbs in V2 position. The line with the circle corresponds to the subset of V2 structures that are finite and where the finiteness marking is realized with target-like inflectional morphology. Accordingly, the difference between the line with the triangle and the line with the circle corresponds to the proportion of verbs in V2 that are morphologically marked for finiteness while the morphological form is not completely correct.

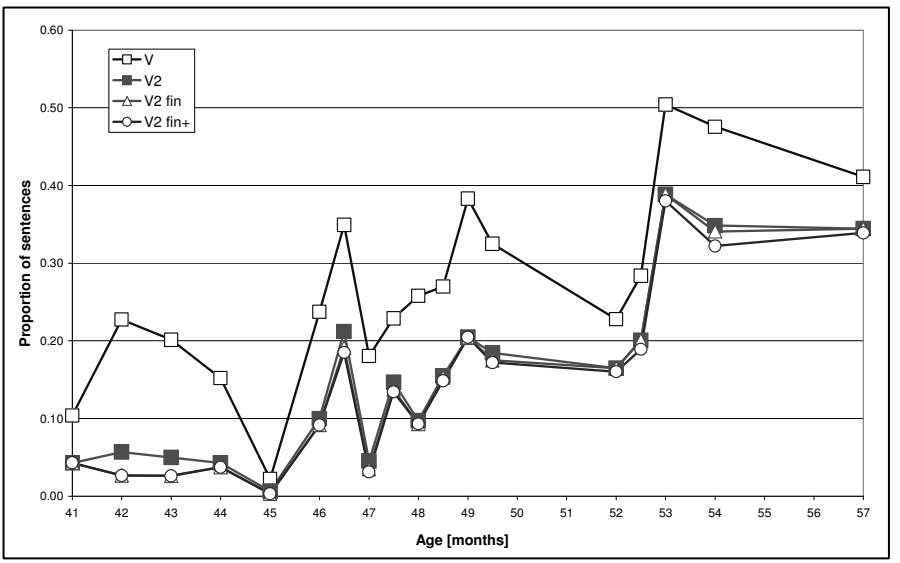



*Figure 1.* AHA: Development of finite verbs, based on 18 L2-transcripts; 6518 sentences

After a steep rise before 53 months, the development of AHA's V2 acquisition reaches a plateau. Then, after about one year of language contact, the proportion of V2 sentences amounts to between 30 and 40% of all sentences. This corresponds to what has been observed for monolingual and bilingual learners of German at the same age despite shorter exposure (cf. Fritzenschaft et al. 1990; Gawlitzek-Maiwald 1997). The almost congruent curves for V2 and V2fin demonstrate that after a slightly chaotic initial phase, verbs in V2 are almost always finite and, moreover, they generally appear in a target-like morphological form (V2fin+). Minor deviations towards the end of our longitudinal study can be attributed to overgeneralizations affecting the paradigms of irregular verbs, e.g. *der willt* ('he wants', rather than *der will*). Note that these deviations provide strong evidence for the emergence of subject-verb agreement and tense marking independently of individual lexical items or specific constructions.

The general difference between V and V2 is largely an effect of one-word or two-word utterances which defy classification in terms of the positions within the sentence bracket. In addition, there was a marginal proportion (1.8% of all V) of deviant structures such as (19a-d) below.

(19) (a) 4;0 *nicht des geht.*
not this goes
'this doesn't work.'
(b) 4;0 *dann dann ich will nicht schlafen.*
then then I do not want to sleep
(c) 4;5 *dann ich muss hier was in mein hose wegmachen.*
then I must here something in my pants put away
'then I must hide s.th. inside my pants.'
(d) 4;6 *weil die mensch hat hier brennt.*
because/since the human has here burned
'because the person burned here.'

The first and the last example are straightforward. (19a) can be interpreted along the lines proposed by Penner et al. (2000) who noted that in monolingual children, too, negation (and other) particles appear to block V2, even in finite clauses. (19d) corresponds to the *weil/denn*-V2 pattern mentioned in Section 1. Only the V3-clauses (19c, d) are ungrammatical. However, V3-constructions are marginal in AHA's data, amounting to barely a dozen tokens throughout. Most cases were limited to the temporal adverb *dann* ('then'), possibly due to its similarity with *denn* ('since'). Despite their low numbers, the fact that ungrammatical V3 structures are closely con-

nected with ambiguous forms reinforces what we stressed in Section 1 concerning ambiguities involving items at the left periphery of German clauses. They are similar to patterns identified by Dimroth (2002) in older learners and to marginal V3 clauses in L1 children (Tracy 1991). We will turn to non-subject initial main clauses in the discussion.

### 5.3. Case study with the Russian L1 child RNV

RNV's and her older sister's first and family language is Russian. Even though the parents graduated from university in Russia, they are currently both employed as factory workers due to insufficient knowledge of German. At age 3;0 RNV produced very few German words, but she was an outgoing child and quickly integrated into the playgroups of her kindergarten. During our first recordings, she did not speak much, but after three to four months she became very talkative. About half a year after joining kindergarten, she started to talk to her sister in German as well.

At 3;1, after about two months of regular German input, one-word utterances were dominant. Her first word combinations contained focus particles, (20a), and non-finite constructions with the verb taking up the right sentential bracket, (20b). Some patterns with either finite or non-finite verbs, (20c-d), and formulaic expressions (20e) can be considered precursors of V2.

(20) (a) 3;1 *da auch des da.*
there also this there
'there's that too.'
(b) 3;1 *ich sowas spielen.*
I like-this-something play$_{[-fin]}$,
'I [want to] play something like this.'
(c) 3;1 *ich räum*$_{[+fin]}$ *auf.*
I tidy up
(d) 3;1 *ich essen so.*
I eat$_{[-fin]}$ that way
(e) 3;1 *all-sen des.*
all-are that
'these are all.'

Initially, RNV's potential V2 candidates are dominated by holistic expressions which only "mimic" main clause patterns (*Ich will nicht,* 'I don't

want to', *Ich weiß nicht,* 'I don't know'), but from 3;5 onwards, four months after her first recorded productions, the structural format of her German converges strongly toward finite V2 clauses. This convergence very quickly results in the complete construction of the sentential bracket and concomitant V2 effects, such as the placement of complements and adjuncts in preverbal position, as in (21). As the phonological variants of the 2nd ps. sg. forms of *have* in (21a) and (21c) show, she produces both standard and dialectal forms, i.e. she appears to be working out different inflectional paradigms of the verb in parallel. Although her L1, Russian, does not have determiners, RNV quickly discovers them in her German input, even though they are –as one would expect – formally deviant or emerge as reduced placeholders, see *d*ə in (21g).

(21) SENTENCE BRACKET

| | | | | | | |
|---|---|---|---|---|---|---|
| (a) | 3;5 | *warum* | ***hast*** | *du des* | | |
| | | why | have | you that | | |
| (b) | 3;5 | *ich* | ***will*** | *net nimmer* | | |
| | | I | want | not anymore | | |
| (c) | 3;7 | *die stiefel* | ***hascht*** | *du* | | ***geangelt*** |
| | | the boots | have | you | | fished |
| (d) | 3;7 | *ein blume* | ***hat*** | *ich* | | ***gemacht*** |
| | | $a_{[NEU]}$ $flower_{[FEM]}$ | has | I | | made |
| (e) | 3;7 | *jetzt* | ***geh*** | *ich* | *in meine gruppe* | |
| | | now | go | I | in my group | |
| (f) | 3;7 | *wenn* | ***gehen*** | *wir* | *in der gruppe* | |
| | | when | go | we | in the group? | |
| (g) | 3;7 | *in də gruppe* | ***hab*** | *ich* | | ***gespiel*** |
| | | in the group | have | I | | played |

Convergence towards V2 after four months of production is clearly visible in the quantitative development displayed in Figure 2. In comparison with AHA, whose development progressed in a stepwise manner, RNV is a very continuous learner. The proportion of her V2 clauses rises consistently to a level of about 30% of her total sentences. Basically all verbs in V2 are marked for agreement/tense, and morphological markers are almost always target-like. The few instances of deviant verb placement were qualitatively and quantitatively equivalent to what we know from monolingual and bilingual acquisition.

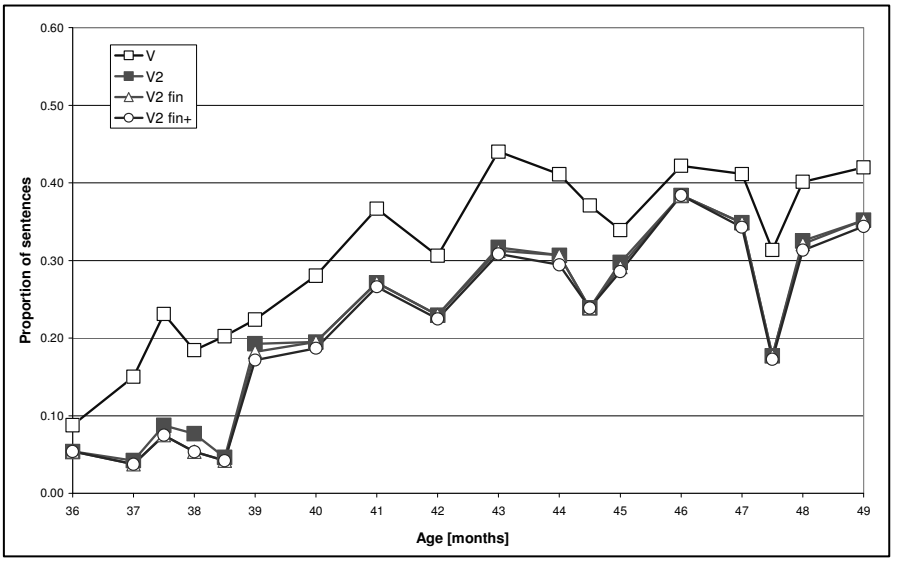



*Figure 2.* RNV: Development of finite verbs, based on 18 L2-transcripts; 3758 sentences

Another two months later, and altogether eight months after the onset of regular exposure to German, RNV also produces precursors of subordinate clauses, as illustrated in (22). Her use of left-periphery placeholders such as [*vaʃ*] ('what') for *dass* ('that') or *wenn* ('when/if') for *bis* ('until') is known from monolingual and bilingual L1 acquisition (e.g. Fritzenschaft et al. 1990; Müller and Penner 1996; Rothweiler 1993).

(22) (a) 3;9 *ich will nicht [vaʃ] du hast gewinne.*
I want not what you have won
'I don't want you to win.'

(b) 3;10 *ich will jetzt [vaʃ] du kommst.*
I want now what you come
'I want you to come.'

(c) 3;9 *warte doch mal wenn ich hab fertig gemal.*
wait |particle| when I have finished drawing
'wait until I'm done drawing.'

We can see, then, that RNV starts to produce complex sentences in her L2 at an age when L1 learners of German struggle with very similar issues, such as the selection of appropriate complementizers from a fine-grained

set of functional items. We also see that her finite verbs are not always in sentence final position yet, which is rare but not undocumented in L1 learners of German (see Gawlitzek-Maiwald et al. 1992).

## 5.4. Case study with the Russian L1 child RAS

RAS a girl whose family members, including a younger brother, only use Russian, provides us with a different picture. In contrast to both AHA and RNV, who are about half a year younger, she is extremely shy during the first recording sessions. In kindergarten, which she joined only a few weeks before we started our investigation, she generally prefers to play on her own.

Despite the age difference, RAS's initial L2 stages parallel those of the other girls. She differs, however, in holding on to verbless multi-word constructions, often in combinations with verbal particles and focus particle phrases for more than nine months, (23). If verbs appear, they are non-finite and occur in final position. Patterns which look like early V2 clauses, (24), could also be interpreted as holistic formulas involving the copula or the high frequency verb *machen* ('make').

(23) (a) 3;7 *noch eine kaputt.*
another one broken
'another one (is) broken.'
(b) 3;8 *und noch ein hund*
and another dog
(c) 3;9 *und des auch baby-schweinchen.*
and that also baby piglet
(d) 3;12 *nach unten vase*
towards down vase
'put the vase down.'
(e) 4;1 *Celine auch heute geburtstag mama.*
C. also today birthday mama
'Celine's mom also has her birthday today.'
(f) 4;2 *was drauf da.*
what there-on there
'(put) s.th. on there.'
(g) 4;3 *weg deine hand.*
away your hand
'take your hand away.'

(24) (a) 3;9 *ich mach's auch.*
I do it too
(b) 4;2 *so mach's du des.*
this-way do you it
'you'll do it this way.'

Only towards the end of the observational period and nine months after her first productive use of German altogether, RAS reaches a developmental stage equivalent to the stages the first two children attained after only about three to four months (25). Particular qualitative evidence for actual progress comes from RAS' 'experimental' variation in the placement of the adverbs *hier* and *dort* and even more so of the focus particle *auch* in.

(25)

| | | | SENTENCE BRACKET ↓ | | ↓ |
|---|---|---|---|---|---|
| (a) | 4;4 | *warum* | ***steht*** | *nicht?* | |
| | | why | stands | not | |
| (b) | 4;4 | *die Martin* | ***weint*** | | |
| | | the M. | cries | | |
| (c) | 4;6 | *hier* | ***ist*** | | ***trink*** |
| | | here | is | | drink |
| (d) | 4;6 | | | *diese auch* | ***passen*** |
| | | | | these also | fit |
| (e) | 4;6 | *die* | ***passen*** | *auch hier* | |
| | | these | fit | also here | |
| (f) | 4;6 | *der* | ***passt*** | *hier* | |
| | | he | fits | here | |
| (g) | 4;6 | *die* | ***passt*** | *dort* | |
| | | she | fits | there | |

RAS' significantly slower development toward the sentential bracket is obvious from the quantitative analysis displayed in Figure 3. For a long time the proportion of utterances with verbs remains low, although the discourse contexts in the observations were very similar to those of the other children. After nine months there is a sharp increase in the use of verbs and, subsequently, in the relative proportion of V2 clauses as compared to mainly non-finite verb end constructions. But even for this slow learner, V2 and explicit finiteness markers on the verb emerge in tandem.

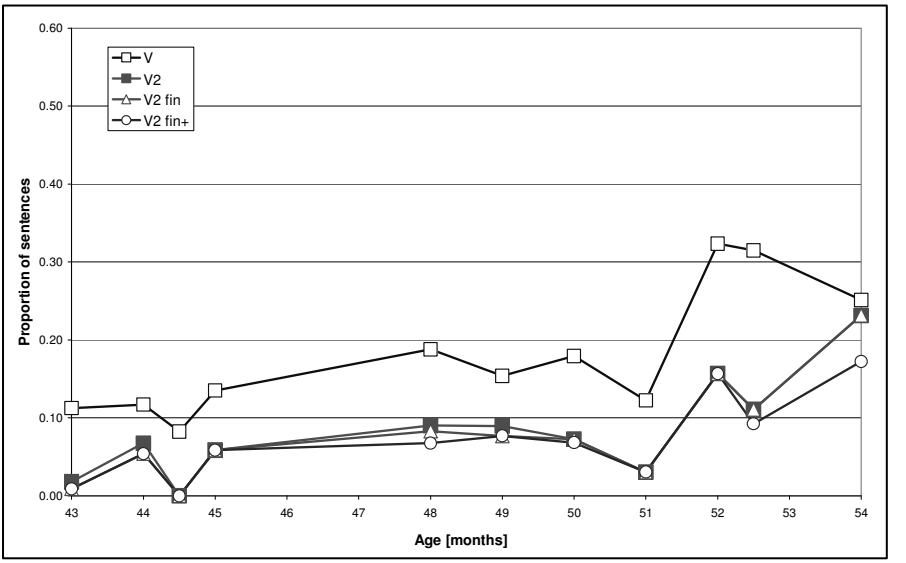



*Figure 3.* RAS: Development of finite verbs, based on 11 L2-transcripts; 1750 sentences

Two plausible explanations for RAS' relatively slow progress towards the target grammar offer themselves. First, she produces very few verbs, both in types and tokens. Her persistent use of verbless projections, such as Focus Particle Phrases, can be interpreted as a communicatively successful avoidance strategy. Second, as a very shy and introverted child RAS rarely interacts with other children and hardly ever initiates conversations or actively 'elicits' input or conversational responses from her environment.

## 5.5. Case study with the Arabic L1 children AII and AMI

The two brothers AII and AMI are 4;7 and 3;3 at the beginning of our study. Their parents came to Germany to study at university. The family language is Syrian Arabic, but the parents report that they watch both Arabic and German TV programs. Initially, the two boys only spoke Arabic to each other in kindergarten and only gradually, with increasing proficiency, replaced it by German. The recording circumstances differed from those of the other children in that we typically recorded them together – out of necessity since the children did not want to be separated. What seemed a disadvantage at first, however, turned into an advantage since it allowed us