UNIVERSAL GRAMMAR: DOWN BUT NOT OUT, THE L2 ACQUISITION OF GERMAN

by

TRAVIS SCOTT SCHNEIDER

(Under the Direction of Vera Lee-Schoenfeld)

ABSTRACT

Universal Grammar is a theory argued to hold for first language acquisition, that provides a model of how humans acquire their native language. It is not entirely certain, however, if Universal Grammar still functions during the course of second language acquisition. Certain parameter settings account for the differences found in languages. It is the aim of this paper to investigate which parameter settings account for the differences between English and German, in order to determine which constructions will be difficult for native speakers of English learning German. It will also be discussed whether parameters can, in fact, be reset.

INDEX WORDS: Linguistics, Second Language Acquisition, Universal Grammar, Principles and Parameters, Full Transfer, Full Access, Fundamental Difference Hypothesis, Critical Period, Subset Principle

UNIVERSAL GRAMMAR: DOWN BUT NOT OUT, THE L2 ACQUISITION OF GERMAN

by

TRAVIS SCOTT SCHNEIDER

BA, University of Georgia, 2011

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

ATHENS, GEORGIA

2013

UNIVERSAL GRAMMAR: DOWN BUT NOT OUT, THE L2 ACQUISITION OF GERMAN

by

TRAVIS SCOTT SCHNEIDER

Major Professor:	Vera Lee-Schoenfeld
Committee:	Renate Born Alexander Sager

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
December 2013

ACKNOWLEDGEMENTS

I would like to thank the faculty and staff of the Germanic and Slavic Studies for their role in my academic development and their continued encouragement of my professional career. I would like to extend specific thanks to Vera Lee-Schoenfeld for choosing to help me with such a burdensome undertaking as the writing of this thesis – she was very encouraging throughout the entire process and was constantly a fountain of ideas, as well as always giving me insightful, thoughtful feedback; I could not have asked for a better major professor. I would like to thank Renate Born for being a part of my defense committee, as well as collaborating with me for the case study I designed *Common Word Order Errors Among GRMN 2001Students*(2012). I would like to thank Alexander Sager for also being a part of my defense committee and always being a strong voice of guidance during my undergraduate and graduate years. I would like to thank my parents and Paola for their unconditional love and support, both during the writing of this paper and my life – thank you for reading my drafts, even if you did not know what I was writing about. I am grateful to my fellow graduate students in the German department; I have learned one does not get very far in graduate school alone.

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

CHAPTER 1

THE BACKGROUND OF SECOND LANGUAGE ACQUISITION RESEARCH

Human societies never fail to develop a language and barring mental handicaps, humans acquire language from a very early age. The perfect development of this first language, Language 1 (L1), is puzzling when viewed at the same time with the incomplete elements that the learner is given. This is known as the poverty-of-the-stimulus (Chomsky 1980) argument: the internal grammar (or the subconscious knowledge one has of one's language) that a learner develops is far too complex and advanced given the meager input the learner receives; therefore, something else must be guiding the learner. Noam Chomsky (1965) suggests the idea of a learning mechanism in the human brain, triggered by the input of human language, which will later be referred to as Universal Grammar (UG). Under the idea of UG, a learner is able to take several thousand sentences of input and translate them into a subconscious system of rules which, when put together, form a human language, such as English or Japanese. UG theory states that human language is comprised of a system of principles and parameters (P&P), principles that are universal to all human languages and parameters, mostly binary choices that separate languages from one another.

The motivating drive for a great deal of the second language acquisition (SLA) research has been discovering why most learners seem to acquire a second language rather imperfectly. There are, of course, a plethora of factors that differentiate first language acquisition from SLA. A human starts developing his or her L1 from birth and studies suggest (see Jean Gleason's famous (1958) Wug test study) that a child's core grammar system is in place between the ages

of three and five. In many Western countries, however, a learner's exposure to a second language may occur anywhere between childhood and adulthood. Studies with feral children and neglected children (see Curtiss et al. (1974), the Linguistic Development of Genie) have shown that failure to receive meaningful input for a L1 before a certain point makes it next to impossible for a learner to obtain a native-like proficiency in a human language. These studies have supported the theory of the critical period hypothesis (Penfield and Roberts 1959), an age, possibly around puberty,[1] when the learner is no longer able to acquire human language; UG seemingly stops functioning at full capacity. The inability of feral children, even those without mental handicap, to obtain real, human language demonstrates the importance of age when learning a language. Given the herculean task of learning a second language after puberty, some researchers have concluded that there must exist a second critical period, after which learning another language becomes much harder (yet not impossible). Many studies have been done analyzing second language acquisition of English from immigrants in the United States, looking at their time of arrival and length of stay (see e.g. Bialystok and Hakuta 1999 for more information). Another factor separating L1 and L2 acquisition is motivation. L1 learners cannot actually fail to learn their language, the process just comes naturally. This is quite a different case, however, for L2 learners. Motivation varies greatly among L2 learners. Some learners may be traveling to a new country wanting to fully interact with native speakers, whereas other learners may only want to learn the bare minimum to get by in everyday life, such as placing and taking orders. This is especially apparent in the classroom where motivation is a very polarized spectrum. Highly motivated students may be encouraged by good grades, while other students might just be trying to fufill a requirement. Aptitude is another factor that is varies between

[1] Many neglected or feral children under the age of ten that were rescued were often fully rehabilitated. The exact opposite case is true for those children who lived in these conditions until their pre-teen or teenage years.

learners. Unlike L1 acquisition, L2 acquisition is often affected by intelligence. Studies (see Gardner and Lambert 1965, 1972) suggest that language aptitude and overall intelligence are interconnected. A better student is likely to acquire a more developed L2 grammar. Though this may seem like an argument of common sense, one must remember that learners cannot fail to learn the L1. Furthermore, L2 requires a greater effort if the learner is already out of the critical period. L1 acquisition, in contrast, is characterized by seemingly no effort on the part of the learner and no chance of failure.

L1 and L2 acquisition vary in other aspects as well. During the period of L1 acquisition, the learner is generally a child and supporting the idea of the poverty of the stimulus argument, grammatical mistakes made by children are rarely corrected by their adult caretakers. Correction in L1 seems to focus more on meaning, rather than form. The following exchange between a parent and a toddler is not an atypical example thereof:

1(a)

C: We goes to the zoo?

P: No, honey, we're going to the park.

Contrast this example with an exchange between a L2 learner and a teacher in a classroom:

(b)

S: I likes ice cream.

T: No, I *like* ice cream. Say, "I like ice cream."

S: I like ice cream.

In the L2 acquisition process, the learner is immediately corrected after making a mistake. The instructor emphasizes the correct response, followed directly with a command to repeat the previous response. Note in (b), the instructor understands perfectly what the student is saying,

yet the student is corrected anyway. The L1 learner may be corrected, but usually to little effect. A purported eight corrections went into a dialogue between a woman and her child in a well-documented dialogue from McNeill (1966):

(c)

Child: Nobody don't like me.

Mother: No, say 'nobody likes me'.

Child: Nobody don't like me.

Mother: No, now listen carefully, say 'nobody likes me'.

Child: Oh! Nobody don't likes me.

These examples illustrate some of the biggest differences between L1 and L2 acquisition, what Chomsky (Cook 2007) refers to as positive and negative evidence. Both L1 and L2 learners receive positive evidence, that is, the actual input of the language – L1 learners get this from their caretakers and L2 learners may receive this from their instructor in the classroom. In either case, this input is the spoken, correct form of the language. In the above examples (1b) and (1c), both learners are faced with negative evidence: direct confrontation that what the learner has just now said is incorrect and how the structure is correctly expressed. It is only the L2 learner that actually *does* correct this error. We might reasonably presume that, as an adult speaker, the learner is now conscious of this error and possesses the mental faculties to *consciously* correct the error. The L1 learner, as evidenced in (1c), largely seems to ignore negative evidence and induce on the correct forms eventually him- or herself.

There is another form of evidence that learners seem to observe in L1 and L2 acquisition that arguably demonstrates the existence of UG. This form of evidence, indirect negative evidence, or inductive thinking, is perhaps most evident during L1 acquisition. L1 learners build

the internal grammar of their first language by unconsciously testing a series of hypotheses, i.e. all possible logical choices constrained by UG principles and parameters. They conclude, then, that certain forms are ungrammatical and hence, not allowable in the grammar of the L1, because certain structures are absent from their primary input. Based on the fact that only certain structures are present, the structures that are *absent* must not be part of the grammar system. The existence of indirect negative evidence in L2 acquisition is somewhat debatable. Trahey and White (1993) conducted a study for French learners of English regarding the placement of adverbs. In French, adverbs come between the finite verb and the object, something normally not allowed in English (*Susan slowly eats her porridge* versus **Susan eats slowly her porridge*). Trahey and White gave only positive input to the French learners of English on the placement of adverbials (Subject-Adverb-Verb-Object (SAVO)), without explicitly stating where adverbs were placed within the sentence and without giving the learners any negative feedback, i.e. not correcting learners when they produced ungrammatical structures. The point of the study was to determine whether, through induction, the French learners would see that adverbs could not come between the finite verb and the object in English, the adverb instead precedes the verb. (This is due to the nature of the verb staying within the confines of the verb phrase in English phrase structure, whereas the verb raises out of the verb phrase in French; further discussion is beyond the scope of this thesis; see White 1990/1991, Trahey and White 1993 for more information.) The result of the study was quite telling: learners began to use the SAVO structure more often, but at the same time, use of SVAO did not significantly decrease. This suggests that indirect negative evidence is not at work in L2 acquisition and learners acquire language by other methods. Among other things, this seems to cast a shadow on the notion that there is indeed access to UG for L2 acquisition, but we will return to this idea later.

Let us examine two examples, the first concerning the development of the placement of verbs for children whose L1 is German in a study by Clahsen and Muysken (1986). In the very earliest stage of development, the verb may occur in second position or final-position. Note that, in the following main clause sentences, the verb-final constructions are ungrammatical. These examples come from children whose L1 is German and who are determining the correct placement of the verb, based on the input they obtain. In the earliest stages of development, it appears that main clause sentence structure is of an optional word order: SVO or SOV.

(2)

(a) Ich *bau'* ein mast.

I build a mast

„I build a mast."

(b)*Der Teddy zu dick *ist*.

The Teddy[2] too fat is

"The teddy is too fat."

(c) *Ich schaufel *haben*

I shovel have

„I have a shovel."

Later, as the children's internal grammar develops, the children place the verb in second position in main clauses (3a) and last in embedded clauses (3b). It is notable that structures like (2b) and (2c) are hardly ever produced by English-speaking learners of German. We will return to this idea later in Chapter 5.

(3)

[2] The child is referring to a stuffed animal

(a) Die Schere *hat* Julia
the scissors has Julia
"Julia has the scissors."

(b) Guck, was ich in mein' Tasche *hab'*.
look what I in my pocket have
"Look what I have in my pocket"

This is an example of the reinforcement of positive evidence. The children narrow down the possibilities for the placement of the verb to its rightful domain. The children had hypothesized that the verb could occur in either second position or sentence finally. After sufficient evidence, the children were able to determine the correct verb placement.

In the second example, regards the comparison of Spanish and English for inductive thinking during L1 acquisition. Spanish, like German, is a morphologically-complex language, that is, a language that marks its verbs for both person and number. Compare the conjugations of a regular verb (to have) in the present tense in English and Spanish:

Table 1.1

English	Spanish
I have	Yo tengo
You (inform.) have	Tú tienes
He/she/it has	Él/ella tiene
We have	Nosotros/(as) tenemos
They have	Ellos/(as) tienen
You (pl.) have	Ustedes tienen
You (form.) have	Usted tiene

Given that the verbs are so highly inflected, Spanish speakers are able to omit pronouns in speech and still be understood, notice that each verb accounts for both person and number. Given English's fairly poor morphology (note English only marks for third-person-singular), this is not possible for an English speaker. This phenomenon is known as the pro-drop parameter – a binary choice in languages of having subject pronouns that are optional or obligatory.

Consider now the example of a sentence in English and Spanish, based on the pro-drop parameter.

(4)
(a) *have a ball.

(b) tengo una pelota.

have-1st-SING a ball

"I have a ball."

(c) Yes, you have a ball.

(d) Si, tienes una pelota.

Yes, have-2nd-SING a ball

"Yes, you have a ball."

(4a) is a perfectly conceivable sentence for an L1 learner of English. The learner is quickly confronted with conflicting information to his or her hypothesis with sentence (4c). The learner realizes that subject pronouns are obligatory in English sentences based on the fact that i) the learner has received positive evidence from the input of another speaker and ii) the learner, through indirect negative evidence, does not receive any input of the structure in (4a) from another speaker.[3] The English learner thus concludes that pro-drop is ungrammatical, while the Spanish learner concludes it is grammatical. Examining evidence like this is especially important for L2 acquisition. L2 learners cannot learn language just on positive evidence alone. Negative evidence is omnipresent in a classroom environment. To see if L2 learners utilize indirect negative evidence, the question must be asked if UG is still present within the mind of

[3] English allows the pro-drop phenomenon only in very specific contexts such as diary writing (*Went to work today* / *Ate a pizza*)

the learner**. One way to determine if UG is involved in SLA is if learners are able to induce that a particular structure X is not a feature of some grammar Y based on X not existing in the input, then the learner may still have some access to UG. We will later investigate this phenomenon with V2 parameter setting and IP-adjunction violation.**

There have been varying forms of SLA research in the past, beginning with **contrastive analysis** in the 1950s and 1960s, which consisted of strong contrastive analysis and weak contrastive analysis. The aim of strong contrastive analysis was to compare L1 with the L2 and predict which errors might occur; the weak contrastive analysis model simply accounted for the errors in L2 structures. The idea of contrastive analysis is somewhat obvious – structures that are different between the two languages would be troublesome for learners to acquire. This model of SLA best supports the idea of **transfer**, that the L1 influences the L2, which will be discussed later. The largest problem of this form of analysis was trying to account for errors produced by students that did not reflect the grammar of the L1. Take, for example, the following sentence uttered by an English learner of German, taken from Schneider and Winarto (2012):

(5)
*Ich viel Geld möchte haben.
I much money like-SUBJ have-INF
"I would like to have a lot of money."

This is an example of an error not resulting from the L1 (English), or a structure present in the L2 (German) – English has a very strict SVO order, while German is SOV with the verb-second (V2) effect in main clauses. The learner has recently been introduced to subordinating clauses and having received input of verb-final clauses, the learner now supposes that verbs *always* come at the end of *every* clause. This would suggest that the learner's L1 was an SOV language where

the verb always occurs in final position, such as Japanese. As previously stated, the learner's L1 is English, thus contrastive analysis cannot explain this particular error.

SLA research began to move away from contrastive analysis in the 1960s, as **error analysis** was developed, the idea that the number of times a certain error occurred in a learner's production indicated the structure's difficulty, in relation to other attempted structures. Stephen Corder, in his groundbreaking 1973 publication *Introducing Applied Linguistics*, reveals three different types of errors a learner can produce:

1) **interference**: errors caused by structure of the native language

2) **intra-lingual errors**: originating in the structure of the target language (TL) itself

3) **developmental errors**: reflecting strategies employed to acquire TL

Where contrastive analysis could not account for errors such as (5), error analysis might interpret this error as a strategy on the part of the learner after receiving new input: all verbs go to the end of clause, all of the time. While this strategy will hold up for embedded clauses, it will not suffice for the majority of German sentences and the learner will be forced to change his or her hypothesis. Error analysis was problematic in that one could only work with the corpus of actually produced sentences – learners have a tendency to avoid problematic structures, thus making the ranking of structures somewhat skewed.

The last form of SLA research is **interlanguage analysis**, which focuses on the transitional periods of learners as they progress closer and closer to the ideal of the TL. Larry Selinker (1972) gives five core points of the interlanguage (IL):

1) language transfer

2) transfer of training

3) strategies of L2 learning

4) strategies of L2 communication

5) overgeneralization of target-language linguistic material

One can easily see the overlap between error analysis and interlanguage analysis: both methods claim the native language as a source of difficulty, that learners may adopt faulty strategies to acquire the L2, and errors might originate from misinterpretation of the input (overgeneralization). Some of the major flaws in contrastive analysis were not being able to account for errors that occurred neither because of transfer nor the result of the target language itself (difficulties with L2 structures). Interlanguage analysis accounts for more possible ways of errors, arguably making it a better method of developing language analysis.

Noting the first point in both error analysis and interlanguage analysis, one comes to a widely disputed point in the field of SLA: the role of UG in acquisition and the influence of L1. There are five major positions on this topic, as defined by White (2003):

1) UG is accessible in L2 acquisition and functions like in L1

2) UG is completely accessible, although learners initially transfer L1 settings

3) UG is accessible, but only through the parameter settings of L1 throughout L2 acquisition

4) UG is accessible, but functions differently than it did in the L1 acquisition

5) UG is not accessible in L2 acquisition

(5) is known as the **No UG Hypothesis** (Cook and Newson 2007) or the **Fundamental Difference Hypothesis** (Bley-Vroman 1989) stating that UG is not available in the SLA process, forcing the learner to acquire the language in a different manner from L1. (1) is the **Full Access Hypothesis** (Cook and Newson 2007), which argues that UG is completely available to the L2 learner. (2) is known as the **Full Access/Full Transfer Hypothesis** (Schwartz and Sprouse,

1994; 1996), where UG is present, but the learner must first reset the parameters from the L1 to reach the target structures of the L2. (3) and (4) reflect the **Partial Access Hypothesis**[4] (Cook and Newson 2007), according to which learners are able to obtain access to UG, but UG access is constrained by certain factors in a way that makes language acquisition different from the L1 process. The fact that very few learners seem to accomplish native competence makes the Full Access Hypothesis doubtful (perhaps an argument of common sense). On the other hand, given that some learners *do* accomplish native-like proficiency and the interlanguage learners possess develops in a very systematic nature, it seems somewhat premature to entirely rule out the idea that there is UG access for L2. **It is the position of this paper that an L2 learner has a least partial access to UG and depending on various factors, may or may not achieve native-like proficiency. We will explore various positions on partial access to UG and their implications.**

[4] Instantiations to be discussed later.

CHAPTER 2

GERMAN AS A SOV LANGUAGE

The status of German as a verb-final language is the consensus of most syntacticians, given that it seems easier to capture both the verb-final and verb-second order, by assuming that German is underlyingly a Subject-Object-Verb (SOV) word-order language, rather than a SVO language. Consider the following four sentences:

(6)

(a) Ich spiele gern Tennis.

I play gladly Tennis

"I like to play Tennis."

(b) Er möchte die Trompete haben.

He would-SUBJ the trumpet have-INF

„He would like to have the trumpet."

(c) Er meint, dass sie ihn gesehen haben könnte

He thinks that she him seen have-INF can-SUBJ

„He thinks she could have seen him."

(d) Sie kaufen in dem Einkaufzentrum ein.

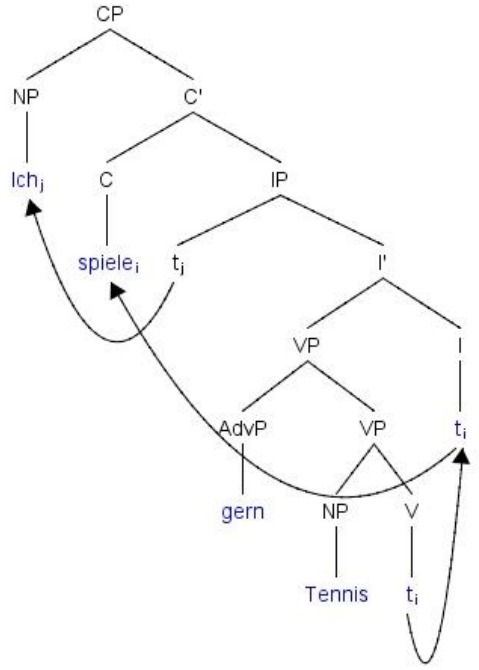
They buy in the mall PRT

"They go shopping in the mall."

In the first example (6a), it is easy to possibly misconstrue German as SVO; the sentence is subject-initial followed by the verb. This becomes slightly more difficult in (6b). To keep the

word order SVO, there needs to be a movement of the verb out of the Verb phrase to the end of the sentence. In (6c), there are now three verbs moving to the end of the sentence under the SVO view. Under the SOV view, the perspectives on movement are different. In (6a), the verb is generated in the head-final verb phrase (VP) and then moves to I (inflection)[5] to get its tense and agreement features and finally moves to C (the empty complementizer position)

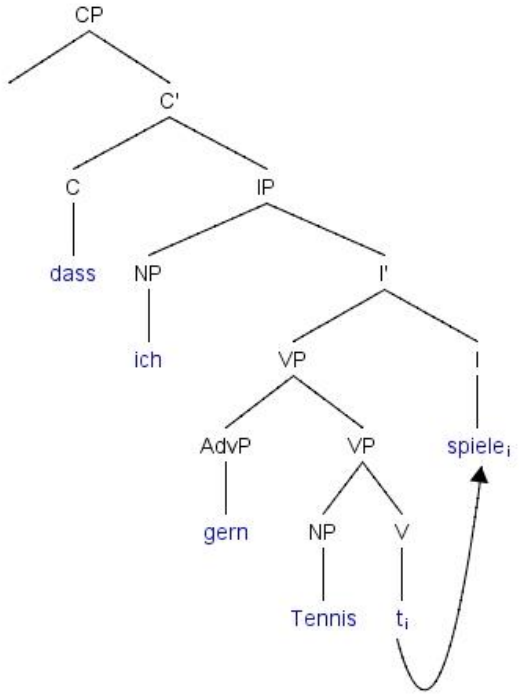
Figure 2.1



While this may seem like a lot of movement, consider the same sentence within the boundary of a subordinate clause *dass ich gern Tennis spiele*, 'that I like to play tennis':

[5] This node is also known as tense (T).

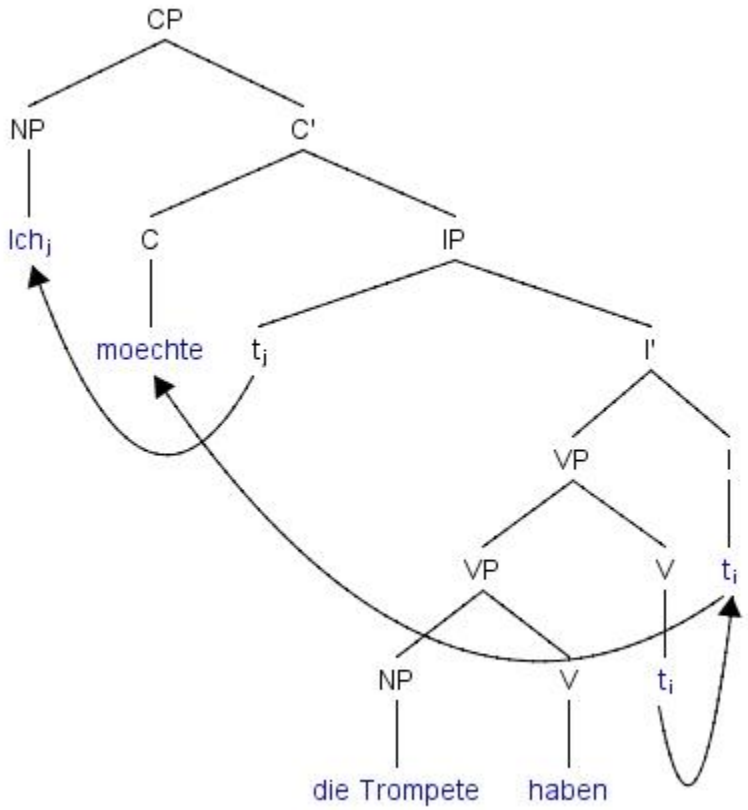
Figure 2.2



To continue to analyze German as SVO in this scenario would take considerable syntactical gymnastics. As one can see, there is nowhere else that the verb could have come from (the specifier of the IP is filled) and nowhere for the verb to go. While an SVO-account of German with a head-initial VP and IP may suffice for subject-initial main clauses, it becomes increasingly difficult to analyze embedded clauses with multiple verbs, since under the SVO-account, each verb would have to move to the end.

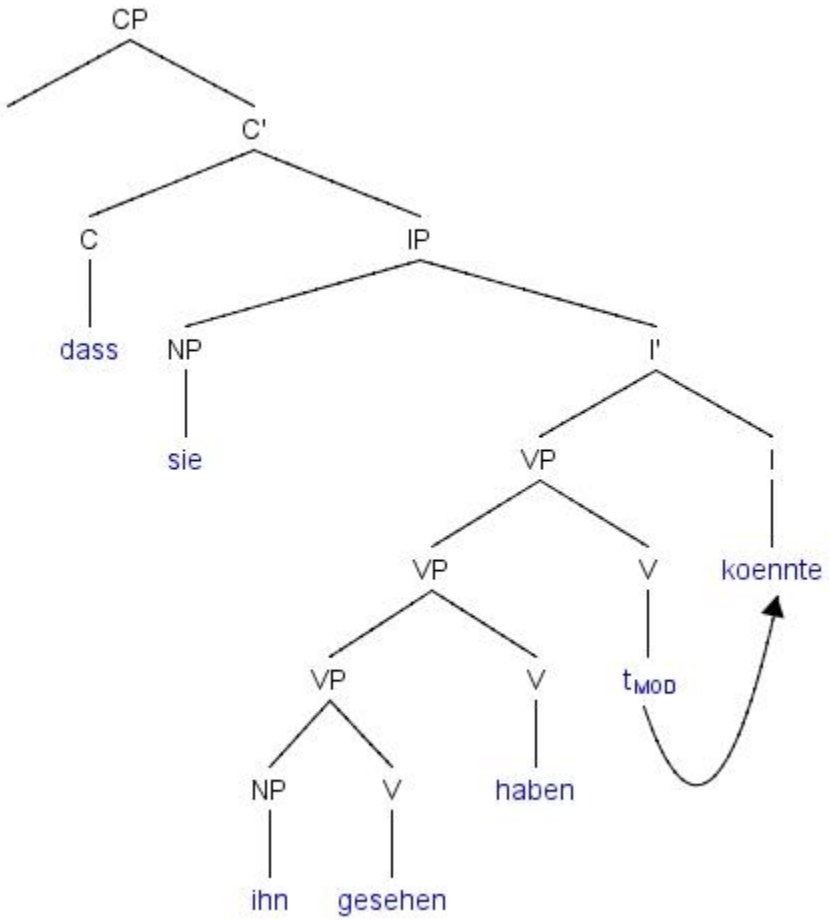
In (6b), we have the verb *möchte* in second position, the other verbal element *haben*, however, stays in place, in the VP, at the end of the sentence.

Figure 2.3



In (6c), all three verbs are generated in the VP and only the rightmost verb needs to move, as illustrated below:

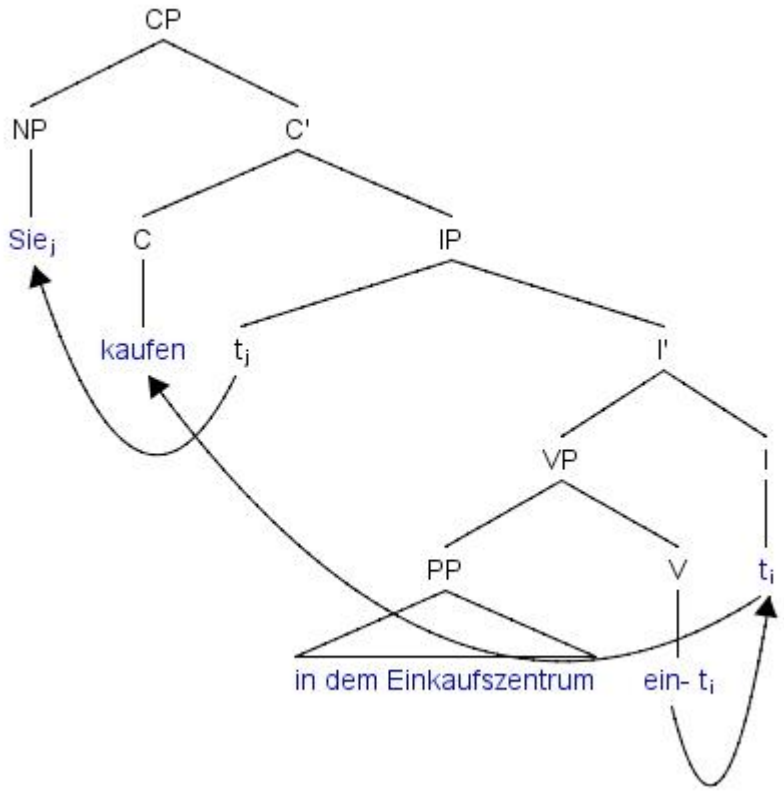
Figure 2.4



This tree becomes completely unwieldy from a SVO perspective – the number of movements required would likely make this figure unreadable. (6d) is an interesting example, since separable prefix verbs demonstrate German's underlying SOV nature by leaving the separable prefix where it was generated in V, with the finite verb moving to I and subsequently C. It is curious how this sentence would play out in an SVO account – it is possible the learner may believe that the prefix moves to the end of the sentence, but this explanation is puzzling, since the prefix can never be separated from the verb in embedded clauses.[6]

[6] There are some English verbs that allow particles to move to the right of the direct object (I'm going to beat Jim up). It is not implausible that the learner sees separable prefix verbs as verbs that do this.

Figure 2.5



The movement results are summarized in the following table:

Table 2.1

	SOV	SVO
6a Number of Movements	1	0
6b Number of Movements	1	1
6c Number of Movements	0	3
6d Number of Movements	1	?1

Based on economy of movement, the idea that the syntax of a language should have as little movement as possible, SOV word-order appears to be more economical. It thus seems more likely that German is, at least underlyingly, a SOV word-order language. The aim of this paper is to examine the difficulties that L2 learners have with German word order, looking specifically at verbs. The focus is looking at learners in secondary education with English as their L1.

CHAPTER 3

GERMAN STRUCTURE AND ACQUISITION

There has been much debate regarding the reason that learners have difficulty with German verb word-order. Some argue that learners do not notice the differences in word order, due to the similarities between L1 and L2 (Ringbom 2007). Others say that learners have wrongly set the parameters for the L2 (duPlessis et al. 1987), or that learners no longer have access to UG and use faulty learning strategies (Clahsen and Muysken 1986), or that learners have transferred the word-order from their L1 (Vainikka and Young Sholten 1996).

Clahsen and Muysken (1986) favored the No UG Hypothesis in an article studying the speech patterns of adult foreign workers in Germany. The structures produced by the informants were often far from target-like and more often resembled the structures of the informants' native languages. Because of the length of stay of many of the workers and their lack of progress, Clahsen and Muysken concluded that these learners no longer had any access to UG. Given the age of the informants and their occupations, one might assume that the workers had no interest in learning German thoroughly and learned only enough to make themselves understood. It seems rather presumptive to assume that UG is unavailable based on informants who have no desire to learn the language. On the other hand, it is true that motivation is *not* a factor in L1 acquisition – UG functions regardless of the child's desire[7]. One might conclude that if UG was still functioning as full capacity the L2 learners would be nearing native proficiency, regardless of their motivation.

[7] Children are motivated, much like the workers, to have their basic needs met, but not to learn a language. The motivation of the L1 learner is, therefore, more general.

L2 learners coming from an L1 background of a SVO language (English, Spanish, French, etc.) may be initially misled by German word order. Although German is underlyingly SOV, the surface word order of main clauses *appears* to be SVO, much like English. This notion, however, is not the case. Instead, German is a verb second language (V2), meaning that the finite verb must always be in the second position of the sentence in main clauses. The German sentence can be divided up into four (sometimes five) main components using sentence bracketing: the Vorfeld (prefield), finite verb, Mittelfeld (middle field), the nonfinite verb(s), and sometimes the Nachfeld (post field).

Here is an example of sentence bracketing (7a), with all the pertinent information located between the finite verb and nonfinite verb. Note that the Nachfeld is considered an afterthought of the speaker in this instance and, being ungrammatical in written German, is accepted only in spoken German with appropriate intonation.

(7)

(a)Er | ist | mit dem Auto nach Frankfurt | gefahren |…um vierzehn Uhr.

He is with the car to Frankfurt driven at two P.M.

Vorfeld finite V Mittelfeld nonfinite V(s) Nachfeld

"He drove to Frankfurt (with his car) at two P.M."

Embedded clauses are usually part of the Nachfeld, the embedded clause being extraposed from the main clause.

(b) Er hat . . . gedacht, dass sie die Birnen gegessen haben.

He has thought that they the pears eaten have

„He thought that they ate the pears."

In (7b) all of the pertinent information from the Mittelfeld is now contained within the Nachfeld.

The V2 nature of German allows for variation in sentence word order in a way that English's strict SVO word-order does not, as in German the Vorfeld may be occupied by a subject, object, prepositional phrase or adverbial phrase:

(c) Diesen Mann | habe | ich |gestern | gesehen.

This-OBJ man have I yesterday seen

"I have seen this man yesterday."

(d) Hoffentlich | gehe | ich |später | zum Konzert.

Hopefully go I later to-the concert

"Hopefully, I will go to the concert later."

(e) Mit ihrem Mann | tanzt |sie.

With her husband dances she

"She is dancing with her husband."

Following the hypothesis of duPlessis et al. (1987) that L2 learners must reset certain parameters to acquire German, it seems likely that L2 learners must also reset a parameter for the verb-second structure of German. If this parameter is not reset, learners will lean heavily on the word-order of main clause SVO and may make the following mistakes:

1) Inflection Phrase adjunction (duPlessis et al. 1987)

*Hoffentlich, ich gehe später zum Konzert.

Hopefully I go later to-the concert

"Hopefully, I'll go later to the concert."

2) Setting the parameter of German to head-initial verb-phrase (duPlessis et al. 1987)

*Ich möchte essen eine Wurst.

I would-like eat-INF a sausage.

"I would like to eat a sausage."

The nature of German as an underlyingly SOV word-order language makes the acquisition of the correct word order quite difficult. As Brian Lightfoot (1991) proposes, learners may only be able to set parameters from main clauses in the L2. That being said, it seems reasonable that learners may be misled by the main clause word order of German and assume that the language is, contrary to fact, SVO. Clahsen and Muysken (1986) and Vainikka and Young-Sholten (1998) found that adult learners of German of various language backgrounds (Romance, Turkish, Korean) without explicit instruction tended to assume very strict SVO patterns. Clahsen and Muysken postulated that the SVO word order could be a result of overgeneralization, that learners "extend the domain of application to embedded sentences" (110). Vainikka and Young-Scholten (1994), having studied the way that Turkish and Korean speakers learned German (beginning with a base OV word order), determined that the word order errors produced by learners were partially a result of transfer – learners would initially transfer the verb phrase projection from their L1; this would account for the reason that Romance language learners (Italian, Spanish, Portuguese, etc.) strongly preferred SVO word order initially, while Korean and Turkish learners preferred SOV word order initially. Clahsen and Muysken (1986) explain the erroneous order as learners' analyzing the word order of German to be SVO based on the unmarked clause structure in the main clause, or the "neutral sentence type" (Slobin and Bever 1982). They maintain that L2 learners use very complicated learning strategies, as opposed to a natural interlanguage, resulting in an imperfect system:

> [B]y fixing on an initial assumption of SVO order, and then elaborating a series of complicated rules to patch up this hypothesis when confronted with conflicting data, the L2 learners are not only creating a rule system which is far more complicated than the native system, but also one which is not definable in linguistic theory (Clahsen and Muysken 1986: 116).

This statement can easily describe the acquisition of verb order in a classroom setting. Many learners begin with a SVO-like grammar of German and only after significant exposure to the language will they change their model. If learners believe the L2 to be of a similar structure, they will not be prompted by UG to reset certain parameters. Learners go through several stages of development in this German-like grammar. Let us examine the development model of word order that Clahsen and Muysken present (1986) for L2 learners of German which has become generally accepted for the L2 acquisition of German:

1) **SVO** – learners initially keep a strict word order that is generally subject-initial.

2) **ADV-PREP** – learners erroneously adjoin adverbs and prepositional phrases to IPs.[8] In German, nothing may be adjoined to the sentence before the finite verb, as there can only be one initial constituent. This violates the V2 parameter, creating an ungrammatical V3 construction (8). This is quite the opposite for learners with an English or Romance language background, for whose languages IP adjunction is perfectly grammatical.

(8)

**Hoffentlich*, er hat mich nicht gesehen.

Hopefully he has me not seen.

"Hopefully, he didn't see me."

3) **Particle** – nonfinite verbs and particles, such as separable prefixes, are placed in final position. Learners are theoretically starting to grasp the head-final nature of the German verb phrase, i.e. that verbs are generated at the end of the sentence. There is no comparable structure in English that 'pushes' verbs to the end of the clause. The learner cannot, therefore, think that the structure of German is SVO at this point. A learner may construct a grammar with an

[8] Learners do not make use of the CP-domain

optional finite verb at the end of the main clause, SVO(V) which will is still UG-compatible.

(9)

(a)Ich *will* meine Oma *besuchen*.

I want my grandma visit-INF

"I want to visit my grandma."

(b)Ich *mache* die Waschmaschine *aus*.

I make the washing-machine out

"I turn off the washing-machine."

4) **Verb Inversion** – the verb is followed by the subject in certain questions, embedded clauses and topicalization. Due to the V2 phenomenon, various constituents (prepositional phrases, objects, etc.) can be moved into first position (the Vorfeld in main clauses, Spec CP). For many learners, it is only the non-interrogative main-clause V2 structure that provides difficulty in reaching this stage because many other languages feature subject-verb inversion in questions.[9]

(10)

(a)Weil er schon seine Hausaufgaben gemacht hat, *kann* er früher ins Bett gehen.

Because he already his homework done has can he earlier in-the bed go-INF

"Because he has already done his homework, he can go to bed earlier."

(b)Meine Freundin *habe* ich in einer Kneipe getroffen.

My girlfriend have I in a bar met

"I met my girlfriend in a bar."

[9] This is evidenced in languages with strong agreement and verb raising, such as French or Spanish. This occurs in English to some degree, with inversion of the auxillary verb and the subject: *Have you seen my dog?*

(c)*Kennst* du meinen Mann schon?

Know you my-OBJ husband already

"Do you already know my husband?"

5) **Adv-VP** Adverbials may appear between the finite verb and the object.

This paper is focused on the verb order and so this stage is largely irrelevant.

6) **V-final** –the finite verb appears at the end of embedded clauses.

(11)

Hans dachte, dass sie die Blumen schon gekauft hat.

Hans thought that she the flowers already bought has

"Hans thought that she already bought the flowers."

The developmental model presented by Clahsen and Muysken has certain pedagogical implications. The following is the general model of introducing German verb word order in the classroom.

1) Simple SVO sentences

2) Separable Prefix Verbs

3) Modal Verbs

4) Auxillary verbs (as seen in present perfect tense)

5) Dependent and subordinating clauses

One can observe certain types of errors depending on the level of development of the student, corresponding to the idea of error analysis (Chapter 1).

(12)

*Gestern, er geht zur Uni.

Yesterday he goes to-the university

"Yesterday, he went to the university."

The learner here assumes that adverbials may be adjoined to German.

(13)

(a) *Er aufhängt die Bilder.

He up-hangs the pictures.

"He hangs the pictures up."

(b) *Sie sucht ihre Eltern be.

She searches her parents prefix

"She visits her parents."

In (13a), the learner moves the prefix, along with the verb to the Complementizer (C) position, although the prefix should stay in V**.** In (13b) the learner assumes that *all* verbs with prefixes are separable prefix verbs, a demonstration of a possible faulty learning strategy, or perhaps a mental lexicon that is not yet fully developed. Some verbs in German have inseparable prefixes and these verbs must be learned.

(14)

(a)*Ich will spielen Tennis.

I want play-INF Tennis

"I want to play Tennis."

(b)*Sie hat bezahlt die Miete.

She has paid the rent.

"She has paid the rent."

In both of these examples, one might see evidence of transfer from the L1, that the learner directly transfers the word order from his or her native language (such as English). Evidence from studies (Clahsen and Muysken 1986), however, suggests that learners assume German to be head-initial from the seemingly-SVO main clause word order, that is, the finite verbs stay in the VP or in I. Clahsen and Muysken found that speakers of Romance learners (SVO) and speakers of Turkish (SOV) alike tended to produce head-initial structures in German.[10] In the final example, the learner seems to have already mastered the head-final nature of German by placing the past participle at the end of the first clause, yet creates a SVO structure in the wake of a subordinating conjunction:

(15)

*Ich habe nein gesagt, obwohl ich habe Geld.

I have no said although I have money

"I said no although I have money."

The learner fails to treat German as underlyingly verb-final. He or she might have done this because i) the learner's L1 has a SVO word order in embedded clauses and the learner is transferring the syntax of the L1 to the L2 due to learning strategies or ii) the learner overgeneralizes that the SVO-seeming word order of main clauses in German could also be extended to embedded clauses.

[10] One might notice that Clahsen and Muysken's (C & M) and Vainikka and Young-Scholten's (V & S) results appear to be at odds with each other. C & M conclude that Turkish learners have a SVO grammar, whilst V & S claim Turkish learners begin with a SOV grammar. Also, V & S seemingly reverse their stance in a later (1998) study. We will discuss the possibility of transfer from L1 in the next chapter.

CHAPTER 4

UG THEORIES AND SECOND LANGUAGE ACQUISITION CONTINUED

In Clahsen and Muysken (1986), speakers of Romance languages (SVO) learning German overwhelmingly had difficulties placing the finite verb at the end of embedded clauses, indicating possible L1 influence. Speakers of Turkish (a SOV language), however, preferred SVO word order in dependent and subordinating clauses, although Turkish also requires the finite verb at the end of the clause in embedded clauses, suggesting that L1 influence was not the culprit for the difficulty for the final stage. Learners were simply extending their hypothesis of German as a SVO order to embedded clauses. We find further evidence of misanalysis of the L2 input in a study done by Håkansson et al. (2002) on a group of Swedish learners of German. Although German and Swedish are both V2 languages, the Swedish learners consistently had problems placing the verb in second position. Curiously, the Swedish learners would adjoin adverbials (adverbs, prepositional phrases) to the beginning of sentences, producing ungrammatical V3 sentences, an error also not expected from the learners. Consider the following utterance from one of the Swedish learners:

(16)

Dann er waschen eh der Schlange.

then he wash-INF eh the snake

“Then he washes, um, the snake.” (interpretation mine)

This example is pertinent on several levels. Firstly, the influence of the L1 seems to be weaker than previously thought. It is certainly telling that Swedish learners apparently experience no

interference from their own L1 which also utilizes V2 since this sentence would be ungrammatical in Swedish.[11] Secondly, this case demonstrates that learners of German do follow the general pattern of development outlined by Clahsen and Muysken (see Chapter 3), regardless of the L1. We can thus rule out the Full Transfer/Full Access Hypothesis (see Chapter 1) as a model of access to UG: clearly learners are not subjected to full transfer.

There are numerous theories in regard to the idea of partial access to UG, one of them being Vainikka and Young-Scholten's (1993/1994) **Minimal Tree Hypothesis**, which states that learners transfer all of the lexical categories from their L1 (verbs, nouns, adverb, adjective), but lack the functional categories (agreement, complementizer, determiner, prepositions, negation, etc.) and acquire these later from UG. In earlier studies with Korean and Turkish learners of German, Vainikka and Young-Scholten (1994; 1996) had concluded that learners transfer their VP structure to the L2 based on the SOV structures of German that the learners were producing. This was affirmed by the simultaneous study with Romance learners who seemed to transfer a head-initial VP to the L2. As the learners develop, they are said to start projecting a Finite Phrase (FP) which only consists of NPs and a bare VP (and therefore, no agreement), which Vainikka and Young-Scholten (1998: 25) claim is head-initial: "Turkish/Korean speakers are positing the head-initial FP based on the German input data (as guided by UG), rather than transferring it from their L1." The problem with the Minimal Trees Hypothesis is that it is grounded on the learner's poor agreement, i.e. overtly pronounced morphology, the underlying morpho-syntactic system of the learner. It cannot be assumed from a speaker's mere performance that the learner has no agreement in his or her interlanguage grammar. Vainikka and Young-Scholten's predictions also seem to be inconsistent with production; the idea that

[11] As is the case for many Scandanavian speakers, this learner may already know English and the learner's knowledge of this language (which permits V3 constructions) may hinder facilitation of the acquisition of German.

learners would initially not have access to negation may be a somewhat hyperbolic example, but it illustrates that the theory cannot account for all features of a learner's grammar. Learners do produce negation quite frequently, even fairly early in the interlanguage and any instance of a learner using *nicht*, 'not' or *kein*,'no', would disprove this idea. The existence of any functional category (prepositions, complementizers, determiners, etc.), whatsoever, in the learner's production would disprove this notion.

Another theory of second language acquisition regarding the interaction of UG and the L1 is the **Valueless Features Hypothesis**, advanced by Lynn Eubank (1993/1994) which states that functional and lexical categories of the L1 do transfer, but none of their feature strengths do. In other words, a learner may have strong or weak values associated with a certain feature (such as inflection), but these features will not be realized in the L2; they are only a blank parameter to be reset. This theory, like the Minimal Trees Hypothesis, succumbs to the pitfalls of relying on overt morphology as an indicator of a learner's underlying knowledge of the interlanguage grammar. Lydia White (2003: 107) describes the problem of trying to equate overt morphology to grammatical competence in response to a study from Clahsen and Hong (1995) on Korean learners of German:

> L2 learners might know that German has agreement at an abstract level, and that this is non-pronominal. At the same time, they might not yet have fully acquired the morphology by which agreement is realized on the surface, thus failing to recognize deviant morphology in some cases. If so, failure to show differences in response times between grammatical and ungrammatical sentence pairs testing agreement is relatively uninformative. We simply cannot tell what the status of abstract agreement is in these grammars, hence we cannot conclude anything about this group of subjects.

Results are thus inconclusive if we try to determine the state of a learner's grammar based on his or her ability to get verbal and nominal inflection right. We must thus look for other means of

determining a learner's state of grammar.

CHAPTER 5

PARAMETER SETTING AND RESETTING

We now return to the notion discussed earlier that some of the problems that learners have with German are due to parametric variation (Chapter 3), that is the headedness parameter (English head-initial versus German head-final) and the V2 parameter (the impossibility of having more than one phrase before the finite V rules out V3 constructions). In the same way that there were various stances as to role of UG in second language acquisition, there are also different attitudes toward the role of parameters of their subsequent (when applicable) resetting. Three of major theories are that

i) no parameters can be reset;
ii) (all) parameters can be reset;
iii) some parameters can be reset, while some parameters do not work.

Examining parameter resetting requires thinking back to the acquisition of the native language. After learners have sufficient input, they set their parameters to the appropriate value (Recall the pro-drop parameter from Chapter 1). One can thus explain variation in languages due to different values for parameters.[12] In the process of acquiring L2, learners must sometimes be prepared to switch parameter values in order to form the grammar of the L2. For this change to occur, learners must go through a period when they are unable to decode the input of the L2. This decoding is also known as parsing and is realized at every linguistic level: phonological, morphological, syntactical, and pragmatic. It seems somewhat obvious that the phonological one is the first hurdle for comprehension – it seems unlikely that language acquisition can take place

[12] Gibson and Wexler (1994) suggest, based on the estimate of forty parameters, a possibility of 1.10 x 10^12 (2^40) possible variations.

with no knowledge of the L2 phonology. The scope of this paper will merely be examining the syntactical level. Learners utilize their L1 parameters for syntax during L2 acquisition until their parsing fails and parameter resetting *must* occur. This effect certainly varies, depending on the L1 and the L2. Take, for example, English speakers learning Japanese. English is a head-initial language with a SVO word order and Japanese is a head-final language with SOV word order. These learners rarely have difficulties in acquiring the basic Japanese word order, indicating that they can reset parameters and do so, in fact, right away, dispelling the idea that parameters cannot be reset. Some researchers (Bley-Vroman 1997) contend that parameter setting is not at work in the process; learners simply observe overt appearances of language features (this plays into the idea that L2 acquisition is not, in fact, acquisition, but rather a form of consciously learned knowledge). I dispute this idea, as there are language features too subtle for learners to ever acquire through memorization. It is regrettable that many of the arguments for the existence of UG in SLA raises questions against its existence, but the strong argument for the UG in first language acquisition provides basis enough for the possibility of UG in SLA. Consider the following example:

(17)

Weil ich um sechs Uhr aufstehe, trinke ich gern Kaffee.

Because I at six o'clock up-stand drink I gladly coffee

"Because I get up at six A.M., I like to drink coffee."

Although the learner may not know it, this sentence demonstrates both head-finality of the verb and the V2 effect. *Aufstehen* is a separable prefix verb and a main clause sentence would generally look like:

(18)

Ich stehe um sechs Uhr auf.

I stand at six o'clock up

"I get up at six A.M."

The learner would probably not realize that the reason for *aufstehen* being one word in (17) is that the verb is generated in the head-final VP and does not need to move in an embedded clause, as the verb and its prefix are separated (see Figure 2.5). Likewise, the learner would not know why a verb immediately follows the dependent clause, but this is the effect of the V2 structure – the whole embdedded clause is being treated as one constituent. If there are, in fact, different UG-compatible word orders that can be achieved in the interlanguage grammar, this implies that UG is active and functioning. It seems curious then that, in the case of English being head-initial/SVO and German head-final/SOV, English speakers and so many other learners whose languages are SVO have serious difficulties placing the finite verb at the end of subordinate clauses (as well as other structures dealing with verb placement). Going back to the example of English speakers learning Japanese, English speakers produce SOV structures right away, while this takes time for English learners of German. We need to admit that the comparison of learning Japanese and German is not exactly fair. While both languages are SOV, it is only Japanese that is always overtly verb-final. This then raises the question of how learners must analyze the input. It seems that the German input is incredibly misleading – learners coming from a SVO language like English have no difficulties parsing the main clause sentences of German which are very SVO-like. Most declarative statements (usually subject-initial in the classroom setting) do resemble this structure. However, the V2 effect of German makes it difficult for learners when it comes to non-subject-initial main clauses. The verb-raising nature and generalized topicalization of German allows for various word orders, although it seems that

many learners simply ignore this property of the input and suppose in all cases that German is simply a SVO language. The input that learners receive conflicts with the SVO grammar that they construct and so the syntax must be increasingly complicated, should learners want to hold onto this notion (see Clahsen and Muysken's quote regarding increasingly complicated grammar Chapter 3). One of the reasons that learners possibly misanalyse the German structure is that the input they receive is (to them) apparently very ambiguous: with prepositions preceding their complements[13] and the verb is second position in main clauses, often preceded by the subject, German easily appears to be a head-initial language. For parameter resetting to occur, the input cannot be obscure (for more research concerning (un)ambiguous input, see Fodor (1998)). One of the defining principles in first language acquisition is the **Subset Principle**, which states that learners will pick the simplest grammar when there are two different versions emerging. For example, German children begin with a grammar that is occasionally SVO in main clauses and sometimes SOV in main clauses (see Chapter 1) and eventually decide on a word order of SOV, +V2. Observing how learners appear to acquire German (as a SVO language with complicated structure) leads one to believe that this principle does not operate in the L2; as previously stated in Chapter 1, learners rarely produce main clause sentences with the finite verbs at the end. There are two theories regarding this phenomenon (White 1989):

1) **Transfer Hypothesis**: L2 learners no longer possess the subset principle and they will be influenced by L1 parameters.

2) **Subset Hypothesis**: learners utilize the subset principle in L2, developing a subset grammar.

[13] A more straight-forward SOV language like Japanese features postpositions, with complements preceding their heads. In German, only the verbal domain is head-final. PPs, DPs, and CPs are head-initial.

One might assume that since learners do not view German as having separate parameters, i.e. head-final for word order in the case of English learners, learners will tend to be affected by their L1 parameters. Lydia White (1989) states that when the L1 and L2 permit similar structures, "resetting parameters is not straightforward…L2 data will be mostly consistent with the L1 setting" (153-154). This creates an interesting circumstance that L2 learners may create a grammar that is overly restrictive or possibly not restrictive enough. A somewhat chicken-or-egg argument develops when one examines the situation further: is transfer the result of the subset principle not operating in L2 *or* does the transfer from the L1 (caused by misanalysis) prevent the subset principle from operating? I argue that the subset principle does not operate in L2 acquisition, at least in the acquisition of German by English speakers. The grammar these learners develop only becomes increasingly more complicated as the learner receives more input. The grammars that are constructed are still constrained by UG, i.e. learners do not create any structures that fall outside the structures of human languages, and thus show at least partial access to UG. **Although UG is present during acquisition, learners are not able to make certain generalizations anymore.** This claim requires evidence, and a case study targeting English learners of German would be able to provide proof.

CHAPTER 6

CASE STUDY

Since I proposed that a case study was needed to examine the extent to which universal grammar plays a role in L2 acquisition, I conducted a preliminary experiment to see if parameters truly reset during the acquisition process. Twenty-one informants took part in the study. All subjects were students of GRMN 1001 and GRMN 1002 classes at the University of Georgia in the spring semester of 2013. The study's aim is to determine if parameter setting occurs for English learners of German and if so, when. To accurately get a sense of the learners' exposure to the language; only the results of subjects who were newly introduced to the language were analyzed. Non-native speakers of English, subjects with previous German classroom experience (such as in high school), and subjects who had spent a significant time abroad in a German-speaking country were excluded from the study, leaving thirteen informants.

6.1 The Study

The study consisted of three parts: a questionnaire inquiring about the subjects' experience with German, a free response section, and a section with grammaticality judgments (see appendix). On the free response section, subjects were instructed to write an essay of at least 150 words describing a vacation that they went on. Subjects were also instructed to write in the past tense. The grammaticality judgment section consisted of thirty sentences and the subjects were instructed to judge whether they thought the sentences (eighteen grammatical, twelve ungrammatical) were correct or not. The only errors in the sentences were those of word

order. The study was designed to examine two specific parameters that differ from English to German (see Chapter 3 for a discussion thereof):

i) Headedness parameter

ii) V2 parameter

The grammaticality judgment section featured sentences that violated these parameters in German. If a learner judges an ungrammatical sentence as incorrect, the learner is said to have acquired the new parameter setting. Conversely, if a learner rejects correct sentences, then that learner is still under influence from his or her L1 parameter setting.

6.2 Hypothesis

After a semester of German, learners will demonstrate the presence of UG in the acquisition process with the evidence of parameter resetting. The Headedness parameter will be reset, the V2 parameter will not. Based on sentences with modal verbs and the present perfect past tense, students should have enough data to determine that German is head-final in regards to verbs, but I believe that students still ultimately perceive that German is SVO, rather than V2. This means that they will accept IP-adjunction and reject non-subject-initial V2 structures.

6.3 Free Response Results

The thirteen subjects in the study wrote two hundred and fifty-eight sentences in the free response section. There was only one instance of a head-parameter violation, appearing from one of the informants with the lowest proficiency in German. The subjects were instructed to write in the past tense, ideally evoking the present perfect to see whether subjects would consistently place the participle at the end of the clause. The one instance of the head-parameter violation was, in fact, not necessarily evidence for a wrongly set parameter:

(19)

Ich ist nach Kentucky gegangen mit meine Mütter und Vater.

I is to Kentucky gone with my mothers and father

„I went to Kentucky with my mother and father.“

The informant was obviously trying to articulate the last line in (19), but it is not entirely clear if the ‘mit meine Mütter und Vater’ part was simply an afterthought on the part of the informant – recall that prepositional phrases and entire phrases (embedded clauses) may commonly extraposed outside of the main clause. The same informant went on to write nine other sentences in the present perfect and, barring redundancy, all have the correct word order. There were 145 other sentences produced by informants which utilized the present perfect, all of which, at least regarding syntax, were correct. The sentences vary in accuracy of other features, but the overwhelming majority (99.3%) of accurate sentences indicates that learners have acquired the head-final parameter of German:

(20)

(a) Wir haben neue Menschen bei der Insel getroffen.

We have new people at the island met

“We met new people at the island.”

(b) Ich bin in der Ozean schwommen.

I am in the ocean swimming-PAST

“I swam in the ocean.”

(c) Ich hat in das Restaurant gestehen.

I has in the restaurant confess-INF

"I was in the restaurant."[14]

Learners may be unaware of the head-final verb phrase structure of German and believe that the main phrase structure is SVO(V) at least at this stage. This would indicate a learning strategy from the students. If students consistently reject head-initial verb phrases in the later grammaticality judgment section, they then would understand that German verb phrase structure is head-final.

When reading free responses from students, one must consider that avoidance plays a large role in what students produce – a difficult structure will likely be eschewed for a simpler one and the absence of a particular structure may not be the best indicator of underlying knowledge. That being said, an attempted 155 sentences (154 correct) in the present perfect indicate that the students felt quite comfortable regarding verb-phrase headedness. In the 258 sentences produced in the response there were only seventeen instances of IP-adjunction violations and a scant nine instances of non-subject-initial V2. This indicates that the students were largely uncomfortable with producing V2 structures. To understand these examples better, one must examine them in conjunction with the grammaticality judgment section. Based on these low numbers, one has a sense that the learners have not yet acquired the V2 parameter.

6.4 Grammaticality Judgments

There were twelve ungrammatical sentences in the section, six with headedness violations and six with IP-adjunction violations. There were seven sentences that demonstrated the correct V2 effect of German. Depending on whether the informants determined the sentences to be grammatical or not, it is determinable whether the learners have, in fact, acquired new parameter settings.

[14] The context implies the informant was eating in a restaurant.

Table 6.1

	Grammatical (total responses)	Ungrammatical (total responses)	Total Responses	Percentage of grammatical (%)	Percentage of ungrammatical (%)
IP-Adjunction Violation	44	34	78	56.4%	**43.6%**
Headedness Violation	12	66	78	15.4%	**84.6%**
V2-structures	65	26	91	**71.4%**	28.6%

The bolded values of the chart indicate the correct ideal in keeping with my hypothesis– IP-adjunction should be **ungrammatical**, head-initial VP structures should be **ungrammatical**, and V2 structures be **grammatical**. We see that the informants performed very well rejecting head-initial structures. The informants performed more modestly on accepting V2 structures. The informants, however, had a slight tendency to accept sentences beginning with an adjunction. One notion that needs to be discussed here is the ideal percentage of accuracy that learners should have so it can be said that they have acquired a structure. Vainikka and Young-Scholten (1998) posit an accuracy of 60% correct,[15] but I find this number rather low. The amount is somewhat arbitrary – 100% is fairly unrealistic (even native speakers may not produce 100% on grammaticality judgment tasks!), so I suggest 70%. The number should be high enough that learners produce a structure (or recognize it) consistently, but perhaps low enough to account for

[15] This number comes from oral interviews. It does not seem unfair to call for a higher standard for written data, where informants have time to reflect on what they have written.

occasional performance errors. Among the distractor sentences were five showing the correct head-final structure of German. The informants accepted these sentences extremely consistently, 89.2% (58/65) of the time. In conjunction with their high rejection of head violations, this demonstrates that learners **have reset their headedness parameter**. The high percentage indicates that learners have internalized this rule.

As might be concluded from Table 6.1, these parameters develop sequentially and the acquisition of new parameter values (P_2) depends first on a learner achieving (P_1):

Learners first acquire P(head-FINAL), then P(+V2).

Observe a comparison of responses from five informants:

Table 6.2

	IP-Adjunction Violation		Headedness Violation		V2 Effect	
	Gramm.	Ungramm.	Gramm.	Ungramm.	Gramm.	Ungramm.
Student 1	4	2	0	6	7	0
Student 2	4	2	1	5	7	0
Student 3	6	0	0	6	5	2
Student 4	5	1	0	6	6	1
Student 5	2	4	1	5	7	0

These students have the most developed grammar in the case study. Students 1 and 4 have the most clear-cut responses. They reject all of the headedness violations and accept most structures of V2. Note that these students reject most headedness violations, accept the majority of V2 structures, but also accept most IP-adjunctions violations. Accordingly, in the free responses of Students 1, 4, and 5, respectively, we find IP-adjunction errors:

(21)

(a) In Napolie das Wetter war nicht schön.

In Napoli the weather was not pretty

„In Napoli, the weather was not pretty."

(b) Letztet Jahr ich bin…zu St. Simons…gegangen.[16]

Last year I am to St. Simons gone

"Last year I went to St. Simons."

(c) Im Morgen ich esse Mexikanisch Essen.

In-the morning I eat mexican food

"In the morning, I eat Mexican food."

These students were fairly permissive of IP-violations. Student 1 accepts four IP violations and has four instances of IP-violation in his or her free response. Curiously, Student 5 correctly rejects four IP-violations and yet we find three instances of IP-violations within his or her free response. Students 2 and 5 accept all instances of V2 effects and are the only informants who have instances of object-fronting within their free responses – this indicates a high development of V2. There are only nine instances of V2 occurring in the 258 sentences from the free response, seven of which are the fronting of adverbials. The following sentences were produced by Students 2 and 5:

(22)

(a) Meine Großmutter und Tante möchte Ich sehen.

My grandma and aunt like-SUBJ I see-INF

"I would like to see my grandmother and aunt."

(b) Ins Fernbank waren große Einimale.

[16] Only the relevant parts of the sentence are being shown for brevity's sake.

In-the Fernbank were large [not a word][17]

"There were large animals(?) in Fernbank."

(c) Das Film haben wir für drei Uhr geseht.

The film have we for three clock see-PAST

"We watched the movie for three hours."

Learners realize that constituents other than the subject may be in first position (the V2 effect), but, at the same time, do not seem to realize that the subject cannot precede the finite verb if this occurs, i.e. the IP-adjunction violations. Learners are not yet making use of the CP domain for German – that the finite verb would be in C and the first constituent would be in Spec CP. Instead, learners still make use of the IP domain and allow the possibility of adjunction. Bizarrely, the learners allow other constituents in the first position as well – as demonstrated when they judge the correct V2 sentences as grammatical. We find zero instances of any construction like Adv, OVS or Adv, XVS. A construction like that might indicate that learners may use of the CP domain while still allowing adjunction. As might be concluded from the Table 6.2, as students reject more headedness violations, they generally accept more V2 structures. Consider now four other students who performed less accurately on the grammaticality judgments:

[17] The student might mean *Tiere*, 'animals'.

Table 6.3

	IP-Adjunction Violation		Headedness Violation		V2 Effect	
	Gramm.	Ungramm.	Gramm.	Ungramm.	Gramm.	Ungramm.
Student 6	2	4	4	2	5	2
Student 7	5	1	2	4	2	5
Student 8	2	4	1	5	3	4
Student 9	4	2	0	6	4	3

By comparison with Table 6.2, one can clearly see that these learners' grammars are not as developed. These learners have a greater tendency to accept headedness violations (Students 6 and 7) and a greater tendency to reject V2 structures (Students 7, 8, 9). Student 7 also accepts far too many headedness issues (all informants other than Students 6 and 7 rejected five or more headedness violations) – I argue that accepting more than one violation of IP-adjunction or headedness violation in this study indicates that the parameter setting has not changed, in keeping my with 70% suggestion. Of all the informants, Student 7 has the most English-like grammar, a head-initial, V2-less grammar (no non-subjects in initial position) that allows IP adjunction as long as the subject still precedes the verb. While it might seem that Student 6 is nearing the native-language grammar in context of IP-adjunction and V2, (s)he accepts far too many headedness violations, indicating that the head parameter has not yet changed. The most interesting case of ambiguity in parametric status comes from Student 9. Student 9 correctly rejects all headedness violations, but wrongly accepts four IP violations and also wrongly rejects three V2 structures. Let us now examine a few sentences from Student 9's free response:

(23)

(a) [A]m Deinstag haben wir der Onzel gebesuckt.

On-the Tuesday have we the ocean visit-PAST

"On Tuesday, we visited the ocean."

(b) Naturalisch, ich will nicht gegangen.

Naturally I want not gone

"Of course, I didn't want to go."

(c) Am Mittwoch, wir haben nach Cumberland Insel im Auto gefahren.

On-the Wednesday we have to Cumberland Island in-the car driven

"On Wednesday, we drove to Cumberland Island."

(d) Am Donnerstag, gibt es stürmisch und regnet wetter.

On-the Thursday gives it stormy and rains weather

"On Thursday, there is stormy and rainy weather."

(e) Am Sonnertag sind wir nach unser Haus gegangen.

On-the Sunday are we to our house gone

"On Sunday, we went home."

(f) Gibt es gut wetter.

Gives it good weather

"There is good weather."

(g) Dann, habe veil Beir getrunken.

Then have-1st-SING much beer drank

"Then, I drank a lot of beer."

This is a very curious case. We find two instances of IP-adjunction violations in (23b) and (23c). At the same time, there are three instances of V2: (23a), (23d), and (23e). (23f) and (123g) are somewhat ambiguous errors – (23f) looks like an attempt at V2, while (23g), which lacks a

subject, might have either been another adjunction error *or* an attempt at V2. This indicates that after a learner acquires the headedness parameter, adjunction and V2 structures might be at odds with each other. This solidifies my earlier argument that certain parameter settings develop in stages. We see that Student 7 (see Table 6.3) accepts 5/6 IP violations, while rejecting 5/7 V2 structures. **As a learner accepts more V2 structures, (s)he should be less permissive with IP-adjunction violations.** While this is the ideal case, this does not necessarily occur as we have seen.

6.5 Discussion and Conclusions

Learners acquire the new parameters in stages. First, they acquire the headedness parameter of German, followed by the V2 parameter. By my own standard of at least 70% accuracy, eleven of the thirteen informants were said to have reset their headedness parameters for German. Since there were no instances of students that accepted at least 5/7 V2 structures and rejected at least 5/6 IP-adjunction violations, zero informants reset the V2 parameter. **The grammar of learners after one semester of German is P(head-final) and P(-V2)**. There is one student, Student 6 (see Table 6.3) that apparently reset his or her V2 parameter without resetting the parameter for headedness. This may, however, be just a fluke, I argue that this student's response is not representative of the study; this informant accepts 4/6 of headedness violations (the most of the entire study), indicating a very English-like verb phrase, while accepting 5/7 V2 structures. The rest of the evidence points to these parameters being acquired in a distinct sequence.

Overall, the results largely support my hypothesis. An extended study similar to this preliminary one would be good for examining the matter further. It would be preferable to have

the study on a larger scale, to use results from both GRMN 1001 and GRMN 1002[18] students and to undertake the study at certain intervals. The headedness parameter seems to be almost unilaterally acquired by this stage (nearing the end of one semester of German for the students), but if the study were undertaken sooner there might be larger variety among the informants.

[18] After non-desirable informants were purged from the study, there were no GRMN 1002 students.

CHAPTER 7

CONCLUSION

Due to the conflicting input of German word order and misinterpretation by L2 learners, learners tend to misanalyse German to be a SVO(V) language. German is truly SVO(V) only in subject-initial main clauses. Learners need to encounter input that contradicts their SVO(V)-hypothesis – SOV in embedded clauses to further illustrate the head-final nature of the verb phrases and non-subject-initial main clauses to demonstrate the V2 effect. The latter is the only input that informs the learners that an SVO(V) analysis does not work, but unfortunately, this is exactly the input that learners do not receive enough of. The V2 effect largely seems to be ignored in the input for quite some time, so that learners can continue on with their SVO(V) analysis. Although learners receive input of the V2 effect, IP-adjunction violations are still very prominent – learners do not seem to have access to UG to decipher that since IP-adjunction does not occur in the grammar (of German), it must be ungrammatical. Indirect negative evidence through UG would mean that if learners have enough exposure to input of the V2 structure, they would determine that IP-adjunction must be ungrammatical. After examining the case study, we find that several learners accept enough V2 structures under my guidelines (at least 70% accuracy) to have changed the parameter setting for V2, yet not a single informant rejected enough IP-adjunction violations to reset the same parameter. We must conclude, then that the V2 parameter has not been reset. Conversely, learners seem to be able to learn German word order regarding main clauses with multiple verbs, i.e. modals and present perfect, fairly quickly, indicating that they *do* have some access to UG, being able to reset the headedness parameter.

The success of acquisition then depends on a learner's ability to consciously analyze the data correctly – the input the learners receive from German is certainly ambiguous. It often takes longer exposure to German for learners' parameter resettings to be triggered. I argue that studies should be conducted to observe exactly when this parameter resetting occurs, and at this point, which parameters reset first. Of course, in the case of some learners, parameters never seem to reset and it should be analyzed why this might occur.

REFERENCES

Bever, Thomas, and Dan Slobin. (1982). "Children use canonical sentence schemas: A crosslinguistic study of word order and inflections." *Cognition* 12, 3, 229-65.

Bialystok, Ellen, and Kenji Hakuta. (1999). „Confounded age: Linguistic and cognitive factors in age differences for second language acquisition." *Second language acquisition and the Critical Period Hypothesis*. Birdsong, David (Ed.); Mahwah, NewJersey, US: Lawrence Erlbaum Associates Publishers, 161-81.

Bley-Vroman, Robert. (1989). "What is the Logical Problem of Foreign Language Learning?" Ed. Susan Gass and Jacquelyn Schachter. *Linguistic Perspectives on Second Language Acquisition*. Cambridge: Cambridge University Press, 41-68.

Bley-Vroman, Robert. (1997). "Features and patterns in foreign language learning." Paper presented at the Second Language Research Forum, Michigan State University.

Chomsky, Noam. (1965). *Aspects of the Theory of Syntax*. Cambridge, M.I.T. Press.

Chomsky, Noam. (1980). *Rules and Representations*. New York : Columbia University Press.

Clahsen, Harald, and Pieter Muysken. (1986). "The availability of universal grammar to adult and child learners – a study in the acquisition of German word order." *Second Language Research* December 2;2 93-119.

Cook, Vivian Jones, and Mark Newson. (2007). Chomsky's *Universal Grammar: An Introduction*. Malden: Blackwell Publishing.

Corder, Stephen Pit. (1973). Introducing *Applied Linguistics*. Harmondsworth, England: Penguin Education.

Curtiss, Susan, Victoria Fromkin, Stephen Krashen, David Rigler, and Marilyn Rigler. (1974) "The Linguistic Development of Genie." *Language* 50,3: 528-54.

duPlessis, Jean, Doreen Solin, Lisa Travis, and Lydia White. (1987). "UG or not UG, that is the question: a reply to Clahsen and Muysken." *Second Language Research* 3: 56-75.

Eubank, Lynn. (1993/1994) "On The Transfer of Parametric Values in L2 Development." *Second Language Research* 9: 253-80.

Fodor, Janet Dean. (1998). "Unambiguous Triggers." *Linguistic Inquiry* 29, 1: 1-36.

Gardner, R. and W. Lambert (1965) "Language aptitude, intelligence, and second-language achievement." *Journal of Education Psychology* 56: 191-199.

Gardner, R. and W. Lambert (1972) *Attitudes and Motivation in Second-Language Learning*. Rowley, Massachusetts.: Newbury House.

Gibson, Edward, and Kenneth Wexler. (1994). "Triggers." *Linguistic Inquiry* 25, 3: 407-54.

Gleason, Jean Berko. (1958). "The Child's Learning of English Morphology." *Word* 14 Aug-Dec: 150-77.

Håkansson, Gisela, Manfred Pienemann, and Susan Sayehli. (2002). "Transfer and typological proximity in the context of second language processing." *Second Language Research* 18, 3; pp. 250-273.

Lightfoot, Brian. (1991). *How to Set Parameters: Arguments from Language Change*. Cambridge, Massachusetts: MIT Press.

McNeill, David. (1966). "Developmental Psycholinguistics." *The Genesis of Language: A Psycholinguistic Approach*. Cambridge, Massachusetts: MIT Press, 15-84.

Penfield, Wilder, and Lamar Roberts. (1957). *Speech and brain-mechanisms*. Princeton, N.J., Princeton University Press.

Ringbom, Håkan. (2007). *Cross-linguistic Similarity in Foreign Language Learning*. Clevedon: Multilingual Matters.

Schneider, Travis, and Ekarina Winarto. (2012). *Common Word Order Errors Among GRMN 2001Students.*

Schwartz, Bonnie, and Rex Sprouse. (1994). „Word Order and Nominative Case in non-native language acquisition: A longitudinal study of (L1 Turkish) German Interlanguage." *Language Acquisition Studies in Generative Grammar*. Amsterdam: John Benjamins, 317-68

Schwartz, Bonnie, and Rex Sprouse. (1996) „L2 Cognitive States and Full Transfer/Full Access Model." *Second Language Research* 7 12,1: 40-72.

Selinker, Larry. (1972). "Interlanguage." *International Review of Applied Linguistics in Teaching* 10,3: 209-31.

Trahey, Martha, and Lydia White. (1993). "Positive Evidence and Premption in the Second Language Classroom." *Studies in Second Language Acquisition* 12: 111-39.

White, Lydia. (1989). "The Adjacency Condition on Case Assignment: do L2 Learners observe the Subset Principle?" Ed. Susan Gass and Jacquelyn Schachter. *Linguistic Perspectives on Second Language Acquisition*. Cambridge: Cambridge University Press,. 134-158.

White, Lydia. (1990/1991). "The Verb-Movement Parameter in Second Language Acquisition." *Language Acquisition* 1: 337-360.

White, Lydia. (1991). Adverb Placement in Second Language Acquisition: Some Effects of Positive and Negative Evidence in the Classroom." *Second Language Research* 7: 133-161.

White, Lydia. (2003). Second *Language Acquisition and Universal Grammar*. Cambridge: Cambridge University Press.

Vainikka, Anne, and Martha Young-Scholten. (1994). "Direct Access to X' Theory: Evidence from Korean and Turkish Adults Learning German." *Language Acquisition Studies in Generative Grammar*, 317-368.

Vainikka, Anne, and Martha Young-Scholten. (1998). "The Initial State in the L2 Acquisition of Phrase Structure." Ed. Susanne Flynn, Gita Martohardjono, and Wayne O'Neil. *The Generative Study of Second Language Acquisition.* Mahwah, N.J. : L. Erlbaum, 17-34.

CASE STUDY FORMS

Part I: Questionnaire
Directions: Read and respond to the following questions. Circle the answer that you feel is most accurate. Please elaborate certain questions in the provided spaces.

1. Age: _____

2. [Male] [Female]

3. [GRMN 1001] [GRMN 1002]

4. Is English your first language?
   [Yes] [No]

   If [No], what is your first language? _____

5. Have you studied German before college?

[Yes] [No]
If [Yes], when and for how long? _____

6. Have you spent a significant amount of time (>2 weeks) in a German-speaking country?

[Yes] [No]
If [Yes], which country/countries? _____

7. Do you have any German-speaking relatives in your immediate family?

[Yes] [No]
If [Yes], which family member(s)?_____

8. Have you studied another language (including English) in a classroom environment?

[Yes] [No]
If [Yes], which language(s)? _____

I authorize the researchers to use my responses for the purpose of linguistic research. I understand that my responses may be used in Travis Schneider's thesis and may be viewed by other parties. I understand that my name will not be associated with my responses.

Name_____ Date_____
(please print)
Name_____
(signature)

Part II: Free Response
Respond to the following question in the space below.
Describe ***in German in at least 150 words*** of a vacation or field trip you once went on. Use the past tense. Feel free to include such details as who was with you, where you went, and what you did. Please count the total number of words to ensure at least 150 words.

Part III: Grammaticality Judgment
Directions: Read the following sentences. Circle [grammatical] if you believe the sentence to be grammatically acceptable. Mark [ungrammatical] if you believe the sentence to be incorrect in some way. Questions regarding lexical items (vocabulary) may be asked.

1. Hoffentlich, er geht nach Hause. [grammatical] [ungrammatical]
2. Ich möchte trinken ein Bier. [grammatical] [ungrammatical]
3. Um zwei Uhr schlafe ich ein. [grammatical] [ungrammatical]
4. Ich fahre mit dem Fahrrad. [grammatical] [ungrammatical]
5. Morgens, ich trinke Kaffee. [grammatical] [ungrammatical]
6. Ich oft gehe zum Park. [grammatical] [ungrammatical]
7. Am Ende, er ist gestorben. [grammatical] [ungrammatical]
8. Sie hat bezahlt die Miete. [grammatical] [ungrammatical]
9. Heute macht ihr Hausaufgaben. [grammatical] [ungrammatical]
10. Er hat Trompete gespielt. [grammatical] [ungrammatical]
11. Morgen laufen wir fünf Kilometer. [grammatical] [ungrammatical]
12. Ich spiele gern Videospiele. [grammatical] [ungrammatical]
13. Natürlich gehen wir zur Party. [grammatical] [ungrammatical]
14. Der schwarze Hund ist sehr groß. [grammatical] [ungrammatical]
15. Abends spielt ihr Fußball. [grammatical] [ungrammatical]
16. Der Vogel hat ein Lied gesungen. [grammatical] [ungrammatical]
17. Wir haben die Pizza gegessen. [grammatical] [ungrammatical]
18. Später treffe ich meinen Freund. [grammatical] [ungrammatical]
19. Abends, ich gehe zum Fitnesscenter. [grammatical] [ungrammatical]

20. Der Hund hat den Mann gebissen. [grammatical] [ungrammatical]

21. Er selten schreibt Gedichte. [grammatical] [ungrammatical]

22. Ehrlich, ich mag ihn gar nicht. [grammatical] [ungrammatical]

23. Ich will haben viel Geld. [grammatical] [ungrammatical]

24. Wahrscheinlich regnet es morgen. [grammatical] [ungrammatical]

25. Sie möchte fahren nach New Orleans. [grammatical] [ungrammatical]

26. Ich kenne den schlanken Mann. [grammatical] [ungrammatical]

27. Er läuft langsam zur Klasse. [grammatical] [ungrammatical]

28. Bestimmt, sie gewinnen das Spiel. [grammatical] [ungrammatical]

29. Ich bin im Meer geschwommen. [grammatical] [ungrammatical]

30. Du darfst länger aufbleiben. [grammatical] [ungrammatical]