The L2 acquisition of German V2 and the status of verb raising to COMP[0]

Darren Tanner
University of Washington

This paper presents findings from a cross-sectional study of college classroom-instructed Anglophone learners of L2 German and their acquisition of German's verb-second (V2) parameter. Previous investigations of V2 in second-language German have noted an empirical distinction in the raising of thematic and nonthematic verbs, indicating that nonthematics appear only in raised positions from the earliest stages of acquisition, while thematic verbs will remain in-situ or raise optionally. However, the dianostics for raising used in these studies only motivate raising within IP; V2 requires the verb to move out of IP to CP. The data in the current study, using subject-verb inversion as an unambiguous diagnostic for V2 and raising to COMP[0], show no preference to raise nonthematic verbs to CP at any stage of acquisition. Additionally, this study provides evidence that functional categories are present from the earliest stages of L2 acquisition, counter claims made by Vainikka and Young-Scholten (1996).

1   Introduction

Much recent generative work on the second language acquisition (L2A) of syntax has focused on the implications of morphological acquisition and associated morphological feature strength (Pollock 1989; Chomsky 2005) on the acquisition of head movement, and in particular verb placement (Eubank 1996; Schwartz and Sprouse 1996; Vainikka and Young-Scholten 1996, 1998; Lardiere 2000; Parodi 2000; Prévost and White 2000; Herschensohn 2001; White 2003). When analyzing the development of L2 morphological feature strength and its effects on verb raising, several scholars have noted an empirical distinction in syntactic distribution between thematic (lexical) and nonthematic (auxiliary, or "light") verbs (Vainikka and Young-Scholten 1996, 1998; Eubank 1996; Parodi 2000). Regardless of the verb raising parameter of the learner's native language (L1) or second language (L2), early L2 learners seem to obligatorily produce finite nonthematic verbs in raised positions (i.e., to the left of VP-adjoined adverbs and sentential negation) (Vainikka and Young-Scholten 1996; Eubank 1996; Parodi 2000), while producing thematic verbs either optionally raised (Eubank 1996; Prévost and White 2000) or obligatorily in-situ (Vainikka and Young-Scholten 1996; Hawkins 2001). While there remains debate over why this happens, it is clear that nonthematic verbs are more likely

to appear in functional head positions than their thematic counterparts in the early stages of second language acquisition.

However, the empirical evidence in the studies cited above only motivates a thematic/nonthematic disjunction in raising when raising is taken to be raising to $INFL^0$ (i.e., to the left of VP-adjoined adverbs and sentential negation (Pollock 1989)). Certain languages, such as German, show a pattern where the finite verb in matrix clauses obligatorily surfaces in second position, the so-called V2 phenomenon. In these cases the finite verb is said to raise past $INFL^0$, to C^0 (Vikner 1995; Schwartz and Vikner 1996; Rohrbacher 1999). Since following Pollock, raising to $INFL^0$ is empirically motivated by the appearance of a verb to the left of adverbs and negation, to test raising to $COMP^0$ (henceforth C^0), one must capitalize on a feature particular to V2 structure—the appearance of nonargumental material, such as temporal or locative adverbs, in sentence initial position followed immediately by the finite verb, with the subject falling in third position (so-called subject-verb inversion) (Hyams 1994). Thus, the focus of this study is precisely that phenomenon: will L2 learners of a V2 language (German), coming from a nonraising L1 (English), make a distinction between thematic and nonthematic verbs in unambiguous V2 strings, allowing raising of nonthematic verbs to C^0 to take place sooner than raising of thematic verbs? The following study presents arguments that when raising to C^0 is implicated, learners do not distinguish between thematic and nonthematic verbs. In presenting these arguments, the paper is organized as follows: section two will present theoretical background of English and German clause structures followed by a brief summary of current theoretical approaches to L2A and the distinction learners make between thematic and nonthematic verbs. Section three will present data collected in the current study and discuss their implications for analyses of head movement in L2A.

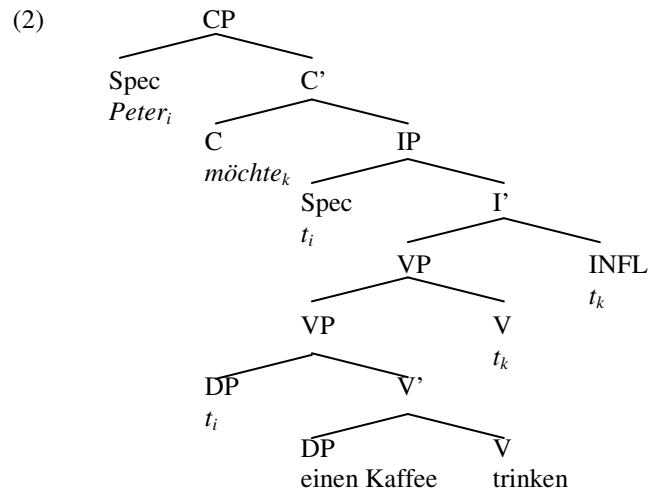## 2   Theoretical background

2.1   Elements of native English and German sytnax

Standard generative approaches to the English (Chomsky 1981, 1995; Haegeman 1994) posit the following structure for declarative clauses:

(1)   IP
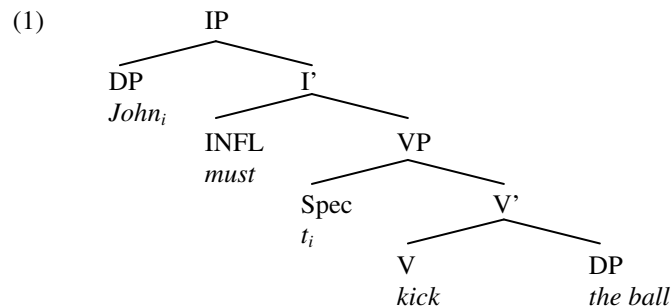
Following Haegeman (1994), I assume that English lexical verbs and aspectual auxiliaries are generated within VP, but only finite auxiliaries may raise to INFL overtly. Chomsky (1995) motivates this asymmetry with regard to raising by postulating that English has <weak> morphological/inflectional features in $INFL^0$, causing lexical verbs to remain in-situ until after Spell-Out. Aspectual auxiliaries, on the other hand, must raise overtly (prior to Spell-Out), since he claims that being void of semantic features, auxiliaries are invisible to LF rules and therefore will cause the derivation to crash if not raised overtly (since LF rules cannot raise invisible elements). Modal verbs form a slightly different class of verbs in English, as Haegeman (1988, 1994) argues that they are generated in $INFL^0$ and are inherently finite. She bases this claim on their complete lack of an agreement paradigm (*he cans), their lack of an infinitival form (*to can), and the fact that they cannot co-occur with do-support (*He does can go), which is also thought to be generated directly in $INFL^0$. Thus, in English modals and finite aspectual auxiliaries will always appear in $INFL^0$, while all lexical verbs and nonfinite auxiliaries will remain in VP until after Spell-Out.

The basic clause of German patterns somewhat differently from that of English, and has the assumed structure below:

(2)
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                    CP
              ┌──────┴──────┐
            Spec            C'
           Peter_i      ┌───┴───┐
                        C       IP
                    möchte_k  ┌──┴──┐
                            Spec    I'
                             t_i  ┌──┴──┐
                                 VP    INFL
                              ┌───┴──┐  t_k
                             VP      V
                          ┌───┴──┐   t_k
                         DP     V'
                         t_i  ┌──┴───┐
                             DP      V
                        einen Kaffee trinken
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Peter	möchte	einen Kaffee	trinken
Peter	would like to	a coffee	drink

"Peter would like to drink a cup of coffee."

As shown above, German is generally thought to have a head-final IP and VP, which accounts for the OV order in finite subordinate clauses and the fact that unraised, nonfinite verbs appear after objects in all clauses. Additionally, finite verbs in matrix clauses uniformly appear in second position, conforming to the so-called "Verb Second" parameter (V2) seen in declarative

matrix clauses in many Germanic languages. Standard accounts of the V2 phenomenon postulate C^0, the usual position of the complementizer, as the landing site for the finite verb in declarative matrix clauses; an additional XP moves to Spec-CP, thus leaving the finite verb always in second position in matrix clauses. This fronted XP is often the subject DP, but other fronted elements can include direct objects, indirect objects, temporal or locative adverbs, prepositional phrases, and full clauses (CP); however, the finite verb is invariably in second position (see Vikner 1995, Schwartz and Vikner 1996, and Rohrbacher 1999 for a full explanation of German V2 and empirical evidence motivating verb raising to CP).

The categorial status of modals and the process of verb raising is somewhat different in German versus English. As noted above, the landing site for all finite verbs in German matrix clauses is C^0. There is also reason to believe that all subclasses of verb in German, including modals, may originate in VP, with overt raising of the finite verb to $INFL^0$ and finally to C^0 to check <strong> inflectional features in the head of IP and an additional <strong> feature in C. Evidence for VP-generation of all German verbs comes from inflectional patterns: German modals do not constitute a distinct morphological class, as they do in English; rather, inflect the same way as the simple past form of lexical verbs. Additionally, German modals can appear with nonfinite morphology embedded under a finite auxiliary and can appear in infinitive constructions. [1] Thus, throughout this study it will be assumed that German modals are not inherently finite as their English counterparts are, and are formally generated within VP along with auxiliary and lexical verbs. The highest verb within VP, regardless of subtype, then undergoes raising to $INFL^0$ and finally to C^0.

2.2   Generative models of L2A

Various theories of L2A have been proposed in the literature within recent years; however, this study will focus on and interpret the data collected with respect to two highly influential proposals about functional categories and the initial state of interlanguage (IL) phrase structure in particular: Vainikka and Young-Scholten's (1996) "Minimal Trees" hypothesis and Eubank's (1996) "Valueless Features" hypothesis. While both of these theories postulates that learners have full-access to UG during the course of acquisition, they make distinct claims about the initial state of the interlanguage grammar, and thus make distinct predictions about how the acquisition process will proceed.

The 'Minimal Trees' hypothesis postulates the initial state of an IL grammar as consisting of only lexical projections, where early IL sentences are VPs which take NP arguments; they presume no functional categories (DP, IP, CP, etc) are present in the initial state and that the only transfer that occurs from

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[1] This argumentation follows Haegeman (1988) where she establishes base-generation within VP for Dutch modals. Rohrbacher (1999) also postulates generation within VP for German modals; he generates English modals within MoodP "Modal Phrase," an IP-level functional category.

the L1 is the headedness parameter of the lexical projections. Their theory is an adaptation of work done by Radford (1990) on child L1A, and proposes that L2A proceeds in a similar fashion to L1A and is uniform for all L2 learners, regardless of their L1. Furthermore, V&Y-S propose that the headedness of the VP quickly resets to that of the L2 and that UG-guided acquisition of functional categories proceeds in phases once the learner processes the relevant triggers for projecting functional phrases. These phases of acquisition begin with the bare VP followed by projection of an underspecified functional phrase ("Finite Phrase," or FP), then a fully specified AgrP (i.e., IP), and finally a complete CP. Through the course of this development, the possibility of verb raising gradually begins to emerge as IP-level functional projections become available. Additionally, V&Y-S state that the acquisition of overt agreement morphology is crucial to the acquisition of features associated with particular functional categories; thus, the development of verb raising corresponds directly to the development of a rich agreement paradigm. The initial VP-stage lacks any overt verb raising, as there are no projections or features to draw the verb out of the VP. Raised verbs first begin to emerge during the FP-stage, as there is a landing site, though it remains optional at this point given the underspecification of features in this projection; this underspecification of functional features follows V&Y-S's observation that their subjects do not productively use verbal morphology at this point, since for them, the two are crucially linked. Finally, when the a full AgrP (=IP) has been acquired, with its full featural specifications and feature strengths fixed, raising to $INFL^0$ become either mandatory or impossible, according to the feature strength of the L2.

Contrasting with this is the Valueless Features Hypothesis (VFH) proposal by Eubank (1996) which claims that the initial IL grammar of an L2 learner is the full phrase structure of the L1, complete with functional projections; however, the feature strength in these projections, he claims, is not supplied by the L1. Rather, all functional feature strength is <inert>, regardless of the <strong> or <weak> features of the L1 and L2. At this point in the acquisition process, verb movement will always be optional; as long as the feature strengths remain <inert>, finite verbs can alternate between raising and not raising. Then, as feature strength in functional heads begins to be fixed to that of the L2, the optionality of finite verb raising will stabilize and resemble verb raising in the L2. Also, Eubank crucially supposes that acquisition of verbal morphology corresponds to the acquisition of feature strength—a similar claim as that made by V&Y-S. For Eubank acquisition of the target inflectional paradigm sets functional feature strength as <strong> for rich agreement and <weak> for poor agreement, following Pollock (1989), Vikner (1995 and 1997), and Rohrbacher (1999) who each link richness of morphological inflection with verb raising in native syntactic systems.

In the two models described above, the predictions for raising made by the three theories for English-German IL are quite similar: beginning learners of German should either alternate between leaving verbs in-situ (in VP) and raising them to a functional head or produce them obligatorily in in-situ, while later learners will obligatorily raise them to a functional head. What is less clear,

however, is which functional head the verbs will be raising to. V&Y-S postulate that once the AgrP stage is reached by learners and raising is no longer optional, acquisition of CP should be in its beginning stages. Therefore, it is Agr^0 that they postulate as the landing site for finite verbs in their 1996 article, as they consider a verb to be raised when it appears with finite morphology and not in sentence-final position; however, V&Y-S make no explicit claim about when and how V2 phenomena should emerge, since their theory does not address verb raising to C^0. However, taking C^0 as the landing site for verbs in V2 structures, V&Y-S's theory would seem to make the prediction that early learners would not allow verbs in second position when non-argumental material has been preposed to sentence-initial position.[2] This follows from their speculation that early learners lack a CP projection, and therefore have no IP-external landing site for verbs. Therefore, if the Minimal Trees Hypothesis holds true, early L2 learners of V2 languages should overwhelmingly reject strings such as Adv-V-Subj, despite their grammaticality in the target language and regardless of whether the verb is thematic or nonthematic. As for Eubank's theory, since he hypothesizes that the initial state contains all of the functional categories present in the L1, C^0 is an acceptable landing site for verbs, and movement to this site should be optional as long as the morphological strength of C^0 is <inert>. Thus, Eubank's theory predicts that early L2 learners of V2 languages should optionally allow unambiguous V2 strings; later learners should always allow such strings.

2.3   The thematic/nonthematic distinction

In V&Y-S's theory, nonthematic verbs play a crucial role in the development and projection of functional phrases. They note that the in the initial stages, learners' utterances lack auxiliary and modal verbs altogether; the VP-stage is characterized by thematic verbs in-situ. Then once learners begin acquiring modal and auxiliary verbs, the FP stage has begun. Because they take these free morphemes to be the relevant triggers for projecting a functional phrase in L2A, nonthematic verbs will obligatorily surface in raised positions—before sentence-medial adverbs and VP-internal arguments. However, as noted in section 2.1, formal approaches to syntax often assume that German modals (and all German verbs) are not inherently finite and are base-generated in VP, with subsequent raising of the finite verb to CP. At this point Vainikka and Young-Scholten assume that modals (and other nonthematic verbs) produced in early IL are base generated in a functional head—a process which does not conform to the distribution of modals in native German—and adopt Steele, et al's (1981) analysis of modals as universally AUX-related elements. Here they assume that UG provides an option for base-generation of finite nonthematic elements outside of the thematic core of the sentence (i.e., VP), since at this point Vainikka and Young-Scholten do not indicate that their subjects have not yet produced nonfinite VP-internal auxiliary verbs. In the FP-stage, thematic verbs, however, may remain in-situ, or optionally raise, as long as features of

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[2] This assumes Spec-IP to be an A-position, disallowing nonargumental material.

tense and agreement remain unspecified. Later learners acquiring a verb-raising language should then obligatorily raise thematic verbs to Agr^0 (or $INFL^0$) once the full agreement paradigm has been acquired. Thus, for V&Y-S, the early stages of learning should show a clear distinction between raising of thematic verbs and raising of nonthematic verbs: during the FP-stage nonthematic verbs will obligatorily appear in raised positions, while finite thematic verbs should alternate between sentence-final and raised positions.

Eubank's theory makes slightly less clear predictions about how or why nonthematic verbs are more likely to raise than thematic verbs; however, he does observe this phenomenon in his data. For example, he notes that in German-English IL data, the nonthematic copula *be* consistently surfaces to the left of sentential negation. Furthermore, he notes that although finite thematic verbs raise optionally, finite nonthematic verbs always appear in raised positions. Parodi (2000) notes the following of Eubank's study (p. 367-368):

> Eubank's (1996) analysis accounts for the optionality of movement with thematic verbs. It does not explain, however, why nonthematic verbs must move and only occur in one structural position. That is, the same feature specification that allows thematic verbs to move enforces movement with nonthematic verbs in the learners' L2 English. Since Eubank (1996) does not discuss nonthematic verbs explicitly, it is not clear what the predictions for the L2 German data studies in the present article would be.

Parodi goes on to examine a corpus of three native Romance speakers acquiring German. She finds, similarly to Eubank and V&YS, that nonthematic verbs never undergo optionality of placement—they appear only in raised positions from the very beginning of acquisition[3]. Thematic verbs, on the other hand, undergo a period of optional raising, which ends when verbs consistently show finite inflection. This distinction between thematic and nonthematic verbs, she argues, stems from a bifurcated way of dealing with syntactic information on the one hand and semantic information on the other in the L2: nonthematic verbs act as carriers of ϕ-features and function as the spellout of INFL, while thematic verbs are carriers of lexical and semantic information. She bases this finding partly on the fact that nonthematic verbs surface from the very beginning with subject-verb agreement in her data; thematic verbs, on the other hand, show a significantly lower rate of target agreement, even at later stages for some

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[3] Parodi's diagnostic for raising is appearance of the verb to the left of negation. She specifically rejects choosing V2 subject-verb inversion as a criterion, as her speakers' native languages (Spanish and Italian) optionally allow (O)VS sequences. Thus, VS strings could be a result of transfer of L1 syntax, rather than evidence of verb raising out of IP. However, this ambiguity is not problematic when analyzing the acquisition of German by L1 English speakers, since English generally disallows VS sequences except in highly marked circumstances (e.g., "Never have I seen such a thing before" and residual V2 in non-subject WH-questions (Rizzi 1996, 1997)).

learners. Interestingly, implicit in Parodi's analysis of verb raising is that "raising" implies target-like raising, i.e. to C^0. However, her diagnostic for raising (negation) only motivates raising within IP; additionally, her explicit analysis of early IL nonthematics as spellouts of $INFL^0$ does not mention if or when the finite verb has moved beyond IP to CP.

Taking the findings of V&Y-S, Eubank, and Parodi in sum, it seems clear that nonthematic verbs are significantly more likely to appear in raised positions in early IL than their thematic counterparts; however, as argued, this raising is only empirically motivated as far as IP. The status of verb raising to CP in English-German IL is the focus of the study that follows.

3   The study

3.1   Subjects, task and methods

This study was designed to elicit grammaticality judgments and translation productions from native speakers of American English learning L2 German in a university classroom setting; however, as this study is as of yet still a work in progress, only data from the grammaticality judgment task will be presented in this paper. Classrooms of first year, second year, and third year German courses at the University of Washington were visited by the investigator, and the students were then asked to voluntarily participate in the study.[4] Additionally, five native German speakers served as a control group and set a benchmark of 100% accuracy on all tasks. As the focus of this study is the acquisition of grammatical structures, and not lexical items, the vocabulary used on the survey was drawn from the first five chapters of the introductory German textbook used in first year German courses at the university. These five chapters are typically covered in the first academic quarter of classroom German, and thus, all of the lexical items used on the survey should be familiar to the test subjects.

Four versions of the survey were made; each contained the same tokens, but the tokens were randomly ordered between the four versions to help control for any list effects. The grammaticality judgment section of the survey had twenty-three tokens, twelve of which were experimental tokens, the rest distracters. In order to make sure the test was explicitly looking for unambiguous V2 phenomena, the experimental tokens all contained either a temporal or locative adverb in initial position. Following the adverb was either a subject DP, modal verb[5], or thematic verb, with the Adv-Subj strings

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[4] The academic year at U. of Washington is divided into three 10-week academic quarters. Three first year classrooms, and one classroom each for second and third year learners were visited. Learners in the first year were in week five of their second quarter of German (German 102), second year learners were in week six of the third quarter of second year German (German 203), and third year learners were in week six the third quarter of the third year (German 303).

[5] I have chosen modal verbs as the nonthematic verbs to use throughout this study, since early classroom learners of German may yet be uncomfortable/unfamiliar with perfective

constituting the ungrammatical cases. All verbs in the grammaticality judgment task contained target-like agreement morphology, regardless of verb subtype or sentence grammaticality. Thus, there were four sub-paradigms within the grammaticality judgment section, each with an equal number of tokens on the survey:

(3)   Grammaticality judgment paradigms with examples of each

a.   Adv-Modal-Subject:
Heute will   sie   ins   Kino   gehen.
Today wants she to the cinema go-INF
"Today she wants to go to the cinema."

b.   *Adv-Subject-Modal:
**Jetzt ich möchte   eine Cola trinken*.
 Now I   would like to a   cola drink-INF
"Now I would like to drink a cola."

c.   Adv-ThematicV-Subject:
Heute kaufe ich Tomaten.
Today buy   I   tomatoes
"Today I'm buying tomatoes."

d.   *Adv-Subject-ThematicV:
**Heute wir gehen ins   Konzert.*
Today we go   to the concert
"Today we're going to the concert."

Participants were asked to simply write "yes" next to tokens which they believed to be well-formed in German, or "no" next to those which they found to be ill-formed in German. Results for all tasks and groups were recorded in Microsoft Excel; statistics were calculated using SPSS for Mac OSX v11.0.2. For the grammaticality judgment task the independent variables in this study were the individual stimulus (i.e., the particular sentence), stimulus type (the four stimulus categories demonstrated in (3) above), verb-type of the stimulus (modal or thematic verb), and grammaticality of stimulus (grammatical or ungrammatical); the dependent variable was the subject's response, recorded as "1" for correct and "0" for incorrect.

3.2   Results

The following table shows a basic summary of results from the grammaticality judgment task:

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aspects in German, and therefore uncomfortable/unfamiliar with nonthematic aspectual auxiliaries. Modal verbs are introduced to the learners in their first academic quarter of classroom study; aspectual auxiliaries are not introduced until much later.

Group	Stimulus paradigm			
	Adv-Modal-Subj	*Adv-Subj-Modal	Adv-ThemV-Subj	*Adv-Subj-ThemV
1st year (n=30)	72.7%	61.1%	72.2%	62.0%
2nd year (n=17)	91.5%	93.8%	95.8%	93.8%
3rd year (n=21)	90.5%	95.2%	98.4%	100.0%
Control (n=5)	100.0%	100.0%	100.0%	100.0%

The percentages in the above table refer to the percentage of correct responses given by each group. Thus, for the grammatical strings (Adv-Mod/ThemV-Subj) the correct response would be "yes," and for the ungrammatical strings (*Adv-Subj-Mod/ThemV) the correct response would be "no."

As can be seen, the native speaker control subjects responded as anticipated 100% of the time; both the second and third year test groups responded correctly in excess of 90% of the time, indicating near mastery of Subj-V inversion when an adverb is in sentence-initial position. The first year group performed slightly worse, but binomial tests for all four stimulus types showed that first year subjects responded correctly significantly more often than chance (50%) on each: for Adv-Modal-Subj and Adv-ThemV-Subj $p<.001$, for *Adv-Subj-Modal $p=.045$, and for *Adv-Sub-LexV $p=.011$. Evaluating the relationship between the verb type and response accuracy, a Chi-square test for independence showed no significant relationship between these two variables, $\chi^2(1, n=357)=0.069$, $p>.05$. In the second and third year data subjects responded significantly better than chance for all individual tokens and stimulus types ($p<.001$ for all tokens and stimulus types). Additionally, the second year data showed no effect for verb type, $\chi^2(1, n=191)=.378$, $p>.05$. The third year data had an unexpected finding, with subjects performing significantly more accurately on tokens containing thematic verbs than modal verbs (Fisher's Exact test, $p=.019$), indicating that this subject group preferred thematic verbs in raised positions over modal verbs in raised positions.

3.3 Discussion

Upon initial evaluation one might view the results outlined above as uninteresting: no subject groups showed a significant preference for raising of nonthematic verbs versus thematic verbs to C^0. In fact, third year learners showed the exact opposite result. However, what is interesting in these findings is how greatly they differ from others' investigations of the acquisition of verb raising and feature strength in functional heads. Recall the findings of Parodi (2000), which showed a marked difference in the structural position for

nonthematic and thematic verbs when the diagnostic for raising is appearance to the left of sentential negation. As argued previously, that diagnostic only empirically motivates raising within the IP domain. However, claims made by both Parodi and Vainikka and Young-Scholten indicate that in early IL, nonthematic verbs may be base generated in an IP-level functional head, serving as either a spellout of, or trigger for, $INFL^0$. When raising is motivated to C^0, through the acceptance and production of subject-verb inversion after sentence-initial adverbs (i.e. V2), the data from this study indicate that this thematic-nonthematic difference does not persist. Rather, the feature responsible for triggering verb movement to CP in English-German IL seems to be blind to thematic features of the verb being raised. However, it should be noted here that the data and findings of Eubank, Vainikka and Young-Scholten, and Parodi were all based on analysis of data from naturalistic learners; the current data comes from classroom learners. This difference in learning environment could be one source of difference between previous findings and those in the current study; thus a corpus analysis of naturalistic learners and the emergence of thematic and nonthematic verbs in V2 strings remains an area for future research. However, it should be noted that research has indicated that classroom learning does not fundamentally change the sequence or process of L2 grammatical acquisition (Pienemann 1998; Gass and Selinker 2001). Thus, drawing a comparison between data provided by naturalistic learners and classroom learners is not methodologically problematic.

An evaluation of the data with respect to the L2 theories of the initial state described in section 2.2 is somewhat inconclusive, however. Recall that the "Minimal Trees" hypothesis of Vainikka and Young-Scholten places a strong emphasis on the acquisition of morphology. After a preliminary analysis of the data in the production task it appears that all groups, including early first year learners, provided agreement morphology in nearly all tokens. However, taking their assumption that modal verbs act as a trigger for projecting IP and are base-generated in this functional head, one could argue that the crucial area of morphological acquisition is for thematic verbs, for which they claim morphology is the trigger for raising. The data in this study show that the first year subjects' production of agreement morphology on thematic verbs is 87.0%, below the benchmark of 90% used by V&Y-S as evidence for a full AgrP. This finding, coupled with the instructors' anecdotal comments about the students' spontaneous use of agreement morphology, indicates that the first year subjects are still within V&Y-S's 'FP' stage, well short of acquisition of the full CP clause structure and an IP-external landing site for the verb. If this is the case, there is no explanation within the Minimal Trees hypothesis for why the subjects allow verb raising to CP at all, let alone significantly more than chance. As for Eubank's "Valueless Features" hypothesis, there appears to be more empirical support in this study. Assuming, as argued above, that the first year subjects have not yet acquired full, productive use of the German morphological agreement paradigm, feature strength of C^0 in the learners' grammars may still be <inert>, but in the process of being fixed to <strong>.

4   Conclusion

Summarizing the results of this study, one can see the following: early L2 learners of German, a V2 language, coming from native American English, a non-verb-raising language, do not distinguish between thematic and nonthematic verbs in unambiguous raising to C^0, the assumed landing site of the verb in V2 languages. This finding contrasts with empirical data which suggests that nonthematic verbs are more likely to appear in raised positions than thematic verbs when appearance to the left of sentential negation and VP-adjoined adverbs is taken as the diagnostic for verb raising (i.e., raising to $INFL^0$). Furthermore, the data collected in this study suggest that a CP projection may be present from the early stages of L2 acquisition, contrary to the claims of V&Y-S. This follows from the observation that the early learners of German, who have not yet acquired full productive use of the German morphological agreement paradigm and are therefore in a pre-AgrP-stage, allow unambiguous V2 strings at a rate well above chance. Additionally, optionality seems to characterize first year learners' acceptance and production of unambiguous V2 strings, lending support to Eubank's hypothesis about valueless features in the initial state of the L2.

While the above findings add to our knowledge of the L2 acquisition process, many questions still remain to be answered about the acquisition of V2 and the interlanguage process in general. For example, since the subjects in this study were all classroom learners of German, the role of direct negative evidence may have had a confounding effect on the outcome. This could have possibly led to a significant difference in the first year data between acceptance of grammatical strings and the rejection of ungrammatical strings, which remains unexplained in this study. Additionally, despite the argument above that classroom instruction does not alter the process of grammatical acquisition, confirmation of this assertion by the study of the same phenomenon in naturalistic learners would be prudent. Thus, a corpus analysis of spontaneous utterances by learners in a naturalist setting remains an area of rich research possibilities in the study of the emergence of verb raising to C^0 and a possible thematic/nonthematic verb difference.

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Darren Tanner
dstanner@u.washington.edu