The Structure of Interlanguages.
The Acquisition of Simple English Interrogatives
in Guided Second Language Acquisition

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D 61

Contents

1. Introduction

> I have the words already. What I am seeking is the perfect order of words in the sentence. You can see for yourself how many different ways they might be arranged.
>
> Frank Budgen, James Joyce and the Making of "Ulysses"

Second languages (L2s) are generally learned to communicate. In order to communicate in a second language, its vocabulary and its underlying rules, such as word order or pronunciation, have to be learned to a certain extent. Ignorance of differing structures and incomplete acquisition or transfer of native language (NL/L1) structures lead to a characteristic learner language. This learner language, or Interlanguage (IL), consists of NL rules, second (target) language (L2/TL) rules and rules which are specific to the learner language and therefore correspond neither to the native nor the second language.

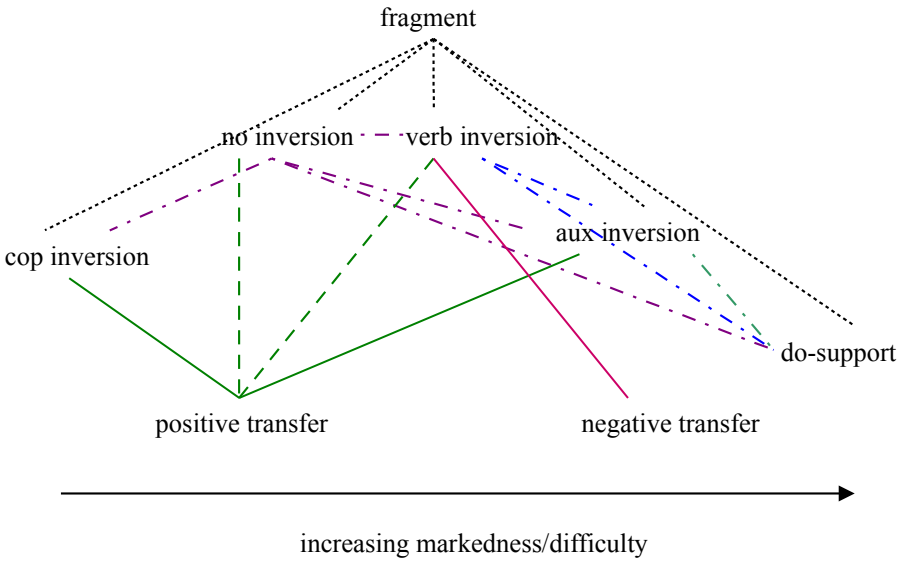
This dissertation focuses on the various stages of development evidenced in the acquisition of simple interrogatives by German learners of English as a second language in a guided second language learning context. A comparison of their IL data shows where problems arise in the acquisitional process.

The thesis is based on a corpus of data which were gathered at four-month intervals over an academic year from 31 participants in three elicitations. Each elicitation consisted of an unstructured and two structured tasks. The participants were grouped into six groups according to how long they had been learning English. Based on this corpus, the developmental processes underlying the acquisition of simple interrogative structures are displayed. Areas where the participants' ILs have developed towards a more targetlike norm by becoming more stable, evidenced by the participants' producing fewer errors, are pinpointed.

In my thesis, I revised Wode's (1978a) developmental stages for the acquisition of simple English interrogatives in natural second language acquisition (SLA). But contrary to Wode's model, my model describes the guided acquisition of simple interrogative structures. Like Wode's model, my model consists of six stages.

Diagram 1.1 below gives a graphical representation of my model's properties which is based on the participants' output:

Diagram 1.1*: *revised model



A comparison of the participants' ILs shows that progress along the developmental hierarchy is very fast as long as the structure of questions is the same as it is in their NL, i.e. *cop inversion* (inversion of subject and copula verb) and *aux inversion* (inversion of subject and auxiliary). The acquisition of *do-support*, which has no corresponding structure in German, is only achieved after several years of studying English.

The dissertation gives evidence that although the medium (oral vs. written) chosen to elicit data from the participants influences the error rate, the produced question type (*yes/no* vs. *wh*-questions) does not. If more processing time is available to carry out a task, as in a written task, the error rate in this task is significantly lower than it is in a corresponding oral task that allows the participants less processing time.

A comparison of the questions produced in the categories *cop inversion*, *aux inversion*, and *do-support* shows that interrogatives requiring *do-support* are especially troublesome for German learners. An analysis of the structure of the interrogatives leads to the result that the percentage of structurally correct interrogatives is independent of the time the participants have been learning

English. A more detailed analysis of the data shows that time independence can also be evidenced with respect to verbal morphology, concord, and negation. Even if the analyses are additionally limited in that only correctly elicited responses are analysed this picture does generally not change.

Correlating a number of different ratios between 'subtypes and other variables' and the amount of time the participants have been learning English shows that time, in some cases, can have an influence on these ratios.

In the unstructured tasks and in difficult contexts, i.e. when complex trigger sentences were presented in the structured tasks, most participants preferred to produce unmarked structures, i.e. structures that do not require the insertion of *do* and its inversion.

The structure of the dissertation is as follows. After introducing the theoretical framework in *chapter 2*, I introduce the aim of the thesis and its methodology in *chapter 3*. In the following *chapter 4*, I then describe the data and its characteristics and carry out an Interlanguage Analysis and modified Error Analyses. Derived from the analyses of the data obtained, I develop and discuss the model (*Diagram 1.1 above*). Statistical tests are carried out and evaluated in *chapter 5*. *Chapter 6* discusses the extent to which the results obtained offer insights into the acquisition of simple interrogative structures in guided SLA. The thesis is concluded in *chapter 7*.

2. Theoretical Framework

In this chapter, I introduce the notion of Interlanguage (IL), give an overview of how IL is analysed and look more closely at variation and its sources, language transfer, typological markedness and the roles these concepts play in second language acquisition (SLA). I then move on to a brief discussion of simple interrogatives and of models postulated for the acquisition of simple interrogatives in natural SLA. I conclude this chapter with a comparison of German and English interrogative structures, pinpointing the differences.

2.1 The Language of the Second Language Learner

Everybody who learns a second language (L2) is aware that there are differences between the way the L2 is spoken by native speakers and the way it is spoken by second language learners. When L2 learners try to communicate in the L2 they neither use the system of their native language (NL/L1), nor the system of the target language (TL); instead, they use a system that is distinct from both NL and TL, although it also shares properties of both.

> […] interlanguages, like fully formed natural languages, are rule governed, although the rules do not always correspond to the rules found in the target language.
>
> (Ellis 1999: 462)

In the following paragraphs, I introduce some notions of learner languages and, specifically, how Interlanguage (IL) is seen today.

2.1.1 Early Notions of Learner Language

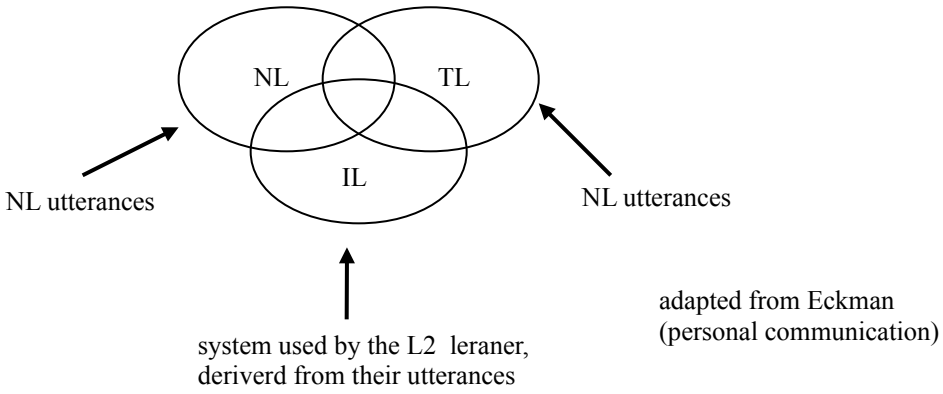
Notions of learner languages were introduced by Selinker (1972), Nemser (1971), and Corder (1971) as Interlanguage (IL), Approximative System and Idiosyncratic Dialect respectively.

Selinker (1972) described the linguistic system of a second language learner as an IL, which is

> […] a separate linguistic system based on the observable output which results from a learner's attempted production of a target language norm. (Selinker 1972: 214)

The IL shares features of both the source language, which is the NL of the learner, and the TL, which is the language the second language learner is attempting to acquire, but it also has IL specific features that cannot be attributed to either source or target language (cf. *Diagram 2.1 below*).

Diagram 2.1: Interlanguage system



The IL system of a learner is derived from his attempted meaningful performance, i.e. his utterances. Adult L2 learners' meaningful utterances differ from the utterances of native speakers in a way that is not always directly attributable to the learner's first language (L1/NL), i.e. to language transfer (cf. *2.2.3 below*). Some of these IL specific utterances can be explained by language transfer, while others can be attributed to developmental processes or are caused by a combination of internal and external factors. Targetlike utterances

reveal that the underlying rules agree with the TL rules. Non-targetlike utterances reveal IL rules that differ from TL rules.

Selinker (1972: 215ff) identifies five central processes and some additional minor ones, such as hypercorrection (cf. *2.2.2.1 below*), which shape the IL and can result in erroneous non-targetlike structures, fossilization (cf. *2.2.1 below*), i.e. the premature cessation of learning where non-targetlike forms are irredeemably incorporated in the IL system (Han 2004: 15) and backsliding, i.e. usage of a structure or rule that belongs to an earlier stage of development (Tarone 1983: 150), especially if the learner is under stress.

Selinker's Five Central Processes:

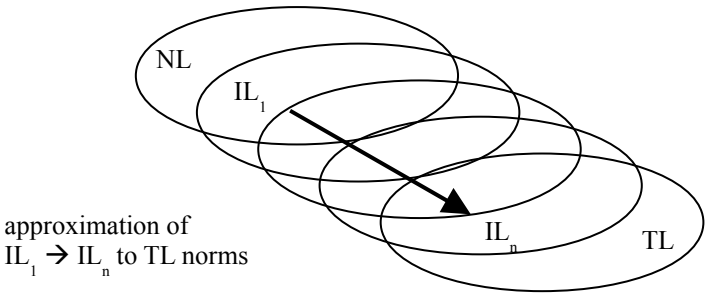
1. LANGUAGE TRANSFER (cf. *2.2.3.1 below*); i.e. erroneous structures which result from transfer of rules from the L1 or from previously learned L2s (cf. *Diagram 2.1 above*); e.g. transfer of pronunciation rules;
2. TRANSFER-OF-TRAINING; i.e. erroneous structures which result from the materials presented to the L2 learner; e.g. over-usage of 3rd person singular pronoun *he* in contexts where *she* is required (Selinker 1972: 218);
3. STRATEGIES OF SECOND LANGUAGE LEARNING; i.e. erroneous structures which result from the way the learner deals with language learning; e.g. avoidance of grammatically conditioned free and bound morphs;
4. STRATEGIES OF SECOND LANGUAGE COMMUNICATION; i.e. erroneous structures which result from how the learner communicates in the L2; e.g. usage of numbers to signify plural instead of marking plural morphologically;
5. OVERGENERALISATION OF TL LINGUISTIC MATERIAL; i.e. erroneous structures which result from extension of TL rules to inappropriate contexts; e.g. extension of the regular plural morpheme to lexemes that form their plural differently, like *ox – oxen* or *mouse – mice*

Nemser (1971: 55) describes the learner language as an approximative system, as the learner's deviation from the linguistic system of the TL when communication in the TL is attempted. He further characterises approximative

systems as being structurally independent because elements that are attributable neither to the source nor to the target language can often be found in the learner system (Nemser 1971: 58).

He characterises approximative systems as being variable according to the proficiency level. This transient character of learner languages allows its system to change over short periods of time, which allows further approximation to the TL norms, represented by *Diagram 2.2 below.*

Diagram 2.2: Interlanguage continuum



Approximation to the TL does not necessarily affect all subsystems of the learner language. The proficiency level of different subsystems can vary, higher proficiency equals further approximation of the learner's system to TL norms. While on one side some subsystems are still permeable, i.e. new rules can be incorporated, and are therefore not stable, other subsystems can, on the other side, have become stable, i.e. incorporation of new rules is no longer possible, due to fossilization.

The learner language or IL continuum (*Diagram 2.2 above*) consists of an evolving series of overlapping L2 grammars, in which each grammar shares rules with the previous one, but each grammar also includes some new items, revised rules, or, sometimes, fossilized structures. These rules can sometimes contradict each other, leading to systematic variability in the learner's performance (Ellis 1994: 352), a possible rule at one stage could be: use 3rd person singular *–s* only with pronouns, use -∅ in all other contexts, e.g. *He lives in London* vs. *Peter live in London*.

Variation in the learner's system can be twofold, i.e. vertical or horizontal variation. Vertical variation is evident in the different stages a learner passes through. Development, i.e. the incorporation of new rules and therefore new variants, is possible as long as the IL system is permeable. Whereas horizontal variation refers to the systematic situational and contextual variation that is evident synchronously within a single stage of development and is seen as a necessary prerequisite for vertical development (Ellis 1985a: 118). Both situational and contextual variability are associated with the use of more than one alternating linguistic variant according to extra-linguistic factors or linguistic context (Ellis 1985a: 119f), e.g. pronunciation differences according to interlocutor or chosen style (Tarone 1983).

Like Selinker (1972), Nemser (1971: 59) proposes the possibility of interference from previously learned languages which can lead to deviations from the TL norm. Nemser states that at different proficiency levels various types of interference such as underdifferentiation, analogy or hypercorrection can be found. During the early stages of language acquisition, underdifferentiation of TL linguistic material is more likely to be found than hypercorrection or analogy, which are more likely to occur during later stages of the acquisitional process.

Corder (1971) describes the language of a second language learner as being a special sort of dialect, calling it idiosyncratic dialect, which is regular, systematic and meaningful and therefore has a grammar which, according to Corder (1971: 151), 'is, in principle, describable in terms of a set of rules, some sub-set of which is a sub-set of the rules of the target social dialect'.

Like Nemser (1971), Corder (1971) states that the idiosyncratic dialect is different from both the NL and the TL of the learner, i.e. it has idiosyncratic rules that are not shared with the rules of any other social dialect, but are idiosyncratic for an individual speaker (Corder 1971: 149). Like Nemser's approximative system, Corder's idiosyncratic dialect is transitional and both leave room for interference from the NL. Corder (1971: 154) further states that a group of learners with the same L1 who had the same learning background have a similar IL. Without this assumption, generalisations about IL would be impossible and one could only make statements about the IL of a single speaker at a time. And, of

course, teaching a group of learners at the same time would be impossible if it cannot be assumed that they speak the same IL.

Table 2.1 below gives an overview of the main characteristics of learner languages as described by the three seminal articles, emphasising their similarity.

Table 2.1: notions of learner languages

Nemser (1971) **Approximative Systems**	Corder (1971) **Idiosyncratic Dialect**	Selinker (1972) **Interlanguage**
deviant linguistic system employed to utilise the TL, elements not attributable to NL and TL	shares some sub-set of rules which is some sub-set of rules of the TL social dialect	a separate linguistic system based on the observable output which results from a learner's attempted production of a TL norm
distinct and structurally independent from NL and TL, internally structured	regular, describable by a set of idiosyncratic rules, which are shared with others of the same NL background	separate linguistic system
variation	variation	variation
interference	interference	fossilization because of: • language transfer • transfer-of-training • strategies of L2 learning • strategies of L2 communication • overgeneralisation of TL linguistic material
transient, evolving series, frequently changing	transitional dialect, unstable	
permanent intermediate systems and subsystems	systematic	

2.1.2 Interlanguage Today

Adjemian (1976) further broadened the notion of IL by arguing that ILs are natural languages because, like all natural languages, they obey a set of consistent linguistic constraints. They have a linguistic system of their own, which generates IL utterances. These IL utterances can differ from the output a native speaker would produce in the same linguistic context.

Like natural languages, ILs are used for communication; mutual intelligibility among the speakers who share an IL is given (Adjemian 1976: 300). Another property that ILs share with natural languages is that ILs can be idealised

so that they are describable and analysable by linguistic theory (Ellis 1994: 363). What distinguishes ILs form other natural languages (L1s) and is probably their most striking characteristic is, unlike L1s, ILs are in a constant state of flux, at least until development ceases. The success of the acquisitional process is almost always incomplete in SLA whereas in first language acquisition it is almost always complete (Adjemian 1976: 307).

ILs are systematic, i.e. they are internally consistent and rule governed. This internal systematicity allows the learner to make grammaticality judgements based on their current IL grammar (Braidi 1999: 20), though not reliably on native speaker language since the native speakers' knowledge and the L2 speakers' underlying knowledge may differ to some extent.

Although they are systematic (Adjemian 1976: 307), ILs are, in contrast to other natural languages, permeable. L1s are relatively stable and not as permeable and dynamic as ILs. The permeability of IL allows the penetration of grammatical properties of other languages into the IL, thereby distorting targetlike rules in the IL in order to communicate. When this happens the wish to communicate outweighs the desire to adhere to grammar, so that output can be produced that would in other situations not be allowed by the current IL grammar. Permeability also allows the learner's overgeneralisation of TL rules and usage of learning strategies, to make initial hypotheses about the TL and to simplify the internal organization. Depending on how far the L2 learner has progressed in acquiring the TL, the IL becomes more stable in different subsystems and therefore less permeable in these subsystems for transfer. A subsystem can be stable and therefore no longer permeable for the following reasons: a subsystem loses its permeability and becomes stable because it reached the TL norm and further progress is not possible; or, regress in the forms of backsliding or attrition occur; or a subsystem becomes stable and loses its permeability because it fossilizes (Adjemian 1976: 316; Braidi 1999: 20; Han 2004: 18). The permeable character of ILs and their being in a constant state of change complicates their identification and description.

According to Adjemian (1976: 311), stability in ILs is defined through overall systematicity. As long as an IL is unstable it changes and can be

characterised by substantial variation (Adjemian 1976: 318), and new rules can be incorporated into the system (Towell & Hawkins 1994: 5); existing, and sometimes competing, rules can be changed or dropped (Meisel, Clahsen & Pienemann 198: 114).

Relative to TL norms, stability in ILs can result in correct and erroneous forms, which are, as long as they occur systematically, an evidence for stability. Fossilization and backsliding are both evidence for the stable character of ILs because both occur systematically.

Fossilization is possible in some subsystems of the IL grammar from the beginning stages of L2 acquisition, while in other subsystems development towards the TL is still in progress (Han 2004: 7; Selinker 1992: 225). Fossilization can, according to Selinker (1972: 220), be the result of the learner's usage of avoidance strategies or when the motivation of learning is low (Huebner 1983: 38). A fossilized structure is a structure where the acquisition process has stopped before TL competence is achieved; it can be either realised as an error, i.e. if the fossilized structure does not correspond to the TL norm, or a correct structure, i.e. if the structure fossilized at a developmental stage where the fossilized structure corresponds to the TL norm (Ellis 1985b: 48). Fossilization can occur in all linguistic subsystems. Speakers with different NL backgrounds will tend to have different, characteristic fossilized structures in their ILs which cannot be removed from their ILs, no matter how much input they receive once the structure or subsystem in question is fossilized (Selinker 1972: 215), e.g. in the English ILs of L1 German speakers one often finds that final voiced obstruents are devoiced. Fossilization has been linked to a variety of causes which often work together. These include: absence of instruction/corrective feedback; satisfaction of communicative needs; lack of acculturation; maturational constraints; L1 influence; lack of opportunity to use TL; avoidance; transfer of training; reduction in the computational capacity of the language faculty (Han 2004: 26f).

Contrasting with this is the case of backsliding, which is always towards the IL norm, where learners have an alternative active rule in their competence. The occurrence of both fossilized elements and backsliding are triggered by sociolinguistic factors.

Continued development of the IL also results from sociolinguistic factors. As long as the learner assumes his communicative skills need further refinement, their IL continues developing towards the TL norm. As soon as he is satisfied with his communicative skills in a subsystem of the IL, it fossilizes, while the other subsystems continue to develop (Ellis 1982: 220; Ellis 1989: 38).

IL systems have come to be accepted as systematic grammars with their individual rules which can be studied in their own right. The internal logic of ILs is no longer obscured by seeing them only as systems resulting from language contact (Bley-Vroman 1983: 15).

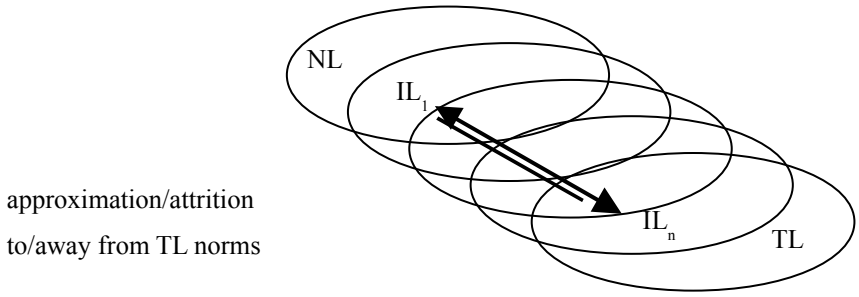
Today the term Interlanguage is used to refer both to the system a learner has created at a single point in time and to the series of overlapping systems that learners develop in their acquisition of a second language, cf. Interlanguage vs. Interlanguage continuum (Ellis 1994: 350).

IL is understood as a chain of grammars which is created by the L2 learner at subsequent points in the acquisition of the L2. At any given time, an IL is characterised as being systematic, permeable, transitional and discrete. "Systematic" refers to being rule governed and consistent, transitional refers to the fact that they change as development progresses. ILs are discrete because one stage of an IL is distinguishable from the preceding or following stages by means of internal development. Evidence of these distinguishable stages comes from U-shaped behaviour (Kellerman 1985), where the learner first passes through a stage in which a structure is used with few or no errors. In the following stage, the previously correctly used rule is used in correct and in incorrect contexts leading to errors. In a final stage the rule is only used in correct contexts.

IL theory recognises the active part that learners play in creating their IL. The language the learner produces, targetlike and non-targetlike output alike, is considered to be rule-governed (Ellis 1994: 44).

Although the concept of L2 attrition was not included in the early theories of L2 acquisition, it should nevertheless be included at this point because it emphasises the variable and transient character of the learner language, revising *Diagram 2.1* we derive the following *Diagram 2.3 below.*

Diagram 2.3: chain of IL grammars



Therefore, just as continuing contact with the TL can lead to further approximation to the TL norm, at least in some subsystems, continuing lack of contact with the TL can lead to attrition of L2 knowledge.

2.2 The Analysis of the Learner's Language

In the following section, I introduce the notions of errors, variation, language transfer, markedness, and developmental patterns. I explain the role they play in the acquisition of a second language and how they are interrelated.

2.2.1 Errors

In the next passage, I look at deviant linguistic forms. I introduce the notion of errors and mistakes, and how these two can be distinguished, outlining the problems that arise with the recognition and categorisation of deviant linguistic forms. I conclude this passage with a brief description of Error Analysis and the role it plays in my thesis.

2.2.1.1 What is an Error?

> [An error is] 'a linguistic form or combination of forms, which, in the same context and under similar conditions, would, in all likelihood, not be produced by the learner's native speakers counterparts' (Lennon 1991: 182)

During the 1950s and 1960s, errors in SLA were looked at mainly from the pedagogical point of view. Errors were explained as a result of language contact between the NL and the TL and were considered to be something that had to be eliminated. This view of the 1950s and 1960s changed when Corder (1967) published his article "The significance of Learner's Errors". Corder saw errors as a means from which linguists are able to reconstruct a learner's current knowledge of the TL and therefore of the learner's underlying system, the IL. By then errors were seen as a developmental necessity (Wode 1978b: 233) in the process of language acquisition and not only as something that had to be corrected by the teacher.

For an error to be evidence of the learner's IL, the distinction between performance and competence errors has to be made (Corder 1967: 10). This distinction is important because errors of performance are unsystematic while errors of competence are systematic, and are therefore a representation of the underlying system of the speaker's IL (Corder 1967: 167). Only errors of competence are referred to as errors, while the others are referred to as mistakes. The main characteristic of mistakes is that by being unsystematic, they are expected to be self-correctable by the learner. In contrast to this, errors are not self-correctable because they represent the underlying system, the IL. For the learner this underlying system is systematic. 'Errors are only errors with reference to some external norm (in this case the TL)' (Gass & Selinker 1994: 67). Therefore, what the linguist describes as an error, is systematic and correct for the learner in their IL.

The distinction between error and mistake is gradient (Arabski 1979: 18):

I. a speaker does not correct himself after his attention is drawn to the error;
II. he corrects himself after his attention is drawn to the error;

III. he corrects himself some time later (e.g. when reading a text written by himself);
IV. he corrects himself immediately (usually in speech).

Distinguishing between errors and mistakes as lack of knowledge and as failed performance respectively is not unproblematic in itself. Can we assume that native speakers who deviate from the norm and who do not correct themselves lack knowledge instead of just failing to perform or do not bother to correct themselves? No. One cannot always be sure that a deviation from the TL norm is an error only because the speaker did not correct themselves. A good example would be slips of the tongue, which are usually not corrected when occurring in fast speech, by both native speakers and L2 learners. Slips of the tongue are considered to be mistakes, although like errors, they are corrected immediately. A second problem that arises from the distinction between error and mistake is that it is taken for granted that competence is homogeneous instead of variable. What is also often overlooked in the analysis of a learner's errors is that the learner's knowledge of a structure may be partial. Deviations in areas the learner has already learned can be attributed to failed performance or lack of automatization, whereas deviations in areas not yet learned represent lack of knowledge (Ellis 1994: 51).

In my thesis, only stage IV of the above stages is considered to be a mistake. Though stage III can also be considered as a mistake, none of the participants used the possibility to correct written mistakes through rereading their answers.

Corder (1971: 155; 1973: 272) further distinguishes between overt and covert errors. An overt error is an error where the deviation is obvious in the surface form (example taken from my corpus).

trigger	Mel is drinking <u>a milk shake</u>.
response	* *What does Mel is drinking?* (Cathy)

elicitation I – task II

Whereas covert errors, though superficially well-formed, do not convey the meaning the speaker intended to express or do not fit to the context or task (example taken from my corpus).

trigger	Mel is drinking a milk shake.
response	**What does Mel drink?* (Larry)
expected response	*What is Mel drinking?*

elicitation I – task II

What does Mel drink? is a well-formed sentence, it is only considered as non-tasklike in my corpus because the tense of the elicited interrogative does not fit to the tense required by the trigger sentence.

A distinction between error and mistake can also be used to make claims about the implicit and explicit knowledge of a speaker (James 1998: 85f), and therefore indirectly about their development:

- −ACQUIRED −LEARNED: neither explicit nor implicit knowledge of the TL form in question. Errors cannot be corrected;
- +ACQUIRED −LEARNED: implicit, but no explicit knowledge of the TL form in question. Errors can be corrected with the help of implicit knowledge, but correction cannot be explained. Mistakes can occur due to lack of automatization. Many native speakers also fall into this category, they have acquired their mother tongue, but lack explicit knowledge about their L1, i.e. they have no metalingual knowledge;
- −ACQUIRED +LEARNED: explicit, but no implicit knowledge of the TL form in question. Errors can be corrected and the rule used for correction can be explained;
- +ACQUIRED +LEARNED: both explicit and implicit knowledge of the TL form in question. Errors do not occur. Mistakes can be corrected. The learner can explain the rule used and has an awareness for what is correct.

When analysing errors, one has always to keep in mind that every error is a relative phenomenon and is an error only when compared to some other norm, i.e. the TL.

> The whole concept of error is an intrinsically relational one. A given feature of an [IL] is an error *only* in its own terms the [IL] is a completely well-formed system.
>
> (Hawkins 1987: 471)

If a learner uttered a sentence like *the lady see it* there would be little disagreement that the learner produced a deviant sentence. Using Standard English English as the reference language, the error can be either the omission of the 3rd person singular *–s*, or the omission of the plural marker *–s*. But what if the learner did not choose the standard variety as their TL model, but a variety like African American Vernacular English (AAVE). If the learner used AAVE as the TL model then the sentence *the lady see it* is correct because AAVE does not use inflection in present tense to mark 3rd person singular (Crystal 1995: 347). As the examples above show, identification of errors is not straightforward and considerable variation exists as to what is regarded as erroneous. Hughes and Lascaratou (1982), for example, asked native speakers of English, native-speaking teachers of English and non-native speaking teachers of English to judge correct and erroneous sentences. Hughes and Lascaratou were able to show that all judges varied in what was considered to be *correct* English sentences, e.g. correct sentences, such as *neither of us feels happy*, were sometimes judged as erroneous (Hughes & Lascaratou 1982).

Without context and clarification concerning the variety of the TL the learner has chosen to learn, it is a hard to decide what counts as an error and what does not.

Another problem, closely connected to which variety should be chosen as the reference norm, is that generally a written standard is chosen (Ellis 1994: 51). This can lead to complications if the data described are oral data because oral language production fundamentally differs from written language production, i.e. what is regarded as acceptable and correct if produced orally does not necessarily apply for written language. For example usage of the adjective

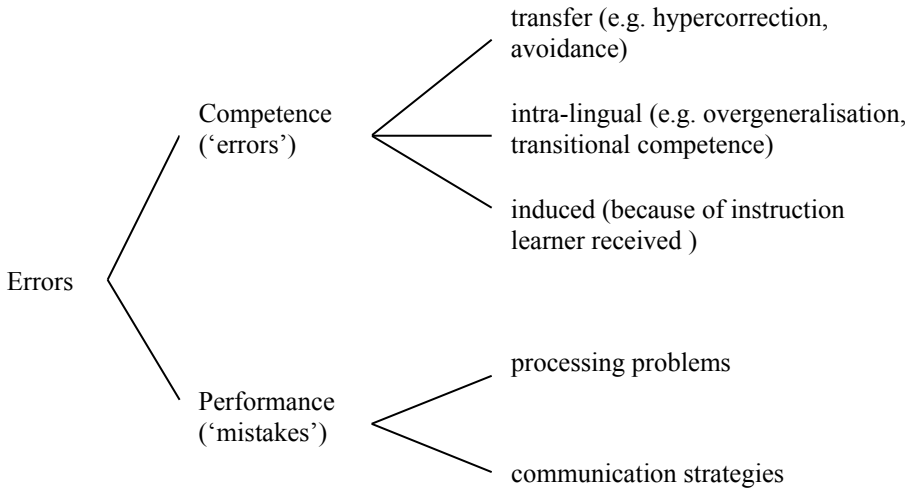
awesome with the meaning 'excellent' as in *"The results of his test were awesome."* is appropriate in a spoken statement, but not in a formal written text.

A further problem is that with a rising degree of informality the oral discourse of native speakers is full of false starts, incomplete clauses and other features that are generally connected with deficient language (Lennon 1991: 182). The discourse of L2 learners, like the native speakers' discourse, exhibits the same features; however, for the L2 learner this is generally counted as erroneous language production.

In my thesis, I use Standard English English as the norm for both written and oral tasks because my participants have had little exposure to English outside school.

The identification of errors is not easy, nor is the classification of errors and mistakes into categories that try to explain their source. A number of sources have been claimed that give rise to learners' errors. Ellis, for example, proposed the following sources for errors (*Diagram 2.4 below*).

Diagram 2.4: sources of errors (adapted from Ellis 1994: 58)



Overgeneralisation and hypercorrection, though being similar concepts, nevertheless have to be distinguished. Hypercorrection is often caused by influences from the L1 (Odlin 1989: 38), though I would also include the possibility of transfer from all previously learned L2s. While hypercorrection can

be attributed to interference from the NL, overgeneralisation has its source in the TL. Hypercorrection refers to the application of a pattern (rule) into a context that would have been correct without this application, while overgeneralisation means the application of a rule to new environments or contexts (Eckman personal communication). Both hypercorrection and overgeneralisation lead to deviant forms, but if the person had not hypercorrected, the result would have been correct.

Richards claims that competence errors made by language learners can be subdivided into three types (Richards 1974: 173), depending upon the origin of the error. According to Richards, errors are either induced by the NL (interference errors) or they are induced by the TL (intra-lingual and developmental errors):

- INTERFERENCE ERRORS, caused by the structure of the native language, e.g. L1 German speakers of L2 English:
  Where lives Erik?
- INTRA-LINGUAL ERRORS, originating in the structure of the TL itself, e.g. dummy *do* for question formation in L2 English:
  Did he talked?
- DEVELOPMENTAL ERRORS, reflecting the strategies employed to acquire the TL, e.g. *is* as present tense marker in L2 English:
  She is speaks Japanese.

Richards' explanation for the source of errors is similar to Ellis', though Richards excludes instruction as a possible source for learners' errors. His distinction between intra-lingual and developmental errors is unnecessary (Schachter & Celce-Murcia 1977); most researchers work with only two categories, i.e. interference and intra-lingual errors.

A slightly different framework to explain the sources of learners' errors is Corder's (1974) distinction of systematicity:

- PRESYSTEMATIC ERRORS occur when the learner is unaware of the existence of a particular rule in the TL. These are random;

- SYSTEMATIC ERRORS occur when the learner has discovered a rule, but it is the wrong one;
- POSTSYSTEMATIC ERRORS occur when the learner knows the correct TL rule, but uses it inconsistently (i.e. the learner makes a mistake).

Other frameworks for the description of errors exist where the categories mentioned above are further subdivided. But it is questionable whether further subdivision is desirable and practicable.

Describing and identifying errors is complicated. The source of the majority of the learners' errors is unclear; classification into clear categories is further impeded by the fact that most errors have more than one source (Ellis 1994: 69).

Many studies have shown that a large number of the learners' errors seem to be developmental (Ellis 1994: 61). Transfer errors, according to Kellerman (1983), occur only if the learner has noticed that the L2 structure in question is similar enough to the corresponding L1 structure to be transferable. Structures that are 'infrequent, irregular, semantically or structurally opaque, or in any other way exceptional' (Kellerman 1983: 117) are not judged to be transferable by L2 learners. Other researchers like Taylor (1975) claim that advanced learners produce less transfer errors than intermediate learners and beginners.

The task used to elicit the data can influence the number and source of errors, for example, the transfer of NL pronunciation in free speaking tasks, but not in formal reading tasks of word lists (Major 2001: 12).

2.2.1.2 Error Analysis

> EA is … the study of linguistic ignorance, the investigation of what people do not know and how they attempt to cope with their ignorance. (James 1998: 1)

Error Analysis replaced Contrastive Analysis in the 1970s. Unlike Contrastive Analysis, which aimed to predict learners' errors by comparing the linguistic differences between the learner's L1 and L2 (Ellis 1994: 47), Error Analysis does

not include the learner's L1 in the description of the learner's errors (James 1998: 5). Error Analysis aims at describing and explaining learner's errors, not at predicting them, bringing to light the difficulties that learners actually have. These difficulties emerge as errors (Braidi 1999: 12) or avoidance of specific structures. The more frequent a specific error occurs with a structure, the more difficult this structure is to acquire (Braidi 1999: 12).

The study of Error Analysis, and therefore the errors in themselves, is considered to be of importance in three different ways (Corder 1967: 10):

- TO THE TEACHER, by telling him how far the learner has progressed in acquiring a language, if a systematic analysis is carried out;
- TO THE RESEARCHER, by contributing evidence of how a language is learned and what strategies are employed by the learner;
- TO THE LEARNER, by being a device of hypothesis testing, concerning how a language functions. This strategy is applied by both first and second language learners.

Every Error Analysis that aims at revealing more than just how far a single learner has progressed, i.e. one that aims to contribute evidence of how a language is learned and what strategies are employed by the learner, should be based on a corpus in which the elicited errors are systematic in a given IL and where the error analyst knows what the learner wanted to express with each utterance (Arabski 1979: 26), i.e. no covert errors are included in the corpus.

Though Error Analysis has its drawbacks, it also has its advantages, for example, giving indications about the underlying system the learner has acquired or serving as a tool to show that many of the learner's errors are developmental instead of interference errors (Ellis 1994: 70), helping to support the claim that learner language is 'creative'. Error Analysis also led to a change in the perception of learners' errors, they were no longer seen as something that had to be eradicated, but as a necessity of the learning process (Ellis 1994: 70). 'Everything the learner utters is by definition a grammatical utterance in his dialect' (Corder 1971: 32).

But Error Analysis also has its drawbacks:

- IDENTIFICATION OF ERRORS: Is the identified error really an error, or is it just a mistake which has been classified as an error because of misinterpreting the data, i.e. not scoring it as a slip of the tongue, or is the error really an instance of a certain phenomenon and not an instance of another phenomenon?
- ANALYSIS OF ERRORS: Errors are usually analysed in isolation instead of analysing them in conjunction with those structures that are used correctly and with those that are not used at all (Schachter & Celce-Murcia 1977). The learners' avoidance of a structure can lead to a distorted result if this avoidance is excluded from the analysis; if a difficult structure is only used in contexts when the learner is sure of using it targetlike and avoided in contexts that the learner thinks too difficult this learner will produce relatively fewer errors than a learner who does not avoid the same structure and therefore uses it more often when they are not sure of using it targetlike (Kellerman 1977; Schachter 1974).
- THE LEARNER'S COMPETENCE: It is generally assumed that the learners' competence is homogeneous and not variable. The possibility that knowledge of a TL form can be partial instead of complete is not considered (Ellis 1994: 51), i.e. if a TL form is sometimes used correctly and sometimes incorrectly, this does not inevitably mean that the target form in question has been acquired and deviations are to be considered as mistakes.

I nevertheless use Error Analysis as a tool for analysing the non-targetlike output because it helps identifying the changes involved in the acquisitional process, i.e. it helps describing the developmental stages of questions (cf. *Table 2.3 below*). A change in the types of errors shows how the participants' ILs evolved during the data gathering period. By analysing the errors L2 learners make in question formation, this subsystem of their ILs can be characterised indirectly. The errors that occur show the underlying IL rules for interrogative

structures that differ from the TL rules. The developmental stages are a direct representation of the IL rules regarding question formation of my test persons. Due to the relatively small corpus I use, one of the disadvantages of Error Analysis, namely, analysing every non-targetlike output as an error, could not be avoided. The other drawback of Error Analysis is not very likely to play a role in my analysis. Evaluation of targetlike structures as errors due to misinterpreting the intention is not likely to have happened, because I was able to clarify the context if a participant's intended statement was unclear.

Analysing the non-targetlike output enables me to infer the IL rules the participants apply for the elicited structures.

2.2.2 Variation

In the next passage, I introduce the concept of L2 variation, introducing the most important types of variation and sketching some of the sources that can trigger variation. I conclude this passage by outlining the role variation plays in SLA.

2.2.2.1 Definition of Variation

The language of second language learners is characterised by a high degree of variability. Versions of one construction often occur as more or less targetlike variants, within short periods of time and often within one speech turn (Mitchel & Myles 2004: 224). Variation is a pervasive feature of language use. It has been shown to occur in all levels of language use (Gass, Madden, Preston & Selinker 1989: 4; Tarone 1983). What we say and how we say it can be influenced by a variety of factors. What we want to express can be the same thing, but how we express it can differ according to context, interlocutor, etc. *I wondered if you could open the window?* and *Would you open the window?* essentially mean the same, though differ in politeness.

Theories trying to account for IL variation can be divided into two main schools of belief. One group of theorists links variation to various psychological processes, while the other group of theorists links variation to sociolinguistic and discourse factors (Tarone 1989: 15). Psychologically based theories relate variation to the learner's use or non-use of the Monitor (Krashen 1981; 1982), the learner's use of controlled or automatic knowledge (Ellis 1985b) or the amount of attention paid by the learner to different task types (Tarone 1983). The sociolinguistically and discourse based theories relate IL variation to external factors like the linguistic environment (Meisel, Clahsen & Pienemann 1981) or to form-function relationships and social-situational factors (Littlewood 1981).

2.2.2.2 Types of Variation

Variation is used in different concepts, of these, I introduce the most important ones below.

- INTERPERSONAL VS. INTRAPERSONAL VARIATION: Interpersonal variation refers to variation within a speech community, i.e. the variation evident in a group of second language learners who have the same L1, or the variation between male and female speakers, whereas intra-personal variation refers to the variation that is evident within the output of a single speaker (Edmondson 1999: 210). Different variants can be triggered by differing contexts, but this must not necessarily be the case; variation can also occur within the same context.
- HORIZONTAL VS. VERTICAL VARIATION: Variation in learner language has been attested throughout time, during the incorporation of new rules and structures into the IL, i.e. vertical variation, and situationally induced at the same time, i.e. horizontal variation (Ellis, 1985a: 119f). In both vertical and horizontal variation more than one variant is used to perform the same function (Ellis, 1985a: 119f). If new rules are incorporated into the IL system they are first used interchangeably (free

variation). Over time, the contexts in which each rule applies are reformed, leading to vertical growth, which equals sequential development (Ellis 1985a: 118; 1989: 37). After the competing variants have been redistributed to be used for specific purposes, variation that is then attested is systematic and rule-governed (Ellis 1994: 153; 1999: 462).

- NON-SYSTEMATIC VS. SYSTEMATIC VARIATION: Non-systematic (free) variation cannot be attributed to rules. We speak of free variation if

> two or more variants occur randomly in (1) the same situational context, (2) the same linguistic context, (3) the same discourse context, (4) perform the same language function, and (5) are performed in tasks with the same processing constraints. (Ellis 1994: 136)

Ellis proposes that reasons for non-systematic variation are twofold: it is either the result of performance problems, i.e. through memory lapses, or it is the result of competing rules (Ellis 1985a: 121) that have not yet been systematically incorporated into the IL. Ellis claims that free variation is a very fleeting phenomenon because it is very inefficient to maintain a system that has too many opposing rules. New rules are therefore quickly incorporated into the existing system or abandoned (Ellis 1985a: 126). Therefore, if a new rule enters the IL grammar, it non-systematically competes with existing rules. Ellis (1985a) essentially states that without initial free variation, systematicity and systematic variation cannot later exist. An example of non-systematic variation could be a learner who initially uses 3rd person singular *–s* inconsistently and unpredictably in a variety of contexts. Systematic variation, in contrast to non-systematic variation, is rule-governed, though variants used in the same situations by L2 and L1 speakers can differ (Ellis 1994: 121; Tarone 1983). An example of systematic variation could be a learner who uses 3rd person singular *–s* on verbs which have the pronouns *he/she/it* as their subject and *–∅* in all other contexts. Distinguishing between systematic and non-systematic variation can sometimes be problematic. Some of the rules that underlie

systematic variation are so complex that, especially in a small corpus, systematic variation can mistakenly be analysed as non-systematic variation (Ellis 1999: 463).

- VARIATION INDUCED BY TASK, LINGUISTIC OR SITUATIONAL CONTEXT: Task, linguistic and situational context are other factors that can lead to variation (cf. *2.2.2.1 above*).

2.2.2.3 Sources of Variation

ILs are, like natural languages, subject to a number of types of variation. Though the variants found in L2 output are not necessarily the same as those found in L1 output, the sources of variation are the same (Ellis 1994: 121; Tarone 1983).

The choice of a variant can be influenced by a variety of both extra-linguistic factors or linguistic context such as

- COMMUNICATION STRATEGIES: e.g. avoidance; paraphrase of unknown or difficult structures; code-switching (Towell & Hawkins 1994).
- USING KNOWLEDGE FROM MULTIPLE SOURCES: e.g. transfer (Mitchel & Myles 2004: 227; Towell & Hawkins 1994). Depending on the accessibility of each of the multiple sources of knowledge different varieties are likely to be chosen in similar contexts.
- PROCESSING PROBLEMS: e.g. choice of a wrong form/word (Towell & Hawkins 1994).
- COMPETING REPRESENTATIONS OF A FORM: e.g. regularisation of a past tense form of an irregular verb (Adamson & Elliott 1997: 90).
- TASK: The task can influence the choice of morphological, phonological and syntactic variants (Tarone 1983: 143). The choice of a phonological variant can for instance be influenced by the style the speaker chooses, e.g. transfer of NL pronunciation as one variant, contrasting with a more targetlike variant; the choice of the variant depends on the formality of

the task, e.g. reading minimal pairs vs. free speech (Braidi 1999: 14; Major 2001: 12). The social status of a sound in the NL can influence whether this sound, if transferred, is used in more formal or in more informal contexts.

- SITUATIONAL CONTEXT: Extra-linguistic factors like interlocutor, amount of attention or topic can influence the variety the learner chooses, e.g. careful or vernacular. The chosen variety again influences which variants are used (Braidi 1999: 14; Ellis 1985a: 120; Tarone 1982).
- LINGUISTIC CONTEXT: The linguistic context of a variable can trigger that one specific variant is chosen in this context, rather than another one (Edmondson 199:116; Ellis 1994:143; Tarone 1983: 142), e.g. 3rd person singular *–s*. The choice of the variant [±*s*] can be influenced by the corresponding subject. A learner might have formulated the following IL rule: add *–s* to verbs if the corresponding subject is one of the pronouns *he/she/it*; use *–∅* in all other contexts.
- SOCIAL FACTORS: Social class, age or gender can cause variation (Ellis 1994: 121). Whether all of these variables can also account for IL variation is still open to debate.

2.2.2.4 Variation in Second Language Acquisition

During all developmental stages the learner's grammar consists of competing rules. The choice of one specific rule over another can either depend on a variety of factors, as we have seen in *2.2.2.3 above*, or can be arbitrary. This high variability of the IL makes it difficult to state what the learner knows, i.e. has acquired, and which structures are still in the process of acquisition (Ellis 1985a; 125; 1994: 139).

When new structures are incorporated into the IL they are at first only used in the context in which they were originally incorporated. After some time the new structure is used as a variant to prior incorporated forms that are used in the

same context. Until the learner starts using the variants systematically, free variation can be attested. The rules according to which the learner uses the variants are not necessarily the same as those of the TL, although eventually these rules can be adapted to represent TL rules (Ellis 1985a: 126; 1999: 475).

As long as the IL system is permeable, i.e. not stable, new forms can be assimilated into the system. Rules that are newly assimilated, but not yet incorporated in the existing system compete with older, already incorporated rules. If new and old structures are used to express the same concept horizontal variation occurs. During acquisition, horizontal variation functions as a basis for progress along an acquisitional sequence, progress along this sequence can be equated with vertical variation (Ellis 1985a; 1994; 1999).

2.2.3 Language Transfer

In this passage, I introduce the notion of language transfer and look at some of the factors that influence transfer. I then sketch the role it plays in language learning and how transfer in connection with the Contrastive Analysis Hypothesis (CAH) (Lado 1957) was used in the prediction of errors.

2.2.3.1 Definition of Transfer

Every contact with L2 learners shows that their performance is influenced by all previously learned languages. Transfer is blatantly obvious when mistakes, that are characteristic for learners of one L1 background, occur (Braidi 1999: 41; Mitchel & Miles 2004: 19). The exact role and the extent previous knowledge plays in the L2 acquisition process is still an ongoing debate.

The notion of transfer takes its origin from the psychological school of behaviourism, which forms the background for Contrastive Analysis (cf. *2.2.3.4 below*). In Contrastive Analysis studies, based on the Contrastive Analysis

Hypothesis (CAH) (Lado 1957), learner difficulty is related to differing structures of NL and TL, predicting that L2 learners will only have difficulties in areas which differ from their NL. Constructions that are the same in NL and TL are acquired via language transfer.

Since the late 1960s, attention has shifted away from language transfer as an explanation for learner errors towards comparing similarities and differences in the acquisitional process among learners of different NL backgrounds. From the 1980s onwards, interest in transfer studies as one of several cognitive mechanisms underlying SLA has been renewed (Gass 1984: 117).

Defining what transfer actually is, is still a controversial topic, though

> […] a theory of transfer is likely to also be a general theory of L2 acquisition, in that the role of the L1 cannot easily be separated from other factors that influence development. (Ellis 1994: 334)

Transfer has been referred to as a strategy applied by L2 learners for learning another language (Adjemian 1976: 306), as a communication or learning strategy by using prototypicality judgements to decide if a particular usage of a word is transferable (Kellerman 2000: 37), as a process of superimposing NL structures on the TL (Gass 1979: 228), as a filter on the learner's input (Andersen 1983: 177), as habits of the NL transferred into the IL (Corder 1971: 158), or as a constraint on the learner's formulation of hypotheses (Schachter 1983: 32).

These rather narrow views on transfer have been widened by Odlin's working definition of transfer, including a number of NL influences such as delayed rule restructuring or avoidance (Odlin 1989).

> […] the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired. (Odlin 1989: 27)

Today, a definition of transfer subsumes phenomena such as delayed rule restructuring, borrowing, avoidance of certain L2 structures, different paths of acquisition, facilitation of learning of similar structures or, overproduction of certain L2 structures (Braidi 1999: 41; Gass 1984: 121; Sharwood Smith and Kellerman 1986).

Studies on transfer phenomena typically only consider substratum transfer (Odlin 1989: 12). In these studies, transfer is defined as the use of previous knowledge of the L1 or L2(s) in the acquisition of a further L2 (Gass & Selinker 1992: 234). Substratum transfer studies generally do not examine if L2 knowledge is transferred into the L1, i.e. borrowing transfer (Odlin 1989: 12). Pavlenko and Jarvis for example show that L2 knowledge is used in L1 production by speakers who show no attrition in their NL (Pavlenko & Jarvis 2002: 210).

Identifying transfer still causes problems because criteria by which transfer can be identified definitively have not yet been established (Braidi 1999: 42). One possible way of establishing whether transfer occurred is to compare the output of speakers of different languages. Only when speakers who do not have a given structure, e.g. preverbal negation, in their NL and do not show this feature in their IL, and when speakers who have this structure in their NL as well as in their IL, transfer can be assumed to have occurred for the latter (Gass 1984: 117). If speakers of both languages show the feature in their ILs, it is a necessary developmental stage. Though transfer cannot be excluded, it cannot be seen as the only explanation. If a pattern of this developmental stage corresponds to a pattern of the learner's NL, delayed IL rule restructuring in this learner's IL can then occur due to transfer (Gass 1984: 118)

2.2.3.2 Factors Influencing Transfer

Although it is not possible to identify transfer definitively, several structural and non-structural factors that influence it have been identified (Ellis 1994: 315; Jarvis 2000: 260f); these include:

- FREQUENCY OF L1 STRUCTURE: only structures which are productive and frequent in the L1 can be transferred into the IL (Zobl 1980: 45).
- MARKEDNESS (cf. *2.2.4 below*): the markedness value of both the L1 and the L2 structure in question plays a role in what the learner judges to be transferable and what as not transferable (Rutherford 1982: 90). If a

structure can be equally well expressed by a related structure that is less marked, the less marked structure is likely to be transferred. The more marked a structure, the higher the probability that this structure will be avoided if a less marked alternative exists (Rutherford 1982: 90). If marked structures are transferred into the IL, e.g. when the L1 has a marked structure, but the L2 does not, they are more easily eradicated than unmarked ones (Hyltenstam 1984: 43; White 1987: 266f). Learners often substitute marked L2 structures with unmarked L1 structures (Hyltenstam 1984: 43). Typologically different and less marked L1 structures can be transferred (Eckman 1977).

- TYPOLOGICAL RELATEDNESS: Kellerman (1977) found that in closely related languages, where the learner has a point of reference, transfer is more likely to occur than in languages that are typologically more distant. It is generally believed that some languages are easier to learn than others, especially related languages where transfer is possible (Odlin 1989: 39), e.g. Europeans would think that Spanish is easier to learn than Japanese. It has now been accepted that although typological relatedness on its own cannot serve as a predictor for transfer, it nevertheless plays a role in transfer in combination with other factors, i.e. psychotypology (Faerch & Kaspar 1987: 121; Kellerman 1983).
- PSYCHOTYPOLOGY/PROTOTYPICALITY: the learner's knowledge, real or assumed, about the typological language distance between NL and TL influences the learner's judgement about the transferability of L1 structures. The closer the languages are related the more likely learners are to transfer L1 structures. The learner's perceptions about their NL can change during the acquisition process (Kellerman 1977, 1983, 1985). What a learner thinks to be psycholinguistically marked is less likely to be subject to transfer (Kellerman 1983: 117). What seems to be transferable from the linguist's point of view is not necessarily transferable from the learner's point of view (Kellerman 1983: 113).

- LANGUAGE BACKGROUND (ALL PREVIOUS L1S AND L2S): Knowledge of all previously learned languages can be the source of transfer (Ringbom 1987, 2001).
- AGE: Selinker (1984) proposes that age can have an effect on the amount of transfer that takes place. The younger L2 learners are, the less likely they are to transfer previous language knowledge. Children, for example, are less likely to transfer L1 structures into their IL; however, it is questionable whether the L2 acquisition of very young children counts as SLA or whether it should be treated as the acquisition of an additional L1.
- SOCIOLINGUISTIC FACTORS: the social context, especially the relationship between the interlocutors, educational and cultural background can influence when and to what extent transfer occurs (Ellis 1994: 317).
- ACCULTURATION: the wish not to acculturate can lead learners to actively stress their foreignness by using NL structures or pronunciation in their IL production (Ellis 1994: 354).
- LANGUAGE LEVEL: transfer occurs on all language levels, although it is easier to spot in pronunciation, lexis and discourse than in syntax (Ellis 1994: 317).
- STRUCTURAL AND DEVELOPMENTAL CONSTRAINTS: development of the language leaner, i.e. TL proficiency, can influence what is transferred and when it is transferred (Braidi 1999: 169; Wode 1978c; Zobl 1980). The learner has to reach a certain developmental stage to be able to recognise the potential for transfer due to the similarity of the structure in question (Wode 1976). Transfer can either facilitate the development of a structure, i.e. premature acquisition of marked structures (Zobl 1989: 156f), or impede the acquisitional process, e.g. if the L1 structure corresponds with a developmental stage (Braidi 1999: 46; Ellis 1994: 332ff).
- TASK TYPE AND AREA OF LANGUAGE USE: different tasks can cause differences in the learners' IL output (Jarvis 2000; Tarone 1988). Task type and formality of the task can influence the type of IL elicited, which in turn

> can influence the amount of transfer that can be found in different styles. Tarone (1982) found that learners are more likely to transfer L1 elements into their IL if they use their *careful style* rather than their *vernacular style*, because learners pay more attention to their language when using their careful style, using all their resources, which includes L1 knowledge.

Ideally, all of these variables should be controlled in an examination if transfer is to be considered.

2.2.3.3 Transfer in Second Language Learning

> […] in the early stages of learning [a second language], there are many things that [the learner] has not yet learned to do … What can he do other than use what he already knows to make up for what he does not know? To an observer … the learner will be seen to be stubbornly substituting the native habits for target habits. But from the learner's point of view, all he is doing is the best he can: to fill his gaps.
>
> (Newmark & Reibel 1968: 159)

Closely connected with both language learning and language acquisition is transfer, which can further be subdivided into positive and negative transfer.

Positive transfer/facilitation occurs if phenomena of the NL or any other previously learned language and the TL are the same, resulting in nativelike output (Major 2001: 3). However, the facilitative effect of transfer can only be determined if two or more groups with different L1 backgrounds are compared (Odlin 1989: 36). If an L1 and L2 structure are similar, and if learners who do not have this L1-L2 similarity show a differing route of acquisition, only then does the L1 facilitate the acquisitional process. 'Facilitation is evident not in the total absence of errors … – but rather in a reduced number of errors, and, also, in the rate of learning' (Ellis 1994: 303; Gass 1996).

Negative transfer is often paralleled with production errors and occurs if phenomena of the NL or of another language are transferred to the TL leading to non-targetlike structures (Odlin 1989: 36). The problem that arises from this view

is that the errors that are believed to be interference errors can also be developmental in origin. Negative transfer can further be subdivided into the following:

- DELAYED RULE RESTRUCTURING: if the L1 structure and developmental stage correspond, progress to the next developmental stage can be delayed. In such cases, the facilitative effects the L1 might have had in the original acquisition of that stage hinders rapid progress to the next stage. In some cases, this correspondence of L1 and developmental stage can lead to early fossilization.
- AVOIDANCE/UNDERPRODUCTION: a structure that a learner knows and can use, but thinks too difficult to use, or one that is too similar to the L1, is produced not as frequently as the TL norms require (Ellis 1994: 303; Odlin 1989: 36; Plag 1994). Avoidance of a structure often occurs if a TL structure has no counterpart in the NL. Learners who avoid a structure often produce, relatively speaking, fewer errors than learners with different L1 backgrounds who use the structure in question more frequently (Kellerman 1977; Schachter 1974).
- OVERPRODUCTION: is sometimes simply the consequence of avoidance. If a learner avoids a structure, e.g. relative clauses, another structure, e.g. simple sentences, has to be produced more often than would be the norm in the TL (Ellis 1994: 305). Another source of overproduction can be the overgeneralisation of a TL rule (Odlin 1989: 37).

However, the question still remains: if L2 learners transfer previous knowledge, when do they do this? Learners seem to transfer knowledge

- TO FURTHER COMMUNICATION, e.g. both production or comprehension (Ringbom 1992: 88), or
- TO HELP THEM LEARNING A L2 STRUCTURE, e.g. to develop hypotheses about L2 rules (Faerch & Kaspar 1986), or
- TO DO BOTH, since learning and communication are interrelated aspects of L2 acquisition (Faerch & Kaspar 1986).

Whenever a L2 learner is in a communicative situation where the IL grammar is not sufficiently developed to fulfil communicative needs, the NL or any other previously learned language is projected into the IL in order to address the grammatical requirements of the IL (Jake 1998: 343). If the projected knowledge agrees with the grammatical requirements of the TL, positive transfer has occurred; if not, the projection is an instance of negative transfer. If learners successfully transfer knowledge in communicative situations such successfully transferred knowledge is incorporated into their IL, no matter whether the transferred structures are correct or incorrect according to the TL norm (Corder 1992: 28). Therefore, communicative transfer, which is definitely furthering communication if the learner uses previous knowledge to fill in gaps, can be, but does not necessarily have to be, counterproductive in the development of the learner's IL grammar and can eventually lead to premature fossilization.

To distinguish positive transfer from TL learning, one has to look first at the notions of positive transfer (see above) and TL learning. Krashen (1982: 10) refers to learning as the development of conscious knowledge of an L2 through formal study. This can be equated with explicit knowledge. Explicitly learned knowledge contrasts with acquired knowledge, which Krashen describes as spontaneously internalised knowledge resulting from natural language use and not language study.

Concluding from this, transfer can be seen as the first step in gaining either learned or acquired knowledge about the TL if it is used to develop and test hypotheses about the TL. Derived from the role transfer holds in the learning/acquisition process, it can either be seen as 'a leg up' when the hypotheses about the L2 are correct, i.e. positive transfer, or it can be seen as a constraint that leads to false hypotheses and therefore to the production of errors or to the avoidance of certain structures, i.e. negative transfer.

The role of transfer in SLA has been a controversial topic for a long time, and there still is no consensus about the exact role transfer plays; nowadays it is generally accepted that transfer plays an important role in SLA. Transfer occurs in all linguistic subsystems, in both formal and informal contexts. It is not restricted to the age of the learner. Transfer is influenced by both structural and

nonstructural factors (cf. *2.2.3.2 above*) (Mitchel & Myles 2004; Odlin 1989). Both negative and positive transfer can be seen as one of the factors that shape ILs (Eckman 1983: 384).

I include the concept of transfer in my thesis because some of my data indicate that transfer is a possible communication and learning strategy in SLA, used as a backup to make up for structures that have not yet been learned. Especially if a learner has just started acquiring an L2, using transfer as a strategy for acquiring the TL is reflected in the IL rules.

In this thesis, transfer will be used as described by Odlin (1989) in his working definition, seeing it, as Selinker (1992: 208) described it, as 'a *cover term* for a whole class of behaviours, processes and constraints.'

2.2.3.4 The Prediction of Errors: Contrastive Analysis Hypothesis

Studies in Contrastive Analysis were to predict difficulties and errors likely to occur because of the contrasting structures of a second language learner's NL and the TL (Gass & Selinker 1994: 53ff).

Lado (1957) stated in the strong version of the Contrastive Analysis Hypothesis (CAH) that

> … the student who comes in contact with a foreign language will find some features of it quite easy and others extremely difficult. Those elements that are similar to his native language will be easy for him and those elements that are different will be difficult.
>
> (Lado 1957: 2)

He stated that the errors a learner makes are predictable on the basis of a comparison of this learner's NL and TL. Those areas that are different lead to the production of errors, while those areas that are similar cause no problems at all because the learner can transfer prior linguistic knowledge into their IL.

The strong version of CAH became untenable because it makes predictions that are wrong; not all differences of the NL and the TL lead to learner errors (Eckman 1977: 316). Many errors that the CAH predicted to be attributable to

transfer were in fact not transfer errors. Another problem with the CAH is that it cannot account for 'sources of difficulty other than the L1' (Ellis 1994: 308) and that learner difficulty is not only displayed through errors, but also in other ways, e.g. through avoidance.

After the strong version of the CAH became untenable, a weaker version of the CAH was put forward which made no predictions at all; if carried out it only confirms that occurring errors are indeed transfer errors (Eckman 1977: 316; Ellis 1994: 309).

While the CAH is incapable of predicting transfer errors it has nevertheless been able to show that some of the learners' errors can be attributed to transfer and it is still an important tool in transfer research, especially if CAH is supplemented by comparisons of learners with different L1 backgrounds (Ellis 1994).

2.2.4 Markedness

In the next section, I introduce the concept of markedness, first looking at some of its usages in linguistics and then moving on to describe some areas where it has been used in SLA.

2.2.4.1 Definition of Markedness

Markedness is applied to various concepts in linguistics. For example, it is used to distinguish between simplicity/complexity, frequency or distribution across languages.

In the simplicity/complexity context, markedness is used to express that the marked member of a pair is more complex than the unmarked member; for example, in English in a male/female word pair, the marked member of the pair is the one with an additional derivational morpheme attached to it, e.g. *lion/lioness*.

When markedness is used in frequency contexts where no implicational relationship exists, the more frequent feature is the unmarked member in the frequency relation; for example, in English, singular is unmarked compared to plural because it occurs more frequently than plural, which in this relation is marked (Braidi 1999: 82; Hyltenstam 1987: 59).

Another definition of markedness is used in language typology. Pairs of related structures that occur more often cross-linguistically are unmarked compared to structures that occur in fewer languages (Ellis 1994: 319; Hyltenstam 1987: 57; Santos 1987: 207). This implies that the presence of a marked structure in a language also implies the presence of an unmarked structure; for example, languages that have voice contrast in word-final positions also have voice contrast in word-medial and word-initial positions (Eckman 1977; 1985; 2008), although languages that have voice contrast in word-medial positions do not necessarily have voice contrast in word-final positions.

In Universal Grammar, markedness is defined differently. Markedness is internal to the L1 learner (White 1989: 118f). The degree of markedness of a feature depends on whether it is part of the core grammar or part of the periphery. The core grammar consists of principles and parameters that are either unmarked or marked. Their acquisition requires minimal evidence or triggering. The acquisition of language specific phenomena, 'which are not direct reflections of the principles and parameters of UG' (White 1989: 118) require much more evidence than the acquisition of features belonging to the core. These language specific phenomena form the marked periphery, which can vary considerably between different languages.

The above notions treat the members of markedness relations as either unmarked or marked, though markedness can also be used to express hierarchical relations in terms of more marked or less marked than X. In any acquisitional hierarchy, the structures that are acquired first are less marked than those that are acquired later.

2.2.4.2 Markedness in Second Language Acquisition

Several notions of markedness have been used to explain different aspects of L2 acquisition. Among these are typological markedness, language-internal markedness or psycholinguistic markedness (Rutherford 1982: 86ff; Santos 1987: 207).

The notion of typological markedness has been used in SLA to account for the acquisitional patterns of L2 learners. Markedness is defined by Eckman as:

> A phenomenon or structure X in some language is relatively more marked than some other phenomenon or structure Y if cross-linguistically the presence of X in a language implies the presence of Y, but the presence of Y does not imply the presence of X
> (Eckman 1985: 3).

Markedness is seen as a relative phenomenon in language typology, where features are seen to stand in a relation of being more marked/less marked or marked/unmarked in contrast to another related feature (Rutherford 1982: 88).

Markedness distinctions help to explain learning difficulties and order of acquisition. The linguistic nature of a phenomenon that has to be learned possibly influences difficulty and order of acquisition. The typologically unmarked or less marked element is learned before the marked or more marked variant. The assumption that ILs are affected in the same way as other natural languages by linguistic universals underlies studies looking at order of acquisition or learning difficulty (Ellis 1994: 426).

The notion of typological markedness is used in SLA studies to predict which structures of previously learned languages, both L1 and L2, are likely to be transferred into the IL (cf. Hyltenstam 1987) or to predict where learner difficulty may arise, where learner difficulty can either mean avoidance of marked structures or more errors in the production of the structure in question (cf. Markedness Differential Hypothesis (MDH) by Eckman 1977).

Revising the strong version of the CAH into the MDH by including a notion of degree of difficulty, which corresponds to typological markedness, Eckman (1977) made a reliable prediction of both the areas of difficulty for the L2

learner and the relative degree of difficulty in the acquisition of the compared structures possible (Eckman 1977; 1985).

> The Markedness Differential Hypothesis
> The areas of difficulty that a second language learner will have can be predicted on the basis of a systematic comparison of the grammars of the native language, the target language and the markedness relations stated in universal grammar, such that,
>
> a. Those areas of the target language which differ from the native language and are more marked than in the native language will be difficult.
>
> b. The relative degree of difficulty of the areas of the target language which are more marked than the native language will correspond to the relative degree of markedness;
>
> c. Those areas of the target language which are different from the native language, but are not more marked than the native language will not be difficult.
>
> (Eckman 1977: 321).

The MDH predicts that only those areas which are relatively more marked in the TL than in the NL cause problems to the learner (Eckman 1977: 321). In an effort to compensate for these problems, the learner transfers structures from the NL or any other language that has previously been acquired and that are less marked than the troublesome structure in the TL.

In areas where markedness relations hold, the MDH not only allows predictions about the areas of difficulty, but also implies that if the marked structures of a hierarchy are taught, the learner can acquire the less marked ones through generalisation (Eckman 1985: 9).

Though typological markedness helps to explain many facts about the acquisition of hierarchies, and why learners seem to find unmarked structures easier to acquire (Ellis 1994: 426), it cannot account for everything. Bardovi-Harlig (1987) found that, at least for some structures, input frequency can outweigh markedness relations. If a marked structure is much more frequent in the input, the learners will acquire the more marked structure before the less marked and less frequently presented structure. This essentially shows, as the MDH implies, that by teaching marked structures the less marked ones can be acquired through generalisation.

This leads to an important question: is it really markedness that accounts for acquisitional sequences or is it input frequency? It is not easy to answer this

question; it all depends on the learner. If, in guided acquisitional settings, the presented input is taken in, input frequency helps to speed up the acquisitional process. If the input is not or only partly taken in then markedness relations help to explain and predict the acquisitional sequence (cf. Bardovi-Harlig 1987; Ellis 1994).

Another approach to markedness in SLA is the notion of prototypicality proposed by Kellerman (1977; 1983; 2000). Instead of using linguistic theory based markedness, Kellerman uses the learner's perceptions of structures of their NL. Kellerman tested the transferability of the Dutch verb 'breken' in different semantic contexts into English. He was able to show that the learners' perceptions actually influenced what was transferred from the NL into the TL. When the native speakers considered that a meaning of 'breken' was 'infrequent, irregular, semantically or structurally opaque, or in any other way exceptional' (Kellerman 1983: 117), transfer of that meaning into the TL English was resisted, even if exactly the same meaning exists in the TL. This resistance to transfer semantically or structurally opaque meanings is not predictable by a contrastive analysis.

I use markedness to account for the order of acquisition. Implicitly less marked structures are acquired before implicitly more marked structures, e.g. questions which are formed with *cop inversion* are acquired before the more marked questions with *aux inversion* which in turn are acquired before the most marked questions with *do-support*. I additionally use prototypicality to account for my participants' resistance to transfer the structures of German questions into their ILs.

2.2.5 Developmental Patterns

One of the most influencing claims that has emerged from SLA research is the idea that L2 acquisition proceeds in a regular, systematic way (Ellis 1994: 73). Examples of structures that are acquired in a series of developing stages are negation or interrogatives. The order of the emerging rules is predictable, i.e. it is

fixed and predetermined (Pienemann, Johnston & Brindley 1988: 222), and can be found among all adult learners who share the same L1 (Meisel, Clahsen & Pienemann 1981: 113); nevertheless, even within a group of learners who share the same L1 the developmental path can vary to some extent (Ellis 1994: 114).

When learners acquire a new structure, they do not suddenly use it correctly in all contexts, they rather learn how to use the new structure in one context and then gradually widen the contexts in which this structure is then used (Meisel, Clahsen & Pienemann 1981), and neither do they suddenly stop using structures of a preceding stage (Wode 1978a: 40). This gradual spread of rules can explain learners' varying performance in different linguistic contexts to some extent.

Though the sequence of acquisition can be generalised for a group of speakers sharing the same L1, each stage is not completely rigid, leaving room for individual variation (Braidi 1999: 22; Meisel, Clahsen & Pienemann 1981: 110; Pienemann, Johnston & Brindley 1988: 222).

The structures that a learner uses can be ordered into a hierarchy, i.e. $Rule_3 \supset Rule_2 \supset Rule_1$; the less marked structures of this hierarchy ($Rule_1$) are acquired before the most marked ($Rule_3$). Learning one structure implies that the preceding structure has also been learned, though this does not necessarily mean that the resulting IL system represents the system of a native speaker (Meisel, Clahsen & Pienemann 1981). Learners who have progressed along the acqusitional hierarchy are likely to backslide to a lower developmental stage in situations of stress or when their communicative needs increase. In these situations, a learner does not apply all of the acquired/learned knowledge, leading to varying output in different situations/tasks (Ellis 1982: 220; Wode 1978a: 40).

Movement along the developmental sequence can be twofold: progress, i.e. acquisition of new features, as long as it is not stopped by fossilization or ceases because of other reasons, or regress, i.e. attrition to earlier stages.

Studies that look at developmental orders are based on two assumptions: (a) that the learner has reached the next developmental stage if few or no errors are produced for a particular structure; and (b) that the frequency of the error rate of a particular structure is an indicator of how far the learner has progressed in

acquiring this structure, i.e. the more errors are produced the further away the learner is from acquiring a structure (Odlin 1989: 20). Therefore, a new stage is not suddenly acquired and used correctly in each appropriate context; rather it can be described as a gradual spreading of rules from one context to the next (Clahsen, Meisel & Pienemann 1983; Meisel, Clahsen & Pienemann 1981). Learners move along this sequence as long as the acquisitional process continues. It is nevertheless possible that even while having moved to the next higher stage of development, not all rules of the previous stage are acquired completely, leading to gaps in the hierarchy, so that errors in this stage are still made (Meisel, Clahsen & Pienemann 1981: 126; Wode 1978a: 39). These gaps can later be filled through instruction (Pienemann 1987).

Movement along the developmental sequence can be facilitated by instruction without altering the sequence of acquisition (Ellis 1985b; Pienemann, Johnston & Brindley 1988: 220), showing that a difference in the setting of acquisition, e.g. natural vs. guided, does not influence the route of acquisition; the only influence instruction can have is to speed up the acquisitional process (Hawkins 2001: 21). This similarity in the acquisitional processes makes it possible to compare data of learners who acquired their L2 naturally with data of learners who acquired their L2 in a guided setting.

Contrary evidence to this position is provided by a substantial body of studies. Gass (1982), Eckman, Bell and Nelson (1988) or Ammar and Lightbown (2005), among others, show that learners who were instructed in more difficult relative clause structures seem to be able to generalise to the less marked relative clause structures that they had not been taught. In other words, knowledge of more marked forms implies knowledge of less marked ones, even if the less marked forms have not explicitly been taught. These studies suggest that the sequence of acquisition can be changed by instruction, but they also show that although instruction makes a generalisation to less marked positions possible, more marked structures are not influenced.

Developmental stages can be identified by looking at how a particular structure is acquired and can then be defined through specific rules acquired during this stage (Meisel et al 1981: 111). A stage is defined as a timespan during

which a specific form or structure is used predominantly, but not exclusively, systematically and non-imitatively (Braidi 1999: 22; Ellis 1994: 111). Although moving to a higher stage does not inevitably lead to an increase in targetlike utterances (Meisel 1983). Movement to a new stage is possible even if the previous stage has not yet been acquired entirely. Generally, every non-imitative utterance should be treated as an instance of an IL rule (Pienemann, Johnston & Brindlay 1988: 223), seeing the IL as a dynamic system in its own right in which new rules emerge, and not in terms of the TL.

The early stages of acquisition are characterised by a silent period, the use of formulas and structural/semantic simplification (Ellis 1994: 74). The silent period does not occur with every learner who learns an L2 in a natural situation; a silent period is less likely to occur in a guided context when the learner's participation can be demanded.

Usage of formulas, i.e. 'expressions which are learned as unanalysable wholes' (Lyons 1968: 177) like *How are you?* or *Where's X?*, can be found in both guided and natural learning situations. At first, L2 learners use formulas in semantically, syntactically and pragmatically inappropriate contexts (Pienemann, Johnston & Brindlay 1988: 235). L2 speakers use formulas on the one hand to facilitate communication, leading to a more effective usage of the TL, and on the other because the processing burden is reduced at the same time (Ellis 1994: 86). Formulas are also commonly employed by native speakers in everyday situations for the same reasons (Michel & Myles 2004: 17), leading to an intricate mix of formulas and creative language use (Nattinger & DeCarrico 1992: 1). Although the formulas used by L1 and L2 speakers might be the same, the semantic function might differ considerably. So, the L2 speaker not only has to learn the formulas, but also has to acquire the contexts in which these formulas are used appropriately. Formulas can easily be distinguished from early creative learner language because they are well-formed, in contrast to early IL rules which differ markedly from the rules a native speaker would employ in the same context.

Early stages of L2 output are often characterised as simplified. Simplification in itself is a problematic concept. Corder (1981:149) for example states that '… you cannot simplify what you do not possess' indicating that

simplification is only possible if you already have acquired the structure that is simplified. According to Corder, early learner language should not be described as simplified, but rather as simple, though this view omits the reasons for simplification, e.g. that the learner is simplifying in order to better communicate or that the 'simplified' structure is evidence of an acquisitional stage. Therefore, early L2 output should still be described as simplified, though simplification should be divided into semantic and structural simplification. Semantic simplification occurs if semantic categories are omitted from utterances as in *car (= there is a car)*, where the demonstrative, verb and article are omitted. Semantic simplification is not only found with beginning L2 learners, it can also be found in the output of advanced L2 speakers as well as native speakers when a conversation relates to an ongoing topic and greater explicitness would hinder communicational ease. Structural simplification occurs when grammatical functors and inflectional morphology are left out as in *eat apple (= he is eating an apple)*, where the subject, inflectional morphology and article are omitted. Reasons for both types of simplification are that the learner has either not yet learned the forms or cannot access them in time (Ellis 1994: 89). It should be kept in mind that throughout the acquisitional process IL rules are restructured and complexified (Ellis 1994: 352).

Several studies show that development can be influenced by the L1 (cf. *2.2.3 above*). The L1 can further acquisition or it can hinder acquisition (Kellerman 1983; Wode 1976). But, according to Kellerman 1983, transfer is only possible if the learner has reached a stage of development that is similar to the L1 and can identify this similarity and recognise the possibility for transfer. If a developmental stage is identical to a structure in the NL, the learner will use this structure longer. Progress to the next developmental stage is slowed down.

2.3 Interrogatives

In the following sections, I briefly introduce the notion of simple questions. I exclude complex questions such as *Do you know where the library is?* or C*ould you tell me how much this book costs?* because they played no role in the study. Following this overview, I describe how interrogatives are formed by L2 learners with differing L1 backgrounds, and I describe how interrogatives are formed in L1 English and L1 German.

2.3.1 Simple Interrogatives

Prototypically, questions are produced to gain information (Crystal 1995: 218; Wode 1978a: 41f).

1. eliciting a *yes* or *no* answer;
   Is Peter here? Are you hungry?
2. eliciting information such as time, place or cause;
   Where is my book? Why is she laughing?
3. eliciting the selection of alternative choices.
   Does Paul own a cat or a dog?

In addition to these major semantic functions, questions can fulfil other functions like exclamatory questions, rhetorical questions or echo questions. Exclamatory questions, like *Hasn't she grown!* or *Wasn't it a marvellous concert!* (Greenbaum et al. 1990: 238), are syntactically interrogatives, but have different semantic functions; they are used as exclamations, expressing the speaker's feelings, or asking the hearer to agree. Likewise, rhetorical questions like *Who cares?* or *How should I know?* (Crystal 1995: 218; Greenbaum et al. 1990: 240) are syntactically interrogatives, though their discourse function is emphasis. Rhetoric questions are often used as a rhetoric device by poets or politicians, where no answer is expected. In echo questions, a part or all of what has been said

before is repeated, asking for clarification of the repeated, stressed part or signalling disbelief (Butterworth & Hatch 1978: 240).

These functions are expressed by diverse formal devices, which are realised differently in various languages (Wode 1978a: 41-2):

1. INTONATION QUESTIONS, which are distinguished from non-questions solely through intonation;
2. PRONOMINAL QUESTIONS, which are marked as questions with a free morpheme, e.g. an interrogative pronoun such as *who, what, which,* in English or *wer, wie, was,* in German;
3. PARTICLE QUESTIONS, in which the interrogative constituent is marked by a bound morpheme, e.g. an interrogative particle such as Bulgarian *–li* or Finnish *–ko* and *–kö*; and
4. INVERSION OR WORD-ORDER QUESTIONS are formed through word-order permutation of the underlying declarative.

In English (Greenbaum et al. 1990: 22) and German (Helbig & Buscha: 615f), questions are realised as intonation questions, pronominal questions or inversion questions.

2.3.2 L2 Acquisition of Simple English Interrogatives

In the following part, I give a brief overview of some studies that focus on the L2 acquisition of simple English interrogative structures.

The focus of these studies ranged from the influence syntactic priming has on the acquisition of L2 English questions (McDonough & Mackey 2008) to the role input enhancement plays (White et al. 1991). Those studies that looked into the developmental sequences of interrogative structures have shown that the L2 acquisition of simple English questions by speakers of several L1s, e.g. German (Wode 1978a), Chinese (Huang & Hatch 1978), Norwegian (Ravem 1974; 1978), Vietnamese and Polish (Pienemann, Johnston, & Brindley 1988), progresses in a

regular, systematic way. On the way to acquiring simple English interrogative structures, L2 learners gradually pass through a sequence of developmental stages (Ellis 1994).

The focus of the earlier studies, e.g. Wode (1978a), Ravem (1974; 1978) or Huang & Hatch (1978), has been on natural SLA by children. The population in their studies has been very small, sometimes consisting of only one participant, e.g. Huang & Hatch (1978).

A comparison of the developmental stages proposed by several researchers shows that the sequence of development for interrogatives is strikingly similar, though the stages proposed are based on a variety of L1 language backgrounds. *Table 2.2 below* gives an overview of the stages proposed by Braidi, based on Wode (1999), Lightbown & Spada, adapted from Pienemann et al. (2006), and Huang & Hatch (1978). Huang & Hatch (1978) proposed only three stages because their study ended before their test person had the chance to progress any further. It can be noticed that the first stage proposed is identical for all. Lightbown & Spada (2006) and Huang & Hatch (1978) include formulae in their framework which differ from non-imitative output in that these are strikingly targetlike.

Table 2.2: proposed stages in the L2 development of English questions

Stage	Braidi 1999 (adapted from Wode 1978a)	Lightbown & Spada 2006 (adapted from Pienemann, Johnston & Brindley 1988)	Huang & Hatch 1978 (adapted; repetition & imitation are omitted)
	L1: German	variety of L1 backgrounds	L1: Chinese
	number of participants: 4	number of participants: 16	number of participants: 1
1	intonation Qs *This slipper?*	single words *Dog?* formulae *What's this?* sentence fragments *Four children?*	Q = rising intonation *Fish +++ see?*
2	*wh*-Qs with copula *Where's Kenny?*	declarative word order, no inversion, no fronting *The boys throw the shoes?*	Q = rising intonation *This +++ you?* where's, what's, whose are question markers, *Where's car?* *Whose truck?* "okay" is a question tag marker *You just listen, okay?*

continued overleaf

Stage	Braidi 1999	Lightbown & Spada 2006	Huang & Hatch 1978
3	non-inverted *yes/no* Qs with all verb types *What she is doing?* *You can see that?* *You see my little football?*	*do*-fronting *Do you have a shoes in your picture?* *wh*-fronting *Where the children are playing?* no inversion […] *there is four astronauts?* other fronting *Is the picture has two planets on top?*	addition of 'can' questions *Can I write my name?* how many NO EXAMPLE GIVEN colour NO EXAMPLE GIVEN be-inversion *Are you a good boy?*
4	*yes/no* and *wh*-Qs: inversion with copula *It's (=is) my fishing pole in the water?* auxiliaries *What is he doing?* main verbs *Catch Johnny fish today?*	inversion in *wh* + copula *Where is the sun?* *yes/no* questions with other auxiliaries *Is there fish in the water?*	
5	*do-support* with main verbs in *wh*-questions *What do you doing to-yesterday?*	inversion in *wh*-questions with both an auxiliary [and *do*] and a main verb *What's the boy doing?* *How do you say 'proche'?*	
6	*do-support* with main verbs in *yes/no* questions *Henning, did you catch anything?*	complex questions: question tag *Its better, isn't it?* negative question *Why can't you go?* embedded question *Can you tell me what the date is today?*	

In the developmental sequences proposed by Braidi (1999), Lightbown & Spada (2006), and Huang & Hatch (1978), a progression can be noticed. Intonation with single words, sentence fragments or formulae occurs first, progressing to *non-inverted* questions, to inversion and to finally usage of *do-support*, leaving room for individual learner variation. The acquisition of interrogatives with copula, which shows inversion of copula and subject before other inverted questions, is explained by Huang & Hatch (1978: 129) in the following way: their test person heard so many '*what's (X)?*' and '*where's (X)?*' that the *'s* is not analysed as copula, but as part of the interrogative pronoun.

Pienemann, Johnston & Brindley (1988) suggest that *pseudo*-inversion, i.e. inversion in *wh*-questions with copula as in '*where is Peter?*'

> …does not involve any sentence-internal rearrangements of constituents and can be accounted for by operations on salient end-positions
>
> (Pienemann, Johnston & Brindley 1988: 227).

It is therefore less complex than inversion in all other types of interrogative structures and consequently occurs relatively early.

Following this brief overview, I give a more detailed outline (cf. *Table 2.3*) of the developmental stages postulated by Braidi (1999), who adapted Wode's developmental stages (1978a: 43ff), which I use as a basis for my refined model.

Table 2.3: developmental stages for simple English questions

intonation questions – Stage I		
a)	demonstrative noun	*This slipper?*
b)	noun noun	*Ball doggie?*
c)	noun V	*Fish see?*
***wh*-questions with copula – Stage II**		
a)	wh cop X	*What is that?*
		Henning, what is it fishing people?
		Where's Kenny?
		Where's pen?
non-inverted *yes/no* and *wh*-questions with all verb types – Stage III		
a)	wh S V (X)	*What you want it?*
b)	wh S V_{ing} (X)	*What you doing, Craig?*
c)	wh S's V_{ing}	*What he's doing?*
d)	wh S Aux V_{ing}	*What she is doing?*
e)	S V (X)	*You see my little football?*
f)	S Aux (X)	*You can see that?*
g)	S cop (X)	*IT'S A WINDOW?* (own example)
inversion with copula, auxiliaries, and main verbs in *yes/no* and *wh*-questions – Stage IV		
a)	cop S (X)	*It's (=is) my fishing pole in the water?*
b)	Aux S (X)	*Please, can I have a piece of drink?*
		Can K have some juice?
c)	V S (X)	*Catch Johnny fish today?*
d)	wh V S (X)	*Why drink we tea and coffee?*
e)	wh Aux S V_{ing}	*What is he doing?*
***do-support* with main verbs in *wh*-questions – Stage V**		
a)	wh do S V (X)	*How do you clean them?*
b)	wh do S V_{ing} (X)	*What do you doing to-yesterday?*
***do-support* with main verbs in *yes/no* questions – Stage VI**		
a)	do S V (X)	*Henning, did you catch anything?*

Compilation of examples is taken from Huang & Hatch (1978), Ravem (1974), and Wode (1978a) all in Braidi (1999).

Wode identified separate developmental stages for simple English questions in natural SLA, whereas the acquisition of complex questions played no role in Wode's study. These stages can be seen as different developmental stages in the IL of an individual learner for both guided and natural SLA. The

developmental stages can be used to describe the IL of a test person regarding simple questions. Acquisition of the developmental stages is influenced by the acquisition of specific lexical items used for question formation in a certain language – for example, the English interrogative pronouns (Wode 1978a: 44).

The acquisition of interrogatives is characterised by a sequential development of the above described stages, i.e. development from least marked, i.e. least difficult, to most marked, i.e. most difficult. Individual variation can also be accounted for within this framework, e.g. usage of earlier acquired and therefore more automatised structures that are still used in non-targetlike contexts until later structures become more productive. This variation is likely to happen in situations of stress or increased need to process and convey information.

The more advanced a learner is in the formation of questions, the higher should be the systematic, nonimitative output in all stages. The further advanced a learner is, the more complex rules are applied correctly in more contexts. However, correct application of a rule does not necessarily mean that it corresponds to the rules of the TL, i.e. a learner could correctly (with regard to the IL norm) form a stage V question as in '*Where do he live?*' and fail to apply 3rd person singular *–s*. We can nevertheless expect that the more advanced the learner is, the higher should be the targetlike output in all stages; targetlike here only refers to the system of interrogatives. More targetlike and tasklike output, i.e. corresponding to TL-norms and fitting to the task, in a sub-system indicates a stabilisation in this sub-system and with this the subsystem's reduced permeability. As mentioned in *2.2.5 above*, it is nevertheless possible that even though a learner has partly acquired *do-support*, they have not necessarily acquired all rules of the previous stages (Meisel et al 1981: 111), leading to variation among learners who have acquired the same interrogative stages. Another possible reason for the variation found in data is that learners do not always produce the same utterances in elicitations as they would in spontaneous speech or in different tasks (Wode 1978a: 38), both the method and the medium used to gather data can influence what the learner produces.

The data in my corpus correspond to the observations of both Meisel et al. and Wode: Movement to a new stage is possible even if the previous stage has not yet been completely acquired. Different tasks can lead to different output.

2.3.3 The Structure of Interrogatives

In the following section, I describe how simple interrogatives are formed in L1 English and L1 German. Embedded questions or question tags are not taken into account since they are irrelevant for this thesis.

2.3.3.1 English Interrogatives

English has two main types of direct questions, e.g. *yes/no* questions (cf. *Table 2.4 below*), which can simply be answered with a *yes/no*, and *wh*-questions (cf. *Table 2.5 below*), which require more information to be answered (Hawkins 2001: 146).

Table 2.4: examples of English yes/no questions

declarative		**yes/no question**	
S cop (X)	*Paul is tired.*	cop S (X)	*Is Paul tired?*
S modal V (X)	*Paul can speak Spanish.*	modal S V (X)	*Can Paul speak Spanish?*
S aux V (X)	*Paul is reading a book.*	aux S V (X)	*Is Paul reading a book?*
S aux aux V (X)	*Paul has been reading for hours.*	aux S aux V (X)	*Has Paul been reading for hours?*
S V (X)	*Paul lives in Poole.*	*do* S V (X)	*Does Paul live in Poole?*
declarative word order	with all verb types *You are leaving.*	intonation Qs	no change of word order, though rising intonation *You are leaving?*

Yes/no questions are formed through subject-verb inversion, i.e. moving a copula, auxiliary or modal verb to the sentence-initial position (Hawkins 2001: 146; White et al. 1991: 419). If the sentence does not contain a copula, auxiliary or modal, *do* is used as operator. If the declarative sentence contains more than

one auxiliary, the first auxiliary is moved to the sentence-initial position (Quirk et al.: 1985: 232).

A change in the intonation contour of a declarative can change the same statement into an interrogative, e.g. a change from falling intonation (declarative) to rising intonation (interrogative), without changing the declarative word order (Crystal 1995: 347; Quirk et al.: 1985: 23).

English information questions or *wh*-questions, which are introduced by *wh*-phrases such as *who, what, which, why, how,* or *when*, are formed like English *yes/no* questions. The auxiliary, copula or modal of the clause, moves to the second position of this clause (Hawkins: 2001: 146). If the declarative sentence does not contain an auxiliary, the operator *do* is inserted in the second position, except when the questioned element is the subject; in these cases the word order is *WH*-PHRASE – VERB – X (Quirk et al.: 1985: 238). In both cases, the first position of the interrogative is a *wh*-element.

Table 2.5: examples of English wh-questions

declarative		**wh-question**	
S cop (X)	*Paul is tired.*	wh cop S (X)	*Who is tired?*
S modal V (X)	*Paul can speak Spanish.*	wh modal S V (X)	*What can Paul speak?* *Which language can Paul speak?*
S aux V (X)	*Paul is reading a book.*	wh aux S V (X)	*What is Paul reading?* *Who is reading a book?*
S aux aux V (X)	*Paul has been reading for hours.*	wh aux S aux V (X)	*What has Paul been doing for hours?* *Who has been reading for hours?*
S V (X)	*Paul lives in Poole.*	wh *do* S V (X)	*Where does Paul live?*
	Paul lives in Poole.	wh V (X)	*Who lives in Poole?*

Questions requiring *do-support* differ from questions that contain other auxiliaries. Question formation with *do* requires an additional operation, i.e. insertion of *do* and inversion of it (Cancino et al. 1978: 221), this additional operation, i.e. insertion of *do*, leads to its later acquisition.

2.3.3.2 German Interrogatives

German has two main types of direct questions, i.e. *yes/no* and *wh*-questions. Contrary to English, German *yes/no* questions (*Table 2.6 below*) can be formed without an auxiliary through simple subject-verb inversion, i.e. movement of the verb to the sentence-initial position. If the declarative sentence contains an auxiliary, the auxiliary and the subject are inverted (Helbig & Buscha: 2002).

Table 2.6: examples of German yes/no questions

declarative		**yes/no question**	
S cop (X)	*Paul ist müde.* *Paul is tired.*	cop S (X)	*Ist Paul müde?* *Is Paul tired?*
S modal V (X)	*Paul kann Spanisch sprechen.* *Paul can speak Spanish.*	modal S V (X)	*Kann Paul Spanisch sprechen?* *Can Paul speak Spanish?*
S aux V (X)	*Paul liest ein Buch.* *Paul is reading a book.*	aux S V (X)	*Liest Paul ein Buch?* *Is Paul reading a book?*
S V (X)	*Paul wohnt in Poole.* *Paul lives in Poole.*	*do* S V (X)	*Liest Paul ein Buch?* *Does Paul live in Poole?*
declarative word order	with all verb types *Du gehst.*	intonation Qs	no change of word order, though rising intonation *Du gehst?*

German *wh*-questions (*Table 2.7 below*) are also formed by means of verb movement. In *wh*-questions, the verb always moves to the second position in the clause, the interrogative pronoun, e.g. *wer, wie, was*, is placed sentence initially, as it is in English. If the declarative sentence contains an auxiliary, the auxiliary is moved to the second position of the clause and an interrogative pronoun is placed sentence initially before the auxiliary.

Table 2.7: examples of German wh-questions

declarative		**wh-question**	
S cop (X)	*Paul ist müde.* *Paul is tired.*	wh cop S (X)	*Wer ist müde?* *Who is tired?*
S modal V (X)	*Paul kann Spanisch sprechen.* *Paul can speak Spanish.*	wh modal S V (X)	*Was kann Paul sprechen?* *What can Paul speak?* *Welche Sprache kann Paul sprechen?* *Which language can Paul speak?*
S aux V (X)	*Paul liest ein Buch.* *Paul is reading a book.*	wh aux S V (X)	*Was liest Paul?* *What is Paul reading?* *Wer liest ein Buch?* *Who is reading a book?*
S V (X)	*Paul wohnt in Poole.* *Paul lives in Poole.*	wh *do* S V (X)	*Wo wohnt Paul?* *Where does Paul live?* *Wer wohnt in Poole?* *Who lives in Poole?*

In German, as in English, it is possible to use intonation as the sole question marker without a change of the declarative word order.

As we have seen, question formation in English and German is quite similar, the only difference being that English does not allow inversion of subject and main verb to form an interrogative in *yes/no* questions and object *wh*-questions. Only in subject *wh*-questions inversion of subject and verb is possible. If an English declarative sentence does not contain an auxiliary, the question must be formed by using *do-support*.

From this difference between the structures of German and English, IL rules can arise which do not represent TL rules, therefore leading to non-targetlike output.

3. Aims and Methodology

In this chapter, I formulate the questions the thesis aims to answer and introduce the methodology used to accomplish this.

3.1 Aims

In the thesis, I aim to answer the following questions:

1. How far have the participants progressed along the acquisitional hierarchy for simple interrogative structures (cf. *Diagram 4.37 below* – answered in *4.1*)?
2. Have the ILs of my test persons changed over a period of nine months (answered in *4.2*)?
3. Is the sentence structure of simple interrogatives problematic for the participants (answered in *4.2*)?
4. How many questions are judged as correct if only syntax is included in the judgement (*3.2.4.2 below*) and how does this picture change if other areas, e.g. morphology …, are considered in the judgement (answered in *4.2.3*)?
5. Does the choice of the interrogative type, i.e. *yes/no* vs. *wh*-question, influence the error rates (answered in *5.1*)?
6. Do differences in medium, i.e. oral vs. written, influence the error rates (answered in *5.1*)?
7. Do the rates of interrogatives judged as correct change over time (cf. *3.2.4.2 below* – answered in *5.2*)?
8. Do different ratios between subtypes and other variables change over time (answered in *5.2*)?

3.2 Method

The following chapter introduces the methodology used to test the questions the dissertation aims to answer. I start with a description of the informants who participated in the study and explain the criteria according to which the participants were divided into groups. I then move on to a description of the materials used and explain how the data were gathered and analysed.

3.2.1 Participants

The informants that participated in this study represent a randomly chosen mixed population. In elicitation I, 33 adolescents (22 female and 11 male) between the ages of 11-17 (mean age 14.7) participated. Of these original participants, 31 informants (21 female, 10 male) took part in elicitation II, and 27 informants (20 female, 7 male) in elicitation III. None of the participants had been exposed to an additional language prior to grade 5 at school, and none of them had been in an English speaking country for a period longer than two weeks.

At the outset of the study, the informants were divided into six groups (cf. *Table 3.1 below*), depending on how long they had studied English at school. Exposure to English ranged from 1.6 to 6.6 years (mean 4.18 years).

Pseudonyms have been used throughout the thesis to ensure confidentiality of the participants' names.

For 30 of the participants, English is the first L2 learned from grade 5 onwards. For three, who started French or Latin in grade 5, English is the second L2 learned from grade 7 onwards. Nell and Vicky started French in grade 5, Dawn started Latin.

Participation in the longitudinal study was voluntary and restricted solely by the requirements that each participant was taking English as a subject when the data were gathered and that they were monolingual speakers of German.

Table 3.1: participants* taking part in the study

				elicitation I		elicitation II		elicitation III	
GROUP	NAME	GRADE	GENDER	AGE	Y◆	AGE	Y◆	AGE	Y◆
1	Alice	6	female	12	1.6	--	--	--	--
	Emma	6	female	11	1.6	11	2.0	12	2.4
	Nell – F5 •	8	female	15	1.6	15	2.0	15	2.4
	Vicky – F5 •	8	female	15	1.6	15	2.0	15	2.4
2	Dawn – L5 •	9	female	14	2.6	15	3.0	15	3.4
	Grace	7	female	14	2.8	14	3.2	15	3.6
	Joyce	7	female	13	2.8	13	3.2	13	3.6
	Lucy	7	female	12	2.6	13	3.0	13	3.4
	Ian	7	male	14	2.8	14	3.2	15	3.6
	Kevin	7	male	13	2.6	13	3.0	14	3.4
3	Cathy	8	female	14	3.8	14	4.2	15	4.6
	Erin	8	female	14	3.6	14	4.0	15	4.4
	Hazel	8	female	14	3.8	15	4.2	15	4.6
	Zoe	8	female	14	3.8	15	4.2	15	4.6
	Gary	8	male	14	3.6	14	4.0	15	4.4
	Matt	8	male	14	3.8	15	4.2	15	4.6
4	Ane	9	female	15	4.6	15	5.0	15	5.4
	Becky	9	female	15	4.8	15	5.2	16	5.6
	Meg	9	female	15	4.8	15	5.2	15	5.6
	Sally	9	female	15	4.8	15	5.2	16	5.6
	Tessa	9	female	15	4.8	16	5.2	15	5.6
	Alec	9	male	15	4.8	15	5.2	16	5.6
	Brian	9	male	15	4.8	16	5.2	--	--
	Larry	9	male	16	4.8	16	5.2	17	5.6
	Sam	9	male	15	4.8	16	5.2	16	5.6
5	Fay	10	female	15	5.6	16	6.0	16	6.4
	Karin	10	female	16	5.6	16	6.0	--	--
	Mary	10	female	16	5.6	17	6.0	17	6.4
6	Ivy	11	female	17	6.6	18	7.0	18	7.4
	Ruth	11	female	17	6.6	18	7.0	18	7.4
	Eric	11	male	17	6.6	--	--	--	--
	Nick	11	male	17	6.6	18	7.0	--	--
	Paul	11	male	17	6.6	18	7.0	--	--

◆: years of training in English

•: started French/Latin in grade 5

* the participants' names were altered

3.2.2 Materials

During each elicitation, the participants performed an oral unstructured task and two structured tasks, one oral, one written (cp. *Table 3.2 below*). The interrogatives produced in the unstructured tasks are referred to as unstructured

questions, whereas those produced in the structured tasks are referred to as structured questions.

Table 3.2: tasks used in the study

medium	task type	task	question type
oral	unstructured	I.a	*yes/no*
		I.b	*wh*
	structured	II	*wh*
written	structured	III	*wh*

Each task was centred around a set of related comic strips by Mark O'Hare. These stories were chosen in order to induce the participants to use their ILs as a communicative tool and not to carry out a grammar exercise. The main rationale for using these types of elicitation tasks is that I assume that the participants use a language variety that reflects unconscious, i.e. acquired knowledge, rather than the learned knowledge that is elicited through grammar exercises (cf. Eckman, Moravcsik & Wirth 1989: 178f; Krashen 1982: 10). I also assume that the unstructured tasks elicit the variety that is the most communicative variety and therefore reflects unconscious knowledge, and that the oral structured task reflects more unconscious knowledge than the written structured task, but less unconscious knowledge than the unstructured task, i.e. the amount of acquired knowledge used in the three tasks is supposed to decrease in the following way: unstructured oral > structured oral > structured written.

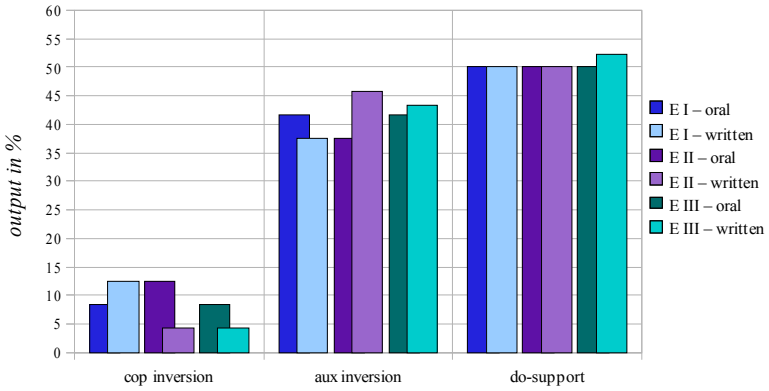
The speech bubbles for each task were edited if necessary, giving only the information that was necessary for the participants to understand the gist of the story.

Task I is an unstructured oral task, in which trigger sentences were not provided to elicit a response. Interrogatives that were produced in this task are referred to as unstructured. In task I, the most natural IL variety is used, since the task is the least formal. Of the structured tasks, in which trigger sentences were provided to elicit a response, task II is less formal than task III because it is oral. The most formal task is the written task III. For each structure tested in the structured part of the elicitation, we have a progression from less formal to more formal, interrogatives that were produced in this task are referred to as structured.

Task I aimed at eliciting *yes/no* and *wh*-questions (subdivided into task I.a and I.b respectively). The storyboards in this task contained approximately 30 separate pictures of a related comic strip. For the first task, the pictures of the comic strips were cut apart and numbered. This presentation of the material ensured that the participants produced more spoken data because they did not have a complete overview of the story.

The following *Diagram 3.1* generated from *Table 3.3 below* shows the proportion of how many trigger sentences requiring the usage of *cop inversion*, *aux inversion* and *do-support* were used in the structured tasks.

Diagram 3.1: expected output



To trigger the examined structures in tasks II and III, each task used 24 declaratives as trigger sentences.

Table 3.3: structured tasks – trigger sentences

to trigger	elicitation I				elicitation II				elicitation III			
	oral Qs		written Qs		oral Qs		written Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
cop inversion	2	8.33	3	12.5	3	12.5	1	4.17	2	8.33	1	4.35
aux inversion	10	41.67	9	37.5	9	37.5	11	45.83	10	41.67	10	43.48
do-support	12	50	12	50	12	50	12	50	12	50	12	52.17
total	24	100	24	100	24	100	24	100	24	100	23	100

Twelve trigger sentences were supposed to elicit *do-support*, while the remaining 12 sentences were supposed to either elicit *cop inversion* or *aux inversion* (the trigger sentences used are given in appendix 9.3 below).

Fergus and Mel are inline-skating.
He looked surprised because he saw a dog inline-skating.

elicitation I – task II

The storyboards accompanying tasks II and III contained approximately 21 pictures. The pictures contained numbers that related a trigger sentence to its related picture. Though the storyboards were not strictly necessary to carry out tasks II and III, they were provided to make the design more attractive.

In oral task II, all 24 declaratives were printed on cards. For written task III, all declaratives were printed on a worksheet.

3.2.3 Procedures

The data were obtained from the participants in up to three individual interviews. Each elicitation was spaced approximately four months apart and lasted approximately an hour. The data are assumed to represent different stages in the participants' ILs and therefore provide an insight into developmental processes of each participant's IL.

The tasks always started with a short explanation; task II began with a couple of warm-up trigger sentences to control whether the participants knew what they were expected to do. The participants where told that during the oral tasks, their output was recorded with a recorder which was placed on the table. For the written tasks, the participants were given worksheets which they were asked to fill out. The records and worksheets were transcribed by the interviewer.

During all tasks, the participants were allowed to ask for vocabulary. Also, if my responses were not understood, they were rephrased and if necessary repeated in German.

For task I, the participants were shown separate, numbered pictures of a comic strip and were asked to find out in as much detail as possible, although within 15 minutes, what the story was about in order to retell it at the end. The participants were allowed to ask as many questions as they wanted to for each

picture. Skipping pictures was possible. To accomplish this task, they were allowed to ask questions. At first, the participants were only allowed to ask questions to which '*yes*' or '*no*' was the only possible answer. Later on they were told that they could ask both *yes/no* and *wh*-questions. This procedure was chosen in order to elicit more questions from the participants. Answers to the participants' questions were translated to German if the English answers were not understood.

The oral tasks were always tested before the written task because a less careful style, i.e. more natural style, was expected to be elicited. In the written task the most careful style, i.e. the style that represents the most grammatical knowledge, was expected to be elicited, and was therefore tested last in order not to influence the results of the other tasks by activating grammatical knowledge.

The participants were handed the storyboards of tasks II and III and were given time to look at them before each task started and the instructions were given. The pictures of the storyboards were numbered. The numbers correspond to the trigger sentences. If a participant needed help in connecting a specific picture to a given trigger sentence, help was provided by pointing out the picture. If vocabulary questions arose they were answered in order to prevent the participants' from not dealing with a sentence due to vocabulary difficulties.

The material for the oral structured tasks was read out to the participants and also presented in written form to avoid listening comprehension difficulties.

Before the second task started, each participant was given a couple of test sentences to control whether the instructions for this task were understood. In the test sentences, *do-support* was not used in order not to trigger this structure. The test sentences were not recorded. If a participant deemed a declarative too difficult they could skip this sentence. Skipped sentences were presented once more at the end; if the participant was not able to deal with this sentence after the second time, it was omitted.

Fergus and Mel <u>are inline-skating</u>.
He looked surprised <u>because he saw a dog inline-skating</u>.

elicitation I – task II

The two declaratives above are examples of trigger sentences given to the informants. From sentences like these, the participants were instructed to formulate a question, asking for the underlined section of the declarative printed on the card.

Task III was designed to be analogous to task II, the only difference being that task III is a written task. The instructions, which were briefly repeated, were the same as for task II. After the instruction, the participant was handed a worksheet and the comic strip and asked to write down questions for the given declaratives. Once again, the participant was encouraged to ask for help if any problems arose with regard to vocabulary or understanding the context of the storyboards.

3.2.4 Analyses

Table 3.4 below shows the total number of data elicited during the three elicitations and how many of the elicited data were used in the analyses.

Table 3.4: produced tokens

	elicitation I		elicitation II		elicitation III		total
	produced	analysed	produced	analysed	produced	analysed	
task I	1006	952	925	923	1095	1092	2967
task II	792	792	744	744	648	637	2173
task III	792	791	744	744	648	621	2156

If the participants produced declarative sentence which were meant to function as a question and used an intonation pattern corresponding to the one of interrogatives, I indicated this in the transcription with a '*?*', e.g. *And he don't likes the doghouse?* (Becky-EI-TI.a-26). Questions that are only marked as questions through their intonation are included in the analysis in the category *no inversion* (cp. *Table 4.4 below*). If a declarative was intended as a comment or a narration of a fact, it is marked with a '.' and is not included in the analysis, e.g. *So they come again to the shop and look for this. Because this was the first*

idea that man had that he can go in the house. And so he thinks that it is good when the dog has a house for himself. (Becky-EI-TI-27).

3.2.4.1 Interlanguage Analysis

Of the analytical tools used in this thesis, the IL analysis is the only one that does not take any external norms like the native speaker's system or the task into consideration. It analyses the participants' output without referring to anything else but the underlying IL system of each participant.

To give a detailed picture of the participants' ILs, their output was analysed syntactically. From this syntactic analysis I abstracted 283 subtypes (cf. *4.1.2.2 below*), which are grouped into 58 types (cf. *4.1.2.1 below*). These types are then abstracted into six categories (cf. *Table 4.4 below*) which are partly based on Wode's developmental stages (cf. *Table 2.3 above*).

Grouping the output into six categories enables me to show whether there is a hierarchy in which the structures are acquired and whether this hierarchy holds for all of my participants. Comparing the data of tasks II and III enables me to show whether this hierarchy also holds if the IL is not used as a communicative tool, but as a means of carrying out the more formal grammatical exercises.

Table 3.5 below explains how I analysed and labelled the IL data.

Table 3.5: key to syntactic analysis

	word type	**label**		**example**
verbal	auxiliary/ modal	aux	unmarked; e.g. 2. sg. & plural simple present	*are, have*
		aux-n	marked for number; e.g. 1. & 3. sg simple present	*am, is, has*
		aux-t	marked for tense	*had, were*
		aux-nt	marked for tense & number	*was*
		mod		*will, would*
	operator do	do	unmarked	*do*
		do-n	marked for number	*does*
		do-t	marked for tense	*did*

continued overleaf

	word type	**label**		**example**
verbal	copula	cop	unmarked	*are*
		cop-n	marked for number	*is*
		cop-t	marked for tense	*were*
		cop-nt	marked for tense & number	*was*
		cop-inf	to infinitive	*to be (angry)*
	verb	V	unmarked	*write*
		Vinf	to infinitive	*to write*
		V-n	marked for number, e.g. 3rd person singular. *-s*	*writes*
		V-t	marked for tense	*writing, wrote*
nominal	subject	S-sg	singular	*Fergus, house*
		S-pl	plural	*Fergus and Mel, cats*
	object	O	specified only if object position is relevant, it is otherwise represented as X	*What is Fergus **her** telling?*
	subject complement	Sc	specified only if subject complement is relevant, it is otherwise represented as X	*Mel is **a teacher**.*
other	interrogative pronoun	wh		*why, who*
	unspecified	X	parts of a clause irrelevant for analysis	*What make Fergus **there**?*
	negator	do+neg mod+neg	unanalysed negator if they additionally occur with aux, cop or do	***Do** they **don't** understand?*
		neg	analysed negator	*What **can't** Fergus see?*

3.2.4.2 Error Analyses

In the analyses that I use to describe my data, I assume that all errors are overt errors (cf. *2.2.1.1 above*). Covert errors would have led to miscommunications during the interviews. My error analyses differ from a classical error analysis in that my analyses accept some deviation from the TL norm as correct. With the exception of these deviations, everything else that deviated from the target from of a question and was not self-corrected was counted as an error.

I carried out two different types of error analyses, each with two different goals; a general description of the data. For the structured tasks, in a second analysis, the trigger sentences are included in the judgement.

Compared to a classical error analysis, both analyses set a different focus on what is counted as an error. As a consequence of the modified focus, I

distinguish between tasklike/non-tasklike instead of using the terms targetlike/non-targetlike which are used to mark IL structures that meet/deviate from the TL norm respectively.

The first error analysis I carried out differs the most from a classical error analysis in that I only consider structural errors. From here on I refer to it as Structural Error Analysis (SEA) and to a variant of the SEA, in which the trigger sentence and therefore the expected response is included in the judgement, as SEA^{+}.

The second type of error analysis I carried out differs from a classical analysis in that semantics is excluded. I refer to this analysis as EA from here on and to its variant that includes the expected response as EA^{+}.

I distinguish between SEA/EA on the one hand and SEA^{+}/EA^{+} on the other because both SEA and EA give insight into the IL system of interrogative formation whereas SEA^{+}/EA^{+} give insight into whether the participants have moved from acquiring a form to using it in appropriate contexts.

Structural Error Analysis (SEA)

A native speaker would consider the interrogative below as being ungrammatical because *do-support* is not marked with 3rd person singular *–s*.

**And … do the other one know where it is … where he is?* (Meg-EII-TI.a-21)

In the SEA, I only judge the structure of the produced interrogatives. In *Table 3.6 below* I give examples of interrogatives that are judged as tasklike/non-tasklike respectively in the SEA.

Table 3.6: examples of tasklike/non-tasklike interrogatives

fragment	*A newspaper?* (Matt-EII-TI.a-2) *Why not?* (Emma-EI-TI.b-25)
	* *He really happy?* (Ane-EI-TI.a-51) * *What that for a shop?* (Gary-EI-TI.b-2)

continued overleaf

cop inversion		*Is this a supermarket?* (Emma-EI-TI.a-1) *Why is Fergus sad?* (Alice-EI-TIII-19)
	*	*Are they are on the North Pole?* (Hazel-EI-TI.a-8) *What are Fergus and Mel?* (Hazel-EI-TII-4)
no inversion		*And Fluffy says no?* (Ian-EII-TI.a-31)
	*	*The perfect spot to bury what does Fergus look for?* (Alec-EI-TIII-2) *How Mel is shaking Fergus?* (Emma-EII-TII-13)
V inversion	*	*Do this other dogs?* (Mary-EI-TI.a-12) *What do the dog?* (Mary-EI-TI.b-18)
aux inversion		*Is Fergus lost?* (Fay-EII-TI.a-2) *What are they doing there?* (Tessa-EI-TI.b-15)
	*	*Will the officer can help him?* (Gary-EII-TI.a-23) *What is Mel Cuddles telling?* (Nell-EII-TII-9)
do-support		*Do they found each other?* (Becky-EII-TI.a-11) *What does Fergus wanted to try out?* (Erin-EII-TII-20)
	*	*Doesn't know Mel what to do?* (Sam-EII-TI.a-12) *What does Mel is raking into a heap?* (Cathy-EII-TII-19)

I consider sentences like the ones below to be tasklike because in the first example, although it is not targetlike, the error the participant made is an error of aspect and not an error concerning the structure of interrogatives. In the second example, the participant encoded tense on both *do* and the main verb, again an error that does not concern the structure.

Has Bruno see Mel? (Emma-EII-TI.a-18)

And what does he said? (Nick-EII-TI.b-21)

The following interrogative is again judged as tasklike because the participant has worked out the concept of *do-support* in at least some contexts, although the need to include either the information for tense or number, 3rd person singular *–s*, is not yet part or the participants IL grammar in all contexts. In this task-based analysis, a distinction is made between tasklike and non-tasklike.

And … do the other one know where it is … where he is? (Meg-EII-TI.a-21)

Table 37 below gives an overview of the criteria used in scoring the interrogatives.

Table 37: criteria used in the SEA

	tasklike	**non-tasklike**
do-support	usage of *do-support*, but tense encoded incorrectly at main verb	incorrect word order if this concerns the placement of do, subject and verb
	tense encoded on both *do* and main verb	
	false subject-verb agreement since it is irrelevant for the sentence structure	
	incorrect placement of adverbs or adjectives	
	unanalysed negator	
non do-support	false subject-verb agreement since it is irrelevant for the sentence structure	incorrect word order
	incorrect placement of adverbs or adjectives	mixing of different tenses on aux and verb
	unanalysed negator	
	omission of inflectional morphology on main verb	

SEA^{+}

In contrast to the structural error analysis, the task-based analysis includes the task the participant had to carry out as the norm against which the output is compared, i.e. it includes whether the produced structure is tasklike in the context in which it was used.

Some of the interrogatives that were produced in the structured tasks are judged as non-tasklike if the trigger is included in the judgement, although when considered without context they would be judged as tasklike.

trigger	*Whenever Fergus places a bone in the hole he gives Mel <u>a piece of paper</u>.*
response	**What is Mel giving Fergus?* ^{0} (Becky-EI-TIII-16)
trigger	*Fergus is telling Mel that they are skating <u>towards the mall</u>.*
response	**What does Fergus tell Mel?*^{0} (Ian-EI-TII-14)

What is included in the analysis of the interrogatives produced in the structured tasks is the 'appropriateness' of the response. Sentences like the examples above are judged to be non-tasklike because they do not fit to the trigger and are therefore, in this context, not appropriate. Interrogatives that were not successfully elicited are superscripted with '^{0}'.

Table 3.8 *below* gives an overview of the criteria used in scoring the interrogatives.

Table 3.8: criteria used in the SEA+

	tasklike	**non-tasklike**
do-support	usage of *do-support* with required tense	change of aspect, even if the resulting structure is an otherwise grammatically well-formed structure
	usage of *do-support* with change of tense if this new tense also requires *do-support*	incorrect word order if this concerns the placement of do, subject and verb
	usage of *do-support*, but tense encoded incorrectly at main verb	
	tense encoded on both *do* and main verb	
	false subject-verb agreement since it is irrelevant for the sentence structure	
	usage of a different verb in response with same tense	
	incorrect placement of adverbs or adjectives	
	unanalysed negator	
non do-support	usage of given tense	change of aspect, even if the resulting structure is an otherwise grammatically well-formed structure
	usage of given tense with different verb	usage of given tense, but omission of inflectional morphology on main verb
	false subject-verb agreement	tense shifts from simple to past
	false subject-verb agreement since it is irrelevant for the sentence structure	incorrect word order
	usage of a different verb in response with same tense	mixing of different tense on aux and verb
	incorrect placement of adverbs or adjectives	
	unanalysed negator	

Error Analysis

In contrast to the SEA, which only looks at structural properties, the EA also includes an analysis of verbal morphology, concord, and unanalysed negator.

... what does the instruction didn't tell ... tell you? [3] (Becky-EI-TII-10)

Is there other people? [1] (Emma-EI-TI.a-6)

What say he? [1 2] (Paul-EI-TI.b-19)

Who is Mel tries to ignore? [2 4] (Kevin-EII-TII-18)

[1]: rule of concord is not obeyed
[2]: syntax differs from declarative or interrogative syntax
[3]: unanalysed negator
[4]: verbal morphology

I chose to look at differences in these four areas, which are superscripted with numbers '[1, 2, 3 & 4]', because these four represent the areas in which most problems arose during question formation.

EA$^+$

The EA$^+$ includes the task the participant had to carry out as the norm against which the output is compared, i.e. if the interrogatives that were produced during the structured tasks are an appropriate response to the presented trigger.

trigger *Whenever Fergus places a bone in the hole he gives Mel <u>a piece of paper</u>.*

response **What is Mel giving Fergus?* [0] (Becky-EI-TIII-16)

trigger *Fergus is telling Mel that they are skating <u>towards the mall</u>.*

response **Where skating Fergus tell Mel?* [0 2 4] (Ian-EI-TII-14)

[0]: tense/aspect shift
[1]: rule of concord is not obeyed
[2]: syntax differs from declarative or interrogative syntax
[3]: unanalysed negator
[4]: verbal morphology

3.2.4.3 Statistical Procedures

I use two statistical procedures to test the statistical relevance of my data.

I use one-tailed matched *t*-tests (Hatch & Farhady 1982: 108-127; 272) to compare the means of overall structurally correct interrogatives with *cop inversion*, *aux inversion*, and *do-support* that were produced during the study, to show whether a significant difference in the correctness exists between the two unstructured and the two structured tasks. The *t*-tests were carried out to test for the hypothesis that the task type, i.e. unstructured *yes/no* questions vs. unstructured *wh*-questions or structured oral interrogatives vs. structured written interrogatives respectively, does influence the overall error rate.

In the second statistical procedure, the Pearson product moment correlation (Hatch & Farhady 1982: 192-231; 277), I want to show whether a significant correlation between time and a number of other variables discussed exists (cf. *5.2 below*).

4. Results

In this chapter, I present the results of my study (cf. *Table 3.1 above*). The output gathered in the unstructured elicitations is likely to reflect unconscious and therefore acquired knowledge (Eckman, Moravcsik & Wirth 1989: 179), representing a more casual style than the output gathered in the structured elicitations. The oral structured elicitations range in their formality between the more casual unstructured elicitations and the more formal written structured elicitations.

In the unstructured tasks, divided into task I.a (*yes/no* questions) and I.b (*wh*-questions), I compare the two different interrogative types that were elicited against each other, discussing differences. In the structured tasks, I compare whether medium differences influence the elicited interrogatives.

First I discuss the results gained from the IL Analysis and then I move on to a discussion of the results gained from the two modified Error Analyses. After giving an overview of the results, I develop a revised model for the acquisition of simple interrogatives in guided SLA, based on Wode's developmental stages (1978a). Into this revised model, the roles of transfer, for L1 German, and markedness are incorporated based on the findings of both Interlanguage and Error Analyses.

4.1 Interlanguage Analysis

In the following section, I describe the results of the IL Analysis. I start with a general classification of the data into Wode's Developmental Stages (cf. *2.3.2 above*).

I then introduce a modified developmental approach for a guided language learning context, rearranging the acquisitional sequence of simple interrogatives

Wode (1978a) has postulated for a natural language learning context. After introducing the revised acquisitional sequence, I look at distributional differences that can be related to the task.

4.1.1 Wode's Developmental Stages in Guided SLA

The following section gives an overview of how the data can be classified into the developmental stages postulated by Wode (1978a). I first look at how interrogatives were formed in the unstructured tasks and then move on to a description of the interrogatives that were produced in the structured tasks, looking for performance differences within each of the task types.

Table 4.1 below briefly summarises Wode's developmental stages (cf. *2.3.2above*).

Table 4.1: Wode's developmental stages

stage 1	intonation questions
stage 2	*wh*-questions with copula
stage 3	non-inverted *yes/no* and *wh*-questions with all verb types
stage 4	inversion with copula, auxiliaries, and main verbs in *yes/no* and *wh*-questions
stage 5	*do-support* with main verbs in *wh*-questions
stage 6	*do-support* with main verbs in *yes/no* questions

Table 4.2 below shows how many interrogatives each group produced in each of the six developmental stages in the two unstructured tasks, while *Table 4.3 below* shows how many interrogatives were produced in each stage in the structured tasks. The results of a classification into Wode's developmental stages in *Table 4.2 below* and *Table 4.3 below* show that a direct comparison of all interrogatives produced throughout the study is difficult; only the *wh*-questions that were produced in the unstructured and structured tasks are comparable, i.e. unstructured *wh*-questions vs. structured *wh*-questions. If the unstructured *yes/no* questions, i.e. *yes/no* questions produced in the unstructured tasks, are to be included into

this comparison difficulties arise. Stages II and IV are especially problematic in a comparison of *yes/no* and *wh*-questions.

Table 4.2: Wode's developmental stages – unstructured questions

	E	stage I		stage II		stage III		stage IV		stage V		stage VI	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
group 1	I	1.9	7.5	-	33.75	19.05	1.25	79.05	56.25	-	1.25	-	-
	II	2.6	-	-	37.5	27.27	-	63.64	62.5	-	-	6.49	-
	III	5.41	2.33	-	25.58	24.32	2.33	64.19	69.77	-	-	6.08	-
group 2	I	8	-	-	30	42	27.5	43	27.5	-	15	7	-
	II	-	-	-	14	23.48	6	55.65	38	-	42	20.87	-
	III	1.12	-	-	18.46	18.44	15.38	55.87	24.62	-	41.54	24.58	-
group 3	I	2.8	2.56	-	23.08	28.04	10.26	20.56	20.51	-	43.59	48.6	-
	II	0.75	-	-	15.71	8.96	17.14	46.27	24.29	-	42.86	44.03	-
	III	4.46	1.33	-	26.67	15.18	10.67	42.86	46.67	-	14.67	37.5	-
group 4	I	4.72	3.23	-	26.88	59.84	4.3	26.77	39.78	-	25.81	8.66	-
	II	4.23	-	-	23.76	29.63	2.97	43.92	31.68	-	41.58	22.22	-
	III	7.35	2.73	-	21.82	30.88	9.09	46.08	39.09	-	27.27	15.69	-
group 5	I	11.9	15	-	17.5	61.9	40	25	27.5	-	-	1.19	-
	II	1.47	-	-	50	72.06	7.14	26.47	28.57	-	14.29	-	-
	III	7.55	-	-	20	39.62	33.33	49.06	46.67	-	-	3.77	-
group 6	I	5.06	5.17	-	18.97	51.9	36.21	29.11	17.24	-	22.41	13.92	-
	II	-	-	-	32.35	32.73	20.59	65.45	23.53	-	23.53	1.82	-
	III	1.32	-	-	16.67	38.16	-	40.79	58.33	-	25	19.74	-

Wh-questions with copula are categorised into stage II, whereas *yes/no* questions with copula are categorised into stage IV. The same distinction is not made for questions that are formed through *aux inversion.* For these, both *yes/no* and *wh*-questions, are stage IV questions. Therefore, a categorisation into Wode's developmental stages creates more complication than simplification in a comparison of *yes/no* and *wh*-questions.

Table 4.3: Wode's developmental stages – structured questions

	E	stage I		stage II		stage III		stage IV		stage V		stage VI	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
group 1	I	-	-	6.25	9.38	6.25	1.04	86.46	89.58	1.04	-	-	-
	II	-	-	2.78	9.72	4.17	2.78	88.89	80.56	4.17	6.94	-	-
	III	-	-	8.57	1.45	-	-	78.57	85.51	12.86	13.04	-	-
group 2	I	-	-	1.39	9.72	34.03	29.17	50.69	50.69	13.89	10.42	-	-
	II	-	-	2.08	5.56	32.64	39.58	51.39	38.19	13.89	16.67	-	-
	III	-	-	7.75	2.9	17.61	21.01	44.37	44.2	30.28	31.88	-	-
group 3	I	-	-	4.17	8.33	18.06	6.25	37.5	37.5	40.28	47.92	-	-
	II	-	-	2.08	9.72	7.64	8.33	51.39	40.28	38.89	41.67	-	-
	III	-	-	7.75	2.17	7.04	4.35	40.14	46.38	45.07	47.1	-	-
group 4	I	-	-	4.63	8.33	4.17	2.31	54.63	42.59	36.57	46.76	-	-
	II	-	-	1.39	10.19	2.31	-	59.26	46.76	37.04	43.06	-	-
	III	-	-	9.57	2.72	0.53	1.09	52.13	58.7	37.77	37.5	-	-
group 5	I	-	-	2.78	9.72	34.72	30.56	58.33	56.94	4.17	2.78	-	-
	II	-	-	2.78	9.72	30.56	25	55.56	40.28	11.11	25	-	-
	III	-	-	6.25	4.35	39.58	21.74	54.17	60.87	-	13.04	-	-
group 6	I	-	-	5	9.24	20	28.57	40.83	31.09	34.17	31.09	-	-
	II	-	-	3.13	6.25	16.67	29.17	42.71	34.38	37.5	30.21	-	-
	III	-	-	8.51	2.17	-	-	51.06	47.83	40.43	50	-	-

The problems that arise when analysing the unstructured interrogatives based upon Wode's developmental stages do not occur for the structured questions; however, if the unstructured *yes/no* questions are to be included a different approach should be used.

4.1.2 A New Approach: Category-based Analysis

Each utterance is abstracted into:

1. SUBTYPES, the most specific description of the data, including detailed information such as number or whether the verbal elements are tensed;
2. TYPES, which are a generalisation of a group of subtypes, giving basic syntactic information and excluding morphological information; and finally,
3. CATEGORIES, which represent the least specific classification.

The following sentence *Did he eat Fergus' friend?* (Vicky-EII-TI.a-17) would therefore be analysed as follows:

1. SUBTYPE: do-t S-sg V (X)
2. TYPE: S V (X),
3. CATEGORY:*do-support*.

The following section introduces the six superordinate categories (cf. *Table 4.4 below*) into which I have abstracted the structures that were used throughout the three elicitations. These categories are represented by 58 subordinate types. The 58 types themselves are a generalisation of their underlying subtypes which in turn are a generalisation of the actual output that was produced by the participants during the elicitations. An overview of the more detailed classification into underlying types and subtypes follows in *4.1.2.1* and *4.1.2.2 below* respectively.

The categories in the tables below are presented according to their relative frequency which does not correspond to the order of acquisition for English

interrogatives introduced in *2.3.2 above*. The column 'output total' in the table in this section shows the absolute frequency of a category in the corpus. In the columns labelled with 'E I, E II, E III' the frequency given refers to the frequency in the corresponding elicitations.

Table 4.4 below gives an overview of the proportion of interrogatives produced in each category. *Aux inversion* (31.14 %) was used most frequently throughout the elicitations to form interrogatives, closely followed by questions with *do-support* (25.67 %). The least frequently used structures belong to the categories *verb inversion* (10.33 %) and *fragment* (1.44 %), respectively. The production rates for *aux inversion*, *do-support*, *cop inversion*, and *fragment* remained relatively stable throughout the three elicitations, while usage of *no inversion* and *verb inversion* declined slightly.

Table 4.4: output categories over all elicitations

type	output total		E I		E II		E III	
	abs.	%	abs.	%	abs.	%	abs.	%
aux inversion	2273	31.15	726	9.95	788	10.8	759	10.4
do-support	1873	25.67	569	7.8	666	9.13	638	8.74
no inversion	1335	18.3	572	7.84	429	5.88	334	4.58
cop inversion	957	13.12	320	4.39	275	3.77	362	4.96
V inversion	754	10.33	296	4.06	241	3.3	217	2.97
fragment	104	1.43	52	0.71	12	0.16	41	0.55
total	7296	100	2535	34.75	2411	33.05	2350	32.21

The categories I use to classify my data roughly coincide with the developmental stages Wode (1978a) postulated (cf. *Table 2.3 above*), although some of the categories I use are mergers of Wode's stages, i.e. Wode distinguishes between *wh*-questions with copula (Stage II) and inversion with copula (Stage IV), whereas my category *cop inversion* contains both *yes/no* and *wh*-questions.

Another difference between Wode's (1978a) developmental stages and the categories I postulate is the category *fragment*, i.e. an incomplete clause (ellipsis), a phrase or just one word used to gain information, like *Where?* (Karin-EI-TI.b-22)*, With the hatchet?* (Ane-EIII-TI.a-33) or *To kill him*. (Meg-EIII-TI.a-55). The structures that are covered by Wode's Stage I and my category *fragment* roughly coincide, although their function differs. Wode's Stage I is the beginning step in the acquisitional sequence in a natural learning situation, whereas I see the

category *fragment* more as a communicative tool instead of belonging to an acquisitional sequence, at least in a guided learning context.

Language acquisition in natural settings leaves room for real intonation questions, which undoubtedly are the first instances of questions in a natural learning context. Whereas in a guided SLA context the first questions the learner learns are formulaic expressions along the line of *Who is X?*. All *fragments* were produced in Task I, the most communicative task. If *fragments* were produced, they were generally used to further communication, fulfilling the same function as do similar structures in German, *Wo ist die nächste Haltestelle?* [translation: *Where is the next bus stop?*] – *Um die Ecke.* [translation: *Around the corner.*] (Wunderlich 1988: 104), where the answer to the question is elliptical.

4.1.2.1 Category – Type Relation

The following tables below show the relation between each of the superordinate categories introduced in *4.1.2 above* and their subordinate types (examples for each type are given in appendix *9.2.3*).

The tables below are given according to how often (absolute and relative frequency) each category was produced. Types with bracketed *(wh)* were produced in the unstructured tasks with variants in *yes/no* and *wh*-questions. As in the previous section, the column 'output total' shows how often each single type occurs in the corpus. The columns labelled with 'E I, E II, E III' refer to the frequency in the respective elicitations.

Table 4.5 below shows which types I abstracted if interrogatives with *aux inversion* were produced. The most frequently used type is *wh aux S V (X)*, e.g. *What is Mel drinking* (Alice-EI-TII-16), followed by *aux S V (X)*, e.g. *Is Fergus lost?* (Emma-EII-TI.a-4), which was used five times less frequently than its *wh*-counterpart. Both types represent prototypical interrogative structures, i.e. how interrogatives are most commonly formed (Quirk et al. 1985: 233ff). In

addition to being the most frequently used structure in the category *aux inversion*, *wh aux S V (X)* is also the most frequently used structure in the whole corpus.

Table 4.5: category-type relation – aux inversion

type	output total		E I		E II		E III	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) aux S V (X)								
• wh aux S V (X)	1661	22.77	504	6.91	577	7.91	580	7.95
• aux S V (X)	323	4.43	55	0.75	139	1.91	129	1.77
wh aux V (X)	207	2.84	139	1.91	57	0.78	11	0.15
wh aux V S (X)	35	0.84	21	0.29	7	0.1	7	0.1
wh aux aux V S (X)	18	0.25	-	-	-	-	18	0.25
(wh) aux S aux V (X)								
• wh aux S aux V (X)	13	0.18	3	0.04	4	0.05	6	0.08
• aux S aux V (X)	3	0.04	-	-	2	0.03	1	0.01
aux S O V (X)	6	0.08	4	0.05	1	0.01	1	0.01
wh aux aux V (X)	4	0.05	-	-	1	0.01	3	0.04
wh aux S O V (X)	2	0.03	-	-	-	-	2	0.03
wh aux S (X)	1	0.01	-	-	-	-	1	0.01
total	2273	31.15	726	9.95	788	10.8	759	10.4

The remaining types represent types that show processing problems, i.e. interrogatives containing two auxiliaries where the second auxiliary is a simple repetition of the first one and not necessary for tense formation like *aux S aux V (X)*, e.g. *Will the officer can help him?* (Gary EII-TI.a-23); or show problems with the sentence structure; e.g. inversion of auxiliary and main verb with the subject as in *wh aux V S (X)*, e.g. *What is watering Mel?* (Kevin EI-TIII-1); or insertion of an object between subject and verb as in *aux S O V (X)*, e.g. *Will the man the dog hiring?* (Paul EI-TI.a-11); or omission of the verb as is the case in *wh aux S (X)*, e.g. *Who is Maggie whethe[r] he has eaten her math[s] homework assignment?* (Ian EIII-TIII-21).

Table 4.6: category-type relation – do-support

type	output total		E I		E II		E III	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) do S V (X)								
• wh do S V (X)	1448	19.85	463	6.35	507	6.95	478	6.55
• do S V (X)	349	4.78	81	1.11	126	1.73	142	1.95
wh do S aux V (X)	39	0.53	7	0.1	19	0.26	13	0.18
(wh) do V S (X)								
• wh do V S (X)	13	0.18	4	0.05	7	0.1	2	0.03
• do V S (X)	2	0.03	-	-	2	0.03	-	-
wh do V (X)	12	0.16	12	0.16	-	-	-	-
(wh) do S cop (X)								
• do S cop (X)	3	0.04	-	-	2	0.03	1	0.01
• wh do S cop (X)	2	0.03	1	0.01	1	0.01	-	-
do S aux V (X)	3	0.04	-	-	1	0.01	2	0.03
wh do S O V (X)	1	0.01	-	-	1	0.01	-	-
do S do V (X)	1	0.01	1	0.01	-	-	-	-
total	1873	25.67	569	7.8	666	9.13	638	8.74

Table 4.6 above shows which types I abstracted if interrogatives with *do-support* were produced. The most frequently used types are *wh do S V (X)* with *wh*-questions, e.g. *What do the teachers never believe?*(Emma EIII-TIII-22), and *do S V (X)* in *yes/no* questions, e.g. *Did he call his dog?* (Grace-EII-*TI.a-5)*. Both types represent structures that Quirk et al. (1985: 233ff) describe as the most common. *Wh do S V (X)* is the second most commonly used structure in the whole corpus. As with *aux inversion* the less frequent types in the category *do-support* are either examples of less common types, e.g. *wh d*o *V (X)*, e.g. *What does suddenly pop out of th*e *hole?* (Tessa-EI-TIII-14); or represent misapplied transformation rules, like *do S au*x *V (X)*, e.g. *On what do they are sitting?* (Brian-EII-TIII-18) or *wh do S cop (X)*, e.g. *What does they are afr*aid *of?* (Larry-EI-TII-15).

Table 4.7 below shows which types I generalised if *non inverted* interrogatives were produced. Types in this category represent the strategy of indicating an interrogative by a change in intonation or the use of an interrogative pronoun and the optional use of an intonational change.

All of the more frequent types in this category represent a declarative sentence structure, to which a *wh*-element is added.

Table 4.7: category-type relation – no inversion

type	output total		E I		E II		E III	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) S V (X)								
• wh S V (X)	384	5.26	177	2.43	137	1.88	70	0.96
• S V (X)	315	4.32	157	2.15	95	1.3	63	0.86
(wh) S aux V (X)								
• wh S aux V (X)	232	3.18	94	1.29	89	1.22	49	0.67
• S aux V (X)	133	1.82	42	0.58	44	0.6	47	0.64
(wh) S cop (X)								
• S cop (X)	190	2.6	61	0.84	43	0.59	86	1.18
• wh S cop (X)	65	0.89	34	0.47	15	0.21	16	0.22
wh O S V (X)	3	0.04	2	0.03	1	0.01	-	-
S do V (X)	3	0.04	2	0.03	-	-	1	0.01
S aux V wh (X)	2	0.03	-	-	1	0.01	1	0.01
S V wh (X)	2	0.03	1	0.01	1	0.01	-	-
S aux aux V (X)	2	0.03	-	-	1	0.01	1	0.01
S cop Sc wh (X)	1	0.01	-	-	1	0.01	-	-
S V (X) wh	1	0.01	-	-	1	0.01	-	-
O V wh do S V (X)	1	0.01	1	0.01	-	-	-	-
wh O aux S V (X)	1	0.01	1	0.01	-	-	-	-
total	1335	18.3	572	7.84	429	5.88	334	4.58

Of the remaining types, only *S aux aux V (X)*, e.g. *So they could be killed from the farmer?* (Vicky-EIII-TI.a-47), represents a prototypical declarative structure. The

other types are based either on the addition of the *wh*-pronoun immediately in front of an *(X)* like, *S V wh (X)*, e.g. *Mel comforts who each time after he has buried a bone?* (Zoe-EI-TIII-20), or, sentence finally like *S cop (X) wh*, or are examples of misformulations, such as *wh O S V (X)*, e.g. *Where burial all three stand after each?* (Nell-EI-TIII-17).

Table 4.8 below shows which types I abstracted if interrogatives with *cop inversion* were produced. The most frequently used type employed to form *yes/no* questions is *cop S (X)*, e.g. *Is the man happy again?* (Emma-EI-TI.a-21), closely followed by *wh cop S (X)*, e.g. *Who is Arlo?* (Dawn-EI-TIII-3). *Cop inversion* differs from both *aux inversion* and *do-support* in that in the latter two categories, the most frequently used types, are instances of *wh*-questions.

As in *aux inversion* and *do-support* the less frequently occurring types are examples of less frequent structures, such as *wh cop (X)*, e.g. *And what's inside?* (Ivy-EI-TI.b.19), or are examples of rules differing from the TL such as *wh cop Sc S (X)*, e.g. *What is afraid Mel that they won't be allowed to put ... to put up?* (Lucy-EII-TII-14).

Table 4.8: category-type relation – cop inversion

type	output total		E I		E II		E III	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) cop S (X)								
• cop S (X)	474	6.5	126	1.73	129	1.77	219	3
• wh cop S (X)	431	5.91	180	2.47	139	1.91	112	1.54
wh cop (X)	45	0.62	13	0.18	6	0.08	26	0.36
cop S cop (X)	3	0.04	1	0.01	-	-	2	0.03
wh cop Sc cop (X)	2	0.03	-	-	-	-	2	0.03
wh cop Sc S (X)	1	0.01	-	-	1	0.01	-	-
wh cop S cop (X)	1	0.01	-	-	-	-	1	0.01
total	957	13.12	320	4.39	275	3.77	362	4.96

Table 4.9 below shows which types I abstracted if interrogatives with *verb inversion* were produced. Most of the types in this category are instances of simple verb subject inversion in sentences without an auxiliary. The most frequent type is again produced with *wh*-questions *wh V S (X)*, e.g. *Who tries Mel to ignore?* Dawn-EII-TII-18), closely followed by *V S (X)*, e.g. *Asks he the policeman?* (Ian-EII-TI.a-37), used in *yes/no* questions. The remaining types are examples of rules differing from the TL, e.g. where the verb was moved to the

second position instead of the auxiliary, e.g. wh *V S aux (X)*, e.g. *How many passed they have their house already?* (Nell-EI-TII-23).

Table 4.9: category-type relation – verb inversion

type	output total		E I		E II		E III	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) V S (X)								
• wh V S (X)	597	8.18	235	3.22	194	2.66	168	2.3
• V S (X)	120	1.64	39	0.53	41	0.56	40	0.55
wh V (X)	33	0.45	21	0.29	5	0.07	7	0.1
V O (X)	2	0.03	-	-	-	-	2	0.03
wh V S aux (X)	1	0.01	-	-	1	0.01	-	-
wh V aux S (X)	1	0.01	1	0.01	-	-	-	-
total	754	10.33	296	4.06	241	3.3	217	2.97

Table 4.10 below shows which types I abstracted if *fragments* were produced to ask questions. Types belonging to the last and least frequently used category at first seem to be incomplete, especially if analysed without context. The most frequently used *fragment* was *S (X)*.

Table 4.10: category-type relation – fragment

type	output total		E I		E II		E III	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) S (X)								
• S (X)	53	0.73	25	0.34	6	0.08	22	0.3
• wh S (X)	6	0.08	6	0.08	-	-	-	-
(wh) (X)								
• wh (X)	18	0.25	13	0.18	-	-	5	0.07
• X	14	0.19	6	0.08	4	0.05	4	0.05
V (X)	10	0.14	1	0.01	1	0.01	8	0.11
aux S (X)	1	0.01	-	-	1	0.01	-	-
do S (X)	1	0.01	-	-	-	-	1	0.01
S aux (X)	1	0.01	1	0.01	-	-	-	-
total	104	1.43	52	0.71	12	0.16	40	0.55

The *fragments* can be categorised into two main groups:

1. they either consist of a single phrase with an optional *wh*-pronoun and/or (X), such as *wh S (X)*, e.g. *Why a mirror?* (Emma-EI-TI.b-62)*, wh (X)*, e.g. *What then?* (Mary-EI-TI.b-26) or *V (X)*, e.g. *To eat?* (Nell-EIII-TI.a-53); or
2. they consist of an auxiliary, including do, a subject and again an optional *wh*-pronoun and/or (X), for example, *do S (X)*, e.g. *And did he?* (Alec-EIII-TI.a-8)*, aux S (X)*, e.g. *Has Fergus?* (Karin-EII-TI.a-27)*,* or *S aux (X)*, e.g. *The dog would?* (Grace-EI-TI.a-5).

Both groups are used as a communicative tool, to effectively and quickly clarify information or verify hypotheses.

4.1.2.2 Type – Subtype Relation

The following classification into 283 subtypes provides the most specific description of the data. For each subtype detailed information such as number or whether the verbal elements are tensed is given, details which are not included in the superordinate types.

Productivity within the different subtypes varies considerably. 114 of the subtypes were only produced once, or, in other words, about 40 % of the subtypes produced represent 1.56 % of the data. To describe 95 % of the data, 102 of the 283 subtypes (about 36 %) that were produced would have to be considered or only those subtypes that were produced 5 times or more during the study.

Table 4.11 below gives an exemplary overview of the relation between the superordinate types introduced in *4.1.2.1 above* and their subordinate subtypes (examples for each subtype are given in appendix *9.2.3*). Relative numbers refer to how often each type/subtype was produced in the corpus.

The subtypes given in *Table 4.11 below* represent the 10 most frequently produced subtypes of the most frequently used type for each category.

Some of the subtypes given in *Table 4.11 below* are labelled with superscript numbers, indicating that for these subtypes rules were applied that differ from the TL rules, e.g. *cop S-sg X* [1] *– Are the turkey insulted?* (Emma-EIII-TI.a-55). For further detail on subtypes with differing rules cf. *4.2.3 below.*

Table 4.11: overview subtypes

	type	abs.	%	subtype	abs.	%	example
aux inversion	wh aux S V (X)	1661	22.77	wh aux-n S-sg V-t (X) [4]	1146	15.71	*What is Mel asking Fergus?* (Brian-EI-TII-9)
				wh aux S-pl V-t (X) [4]	265	3.63	*What are Arlo and Mel telling Fergus?* (Vicky-EI-TIII-5)
				wh aux-n S-sg V-n (X) [4]	52	0.71	*How is Fergus looks?* (Vicky-EII-TII-23)
				wh mod S-sg V (X)	51	0.7	*What can one buy there?* (Alec-EII-TIII-2)
				wh aux-n S-sg V (X) [4]	40	0.55	*What is Maggie concentrate on?* (Tessa-EIII-TII-17)
				wh aux S-pl V (X) [4]	34	0.47	*What are Fergus and Arlo do?* (Ian-EIII-TIII-23)
				wh mod S-pl V (X)	20	0.27	*Where can they find the living room set?* (Tessa-EII-TIII-5)
				wh mod neg S-sg V (X)	18	0.25	*What can't Fergus see?* (Ivy-EII-TII-4)
				wh aux-nt S-sg V-t (X)	9	0.12	*What was Maggie looking for?* (Larry-EIII-TIII-10)
				wh mod neg S-pl V (X)	5	0.07	*What won't they put up?* (Grace-EII-TII-14)
do-support	wh do S V (X)	1448	19.85	wh do-n S-sg V (X)	649	8.9	*What does Fergus hate?* (Nick-EII-TII-10)
				wh do S-pl V (X)	232	3.18	*When do they have to finish?* (Vicky-EII-TII-11)
				wh do-n S-sg V-n (X) [4]	197	2.7	*Why does he wants it?* (Sally-EI-TI.b-7)
				wh do-n S-pl V (X) [1]	76	1.04	*What does Arlo and Mel tell Fergus?* (Zoe-EI-TIII-5)
				wh do-t S-pl V (X)	68	0.93	*And why did they do that?* (Kevin-EIII-TI.b-36)
				wh do-t S-sg V (X)	56	0.77	*And what did the other say?* (Ian-EII-TI.b-21)
				wh do-n S-sg V-t (X) [4]	43	0.59	*What does Fergus found?* (Kevin-EIII-TII-22)
				wh do S-pl V-t (X) [4]	21	0.29	*When Mel ... what ... what do Mel and Fergus grabbed but they did not stop?* (Joyce-EI-TII-12)
				wh do-t S-sg V-n (X) [4]	21	0.29	*And what did the turkey says?* (Grace-EIII-TI.b-42)
				wh do-t S-pl V-t (X) [4]	17	0.23	*What did they already sold?* (Zoe-EIII-TIII-24)
no inversion	wh S V (X)	384	5.26	wh S-sg V-n (X) [2]	156	2.14	*Why he takes a bone?* (Fay-EI-TI.b-13)
				wh S-pl V (X) [2]	127	1.74	*What all passers-by think?* (Brian-EI-TII-3)
				wh S-sg V (X) [1 2]	36	0.49	*Why he get lost?* (Paul-EII-TI.b-14)
				wh S-sg V-t (X) [2 (4)]	31	0.42	*But why he screamed?* (Joyce-EI-TI.b-9)
				wh S-pl V-t (X) [2 (4)]	19	0.26	*What Mel and Fergus grabbed?* (Paul-EI-TII-12)
				wh S-pl do neg V (X) [2]	5	0.07	*Why they don't need worry?* (Grace-EI-TIII-9)
				wh S-sg do neg V (X) [1 2]	2	0.03	*Why the box don't stand there?* (Lucy-EI-TI.b-32)
				wh S-sg do-n neg V (X) [2]	2	0.03	*And why he ... he don't ... he doesn't get through it ... or?* (Fay-EI-TI.b-24)
				wh S-pl do-t neg V (X) [2]	1	0.01	*What did the instructions only tell you how to ... what didn't the instructions ... what the instructions didn't say?* (Matt-EI-TII-10)
				wh S-pl V-n (X) [1 2]	1	0.01	*On what Mel and Fergus sits always buy looking at their latest purchase?* (Nick-EII-TIII-24)
cop inversion	cop S (X)	474	6.5	cop-n S-sg (X)	379	5.19	*Is this a good idea?* (Alec-III-TI.a-10)
				cop S-pl (X)	88	1.21	*Are they in Dog World?* (Cathy-EI-TI.a-20)
				cop-nt S-sg (X)	4	0.05	*Does Mel ... was Mel ... was Mel at the detective centre?* (Meg- EII-TI.a-50)
				cop S-sg (X) [1]	2	0.03	*Are the turkey insulted?* (Emma-EIII-TI.a-55)
				cop-n S-pl (X) [1]	1	0.01	*Are the turkeys at a ... are the turkeys?* (Becky-EIII-TI.a-15)
V inversion	wh V S (X)	597	8.18	wh V-n S-sg (X) [(2)]	300	4.11	*What says he?* (Cathy-EIII-TI.b-21)
				wh V S-sg (X) [1 2]	128	1.75	*What say he?* (Paul-EI-TI.b-19)
				wh V S-pl (X) [2]	116	1.59	*What do Fergus and Arlo?* (Nell-EIII-TIII-23)
				wh V-t S-sg (X) [(2 4)]	34	0.47	*What said Mel when they are inline-skating?* (Matt-EI-TII-8)
				wh V-t S-pl (X) [2 (4)]	10	0.14	*What did Fergus and Mel?* (Matt-EI-TII-4)
				wh V-n S-pl (X) [1 2]	8	0.11	*Where stands the three after each burial?* (Lucy-EI-TIII-17)
				wh VGer S-sg (X) [2]	1	0.01	*Will the man ... what will the man with the axt [German → axe]?* (Nell-EIII-TI.b-66)
fragment	S (X)	53	0.73	S-sg (X) [(2)]	43	0.59	*Same story?* (Alec-EIII-TIa-27)
				S-pl (X)	9	0.12	*Two Ferguses?* (Larry-EI-TI.a-21)
				S-pl do neg (X)	1	0.01	*But they don't?* (Dawn-EIII-TI.a-7)

[1]: rule of concord is not obeyed
[2]: syntax differs from declarative or interrogative syntax
[3]: unanalysed negator
[4]: verbal morphology
[0]: does not apply to all sentences in this subtype

4.1.3 Group-based Analysis

In the following part, I discuss the results of the Interlanguage analyses on a group based level. I start with a comparison of the categories that were used to form *yes/no* and *wh*-questions in the unstructured task, i.e. tasks that were not based on trigger sentences, and then move on to compare the categories that were used in the oral and written structured tasks, i.e. tasks in which questions were elicited with given trigger sentences aimed at evoking a certain response.

4.1.3.1 Unstructured Questions

The following diagrams and tables focus on each groups' usage of the six categories I introduced in *4.1.2 above*. Diagrams focusing on production differences in each category are given in *9.2.1.1 below.*

Usage of the six categories varies throughout the three elicitations. During the unstructured tasks the participants used an IL variety that is only minimally influenced by the task, instead they chose freely from their IL grammars to gain information. I assume that the structures chosen by the participants best fit their developmental stages.

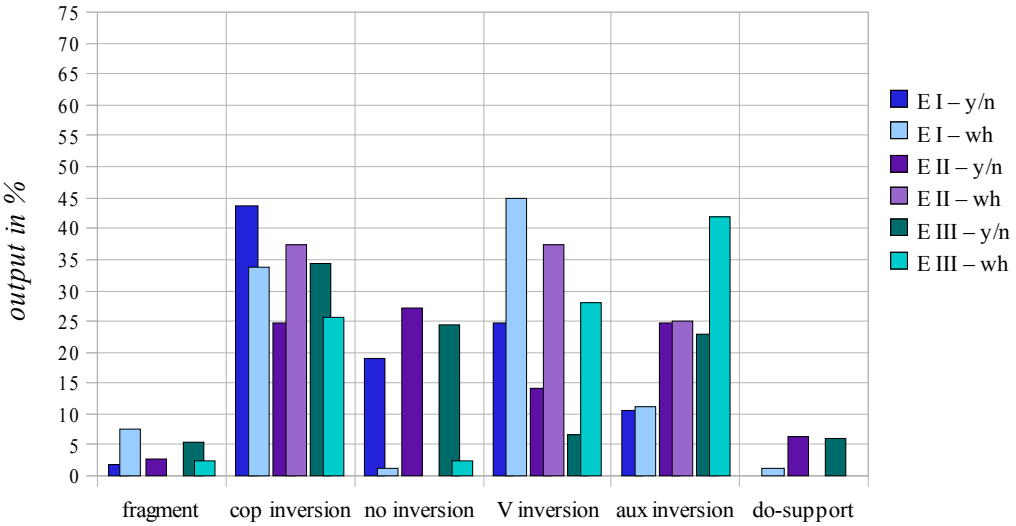
In the following diagrams and tables the categories are ranked according to the acquisitional sequence in which they occur. The sequence I use corresponds roughly to Wode's developmental stages (cf. *2.3.2*; *4.1.1*).

Group 1

The following *Diagram 4.1* generated from *Table 4.12 below* gives an overview of the output that was produced by group 1 to form unstructured *yes/no* and *wh*-questions. Four of the study's participants belong to this group. All of them

had been learning English for 1.6 years when the study started; for two of the participants English is their second L2.

Diagram 4.1: IL Analysis - unstructured questions – group 1



Fragments were used in both *yes/no* questions and *wh*-questions to some extent; in *yes/no* questions usage of *fragments* increased slightly (1.9 %; 2.6%; 5.4 %) throughout the study. In elicitation II, group 1 did not produce *fragments* with *wh*-questions. Usage with *wh*-questions decreased from elicitation I to elicitation III, (7.5 % to 2.33 % respectively).

Table 4.12: IL Analysis - unstructured questions – group 1

category	elicitation I				elicitation II				elicitation III			
	yes/no Qs		wh Qs		yes/no Qs		wh Qs		yes/no Qs		wh Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
fragment	2	1.9	6	7.5	2	2.6	-	-	8	5.41	1	2.33
cop inversion	46	43.81	27	33.75	19	24.68	6	37.5	51	34.46	11	25.58
no inversion	20	19.05	1	1.25	21	27.27	-	-	36	24.32	1	2.33
V inversion	26	24.76	36	45	11	14.29	6	37.5	10	6.76	12	27.91
aux inversion	11	10.48	9	11.25	19	24.68	4	25	34	22.97	18	41.86
do-support	-	-	1	1.25	5	6.49	-	-	9	6.08	-	-
total	105	100	80	100	77	100	16	100	148	100	43	100

Cop inversion was used with both yes/no and wh-questions in all three elicitations. Production of cop inversion decreased throughout the study in yes/no questions (43.81 %; 24.68 %; 34.46 %). With *wh*-questions, *cop inversion* was produced less frequently in elicitation I (33.75 %) and elicitation III (25.58 %), than in *yes/no* questions.

Asking *yes/no* questions with a *non-inverted* structure amounts to 19.5 %, 27.27 % and 24.32 % of the group's output during the study. Compared to this relatively high usage of *no inversion* in *yes/no* questions, it is almost non-existent in *wh*-questions. *No inversion* in *wh*-questions was produced less frequently than *fragments* in elicitation I. *No inversion* was not produced in elicitation II and was produced only once in elicitation III. If produced, *no inversion* in these contexts was the least frequently used category, 1.25 % and 2.33 % respectively. Group 1 seems to be aware of the fact that *non-inverted wh*-questions are ungrammatical in English, while *non-inverted yes/no* questions are effectively declaratives, distinguished only through intonation.

Verb inversion was produced in both *yes/no* (24.76 %; 14.29 %; 6.67 %) and *wh*-questions (45 %; 37.5 %; 27.91 %) in all three elicitations. Usage of *verb inversion* decreased for both question types during the data gathering period, indicating progress along the acquisitional sequence.

Usage of *aux inversion* increased in both *yes/no* questions (10.48 %; 24.68 %; 22.97 %) and *wh*-questions (11.25 %; 25 %; 41.86 %) from elicitation I to elicitation III. With *yes/no* questions, *aux inversion* was most frequently used in elicitation II, while in *wh*-questions the highest usage of *aux inversion* was in elicitation III.

Interrogatives with *do-support* were only produced in elicitations II and III with *yes/no* questions (6.49 %; 6.08 %) and only once with *wh*-questions in elicitation I (1.25%).

Of the total output of group 1, *fragment* was the least frequently used category to form unstructured *yes/no* questions in all elicitations (1.9 %; 2.6 %; 5.41 %). The least frequently produced categories with unstructured *wh*-questions in elicitation I were *no inversion* and *do-support* (both 1.25 %), in elicitation II *aux inversion* (25 %) and in elicitation III *fragment* and *no inversion* (both 2.33 %).

Of the group's total output, the most frequently produced categories to ask unstructured *yes/no* questions in elicitations I and III were *cop inversion* (43.81 %; 34.46 % respectively) and *no inversion* in elicitation II (27.27 %). In unstructured *wh*-questions the most frequently employed category were

verb inversion (45 %; 37.5 %) in elicitations I and III and *aux inversion* (41.86 %) in elicitation III.

The data gathered from group 1 indicate a development along the acquisitional sequence. Group 1 successfully used *fragments* and *non-inverted* structures to verify hypotheses through usage of *yes/no* questions. The variation that is evident in interrogatives with *cop inversion*, depends more on the kind of information the participant is interested in, i.e. the context, than on development since the structures of English and German copula questions is exactly the same (cf. *2.3.3 above*).

Verb inversion as a means of question formation in both *yes/no* and *wh*-questions decreased while usage *aux inversion* increased in both *yes/no* and *wh*-questions. Development is also evident in the usage of interrogatives with *do-support* in combination with *wh*-questions.

Group 2

The following *Diagram 4.2* generated from *Table 4.13 below* gives an overview of the output that was produced by group 2. Six of the study's participants belong to this group, all of them had been learning English for 2.6 or 2.8 years respectively when the study started; for one of the participants English is the second L2.

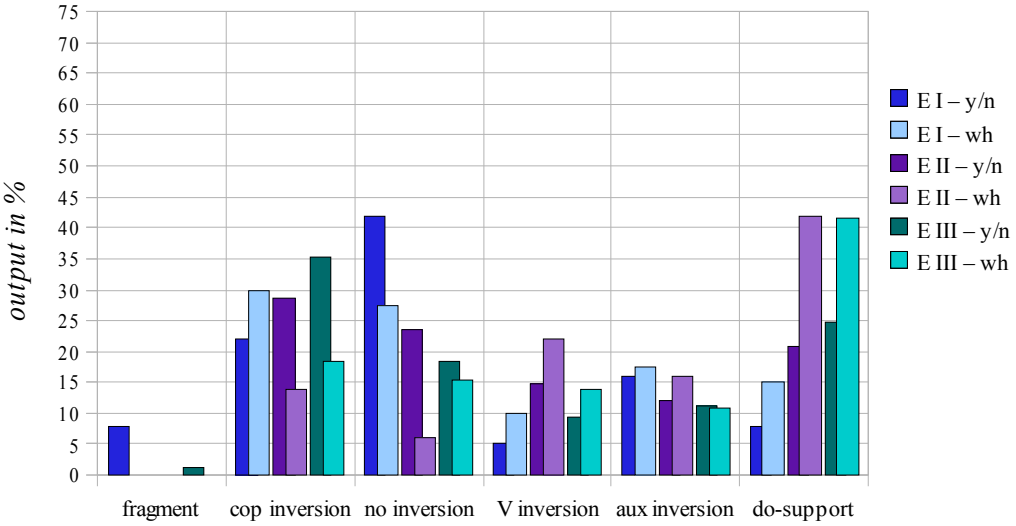
Fragments were only used in *yes/no* questions in elicitation I (8 %) and, less frequently, in elicitation III (1.12 %), but not with *wh*-questions.

Cop inversion was used increasingly to ask *yes/no* questions over the three elicitations (22 %; 28.7 %; 35.2 %). The usage of *cop inversion* decreased slightly in *wh*-questions over the data gathering period (30 %, 14 %; 15.38 %). In elicitations II and III, *cop inversion* was used more often in *yes/no* than in *wh*-questions.

Usage of *no inversion* in *yes/no* questions declined rapidly from elicitation I to elicitation II and further, although less rapidly, in elicitation III (42 %; 23.48 %; 18.44 %). *No inversion* was less frequently used with

wh-questions than with *yes/no* questions. Overall usage of *no inversion* decreased throughout the study, although it was used more frequently in elicitation III than in elicitation II (27.5 %; 6 %; 15.38 %).

Diagram 4.2: IL Analysis - unstructured questions – group 2



Usage of *verb inversion* with *yes/no* questions rose from 5 % in elicitation I to 14.78 % in elicitation II and then declined once more to 9.5 % in elicitation III; although usage of *verb inversion* in *yes/no* questions tends to decrease, *verb inversion* was nevertheless more often used in elicitation III than in elicitation I. *Verb inversion* occurred more frequently in *wh*-questions than in *yes/no* questions, (10 %; 22 %; 13.85 % respectively). The usage pattern of *verb inversion* in *wh*-questions is comparable to that in *yes/no* questions; after increased usage in elicitation II, usage of *verb inversion* decreased in elicitation III, although *verb inversion* was more often employed in elicitation III than in elicitation I.

Table 4.13: IL Analysis - unstructured questions – group 2

category	elicitation I				elicitation II				elicitation III			
	yes/no Qs		wh Qs		yes/no Qs		wh Qs		yes/no Qs		wh Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
fragment	8	8	-	-	-	-	-	-	2	1.12	-	-
cop inversion	22	22	12	30	33	28.7	7	14	63	35.2	12	18.46
no inversion	42	42	11	27.5	27	23.48	3	6	33	18.44	10	15.38
V inversion	5	5	4	10	17	14.78	11	22	17	9.5	9	13.85
aux inversion	16	16	7	17.5	14	12.17	8	16	20	11.17	7	10.77
do-support	7	7	6	15	24	20.87	21	42	44	24.58	27	41.54
total	100	100	40	100	115	100	50	100	179	100	65	100

Usage of *aux inversion* to form *yes/no* and *wh*-questions decreased slightly throughout the study (16 %; 12.17 %; 11.17 %) with *yes/no* questions and with *wh*-questions (17.5 %, 16 %; 10.77 %).

Usage of *do-support* increased in *yes/no* questions throughout the study (7 %; 20.87 %; 24.58 %). Usage of *do-support* almost tripled from elicitation I to elicitation II, to then further, although slower increase in elicitation III. In all three elicitations *do-support* was more frequently used with *wh*-questions (15 %; 42 %; 41.54 %) than with *yes/no* questions.

Looking at the overall performance of group 2, it can be seen that usage of *do-support* in both context increased, while usage of the other categories decreased throughout the study.

Of the total output of group 2, the categories that were used least frequently to form unstructured *yes/no* questions was *verb inversion* in elicitation I (5 %), *aux inversion* in elicitation II (12.17 %) and in elicitation III *fragment* (1.12 %). The least frequently employed categories with unstructured *wh*-questions were *verb inversion* (10 %) in elicitation I, *no inversion* (6 %) in elicitation II and *aux inversion* (10.77 %) in elicitation III.

Of the group's total output, the most frequently produced categories to form unstructured *yes/no* questions were *no inversion* in elicitation I (42 %) and *cop inversion* (28.7 %; 35.2 %) in elicitations II and III. In unstructured *wh*-questions the most frequently produced categories were *cop inversion* in elicitation I (30 %) and *do-support* in elicitations II and III (42 %; 41.54 %).

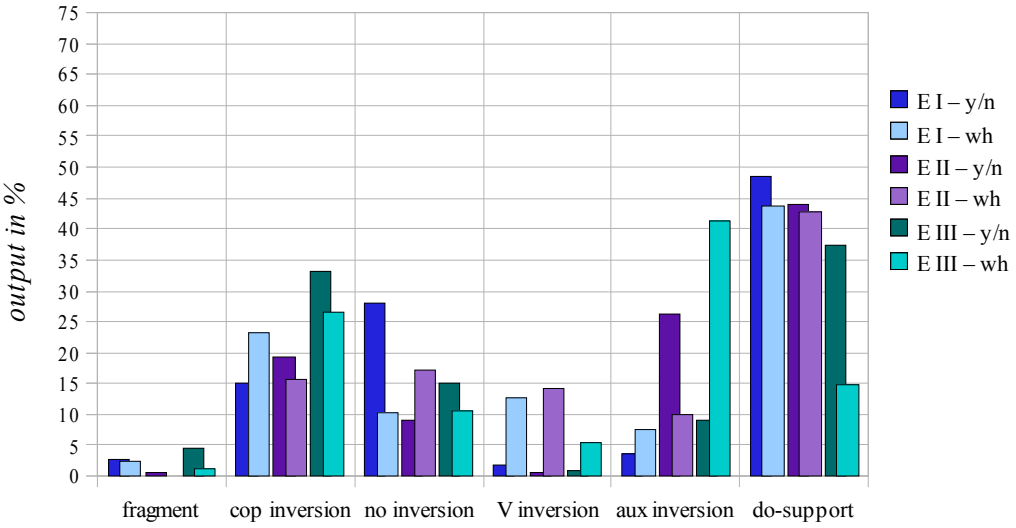
Group 3

The following *Diagram 4.3* generated from Table 4.14 *below* gives an overview of the output produced by group 3. Six of the study's participants belong to this group. All of them had been learning English for 3.6 or 3.8 years respectively when the study started, for all, English is their first L2.

Group 3 used *fragment*s to some extent to form *yes/no* questions. Usage of *fragments* decreased from elicitation I to elicitation II, to then again increase once

more in elicitation III (2.8 %; 0.75%; 4.46 %). In *wh*-questions *fragments* were only used in elicitations I and III (2.56 %; 0 %; 1.33 %). Compared to the output of *fragments* in *yes/no* questions *fragments* were less frequently used with *wh*-questions in the respective elicitations.

Diagram 4.3: IL Analysis - unstructured questions – group 3



Group 3 increasingly used *cop inversion* with *yes/no* questions (14.95 %; 19.4%; 33.04 %). Usage of *cop inversion* with *wh*-questions followed a different trend: from elicitation I to elicitation II usage decreased and then increased once again in elicitation III. In elicitation III *cop inversion* was more often produced than in elicitation I (23.08 %; 15.71; 26.67 %). With the exception of elicitation I, *cop inversion* was more often produced with *yes/no* questions than with *wh*-questions.

Table 4.14: IL Analysis - unstructured questions – group 3

category	elicitation I				elicitation II				elicitation III			
	yes/no Qs		wh Qs		yes/no Qs		wh Qs		yes/no Qs		wh Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
fragment	3	2.8	1	2.56	1	0.75	-	-	5	4.46	1	1.33
cop inversion	16	14.95	9	23.08	26	19.4	11	15.71	37	33.04	20	26.67
no inversion	30	28.04	4	10.26	12	8.95	12	17.14	17	15.18	8	10.67
V inversion	2	1.87	5	12.82	1	0.75	10	14.29	1	0.89	4	5.33
aux inversion	4	3.74	3	7.69	35	26.12	7	10	10	8.93	31	41.33
do-support	52	48.6	17	43.59	59	44.03	30	42.86	42	37.5	11	14.67
total	107	100	39	100	134	100	70	100	112	100	75	100

Production of *yes/no* questions with *no inversion* by group 3 decreased from elicitation I to elicitation III, although *no inversion* was produced more frequently in elicitation III than in elicitation II (28.04 %; 8.95 %; 15.18 %). While the production rate of *no inversion* in *wh*-questions was stable in elicitations I and III, it was more frequently used in elicitation II (10.26 %; 17.14 %; 10.67 %). Except for elicitation II, *no inversion* was produced less frequently with *wh*-questions than with *yes/no* questions.

Group 3 hardly used *verb inversion* in *yes/no* questions (1.87 %; 0.75 %; 0.89 %), whereas in *wh*-questions it was much more frequently produced (12.82 %; 14.29 %; 5.33 %).

Group 3 did not produce *aux inversion* very frequently with *yes/no* questions in elicitations I and III. Although usage of *aux inversion* increased immensely in elicitation II, it dropped once again in elicitation III (3.74 %; 26.12 %; 8.93 %). *Aux inversion* was also not very frequently produced in *wh*-questions in elicitations I and II, though in elicitation III, usage of *aux inversion* quadrupled in contrast to elicitation II (7.69 %; 10 %; 41.33 %).

Production of *do-support* in *yes/no* questions decreased slightly throughout the study (48.6 %; 44.03 %; 37.5 %). Usage of *do-support* with *wh*-questions followed a similar pattern. First, the production rate decreased slightly from elicitation I to elicitation II, and then dramatically decreased in elicitation III (43.59 %; 42.86 %; 14.67 %).

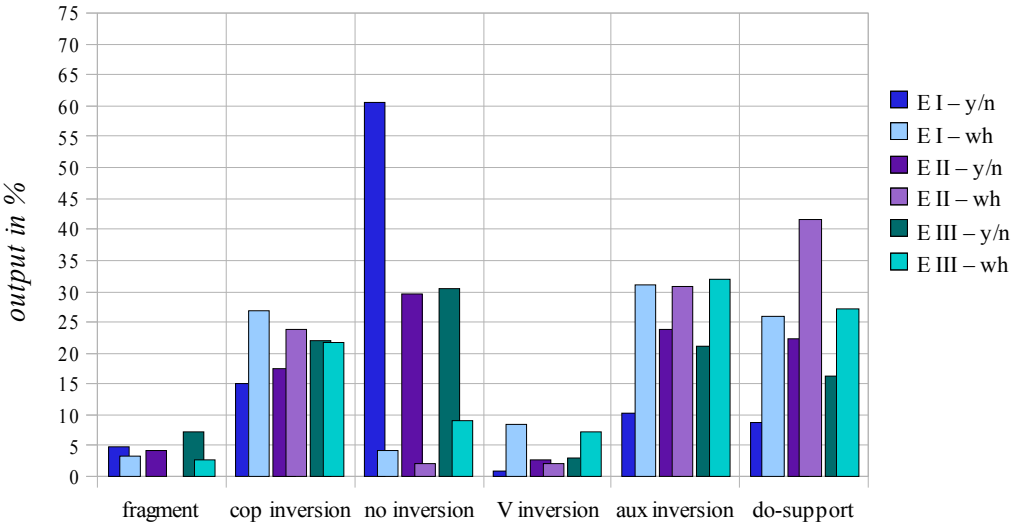
Of the total output of group 3, the categories least frequently employed to produce unstructured *yes/no* questions were *verb inversion* in elicitations I and III (1.87 %; 0.89 %) and *fragment* and *verb inversion* in elicitation II (both 0.75 %). The categories that were least frequently produced by group 3 with unstructured *wh*-questions were *fragment* (2.56 %; 1.33 %) in elicitations I and III and *aux inversion* (10 %) in elicitation II.

For group 3, the most frequently produced category to form unstructured *yes/no* questions was *do-support* in all elicitations (48.6 %; 44.03 %; 37.5 %). In unstructured *wh*-questions the most frequently employed category in elicitations I and II was *do-support* (43.59 %; 42.86); whereas in elicitation III (41.33 %) it was *aux inversion*.

Group 4

The following *Diagram 4.4* generated from *Table 4.15 below* gives an overview of the output that was produced by group 4. Nine of the study's participants belong to this group. All of them had been learning English for 4.6 or 4.8 years respectively when the study started, and all have English as their first L2.

Diagram 4.4: IL Analysis - unstructured questions – group 4



Usage of *fragment*s with *yes/no* questions increased to some extent for group 4 (4.72 %; 4.23 %; 7.35 %). However, *fragments* were not used at all in elicitation II with *wh*-questions and were used less frequently in elicitation III than in elicitation I (3.23 %; 0 %; 2.73 %).

Table 4.15: IL Analysis - unstructured questions – group 4

category	elicitation I				elicitation II				elicitation III			
	yes/no Qs		wh Qs		yes/no Qs		wh Qs		yes/no Qs		wh Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
fragment	6	4.72	3	3.23	8	4.23	-	-	15	7.35	3	2.73
cop inversion	19	14.96	25	26.88	33	17.46	24	23.76	45	22.06	24	21.82
no inversion	77	60.63	4	4.3	56	29.63	2	1.98	62	30.39	10	9.09
V inversion	1	0.79	8	8.6	5	2.65	2	1.98	6	2.94	8	7.27
aux inversion	13	10.24	29	31.18	45	23.81	31	30.69	43	21.08	35	31.82
do-support	11	8.66	24	25.81	42	22.22	42	41.58	33	16.18	30	27.27
total	127	100	93	100	189	100	101	100	204	100	110	100

Group 4 produced *cop inversion* increasingly to form *yes/no* questions throughout the study (14.96 %; 17.46 %; 22.06 %). Although *cop inversion*

decreased with *wh*-questions (26.88 %; 23.76 %; 21.82 %), it was nevertheless more often produced with *wh*-questions than with *yes/no* questions in elicitations I and II. In elicitation III, *cop inversion* was produced with approximately the same frequency in both contexts.

In elicitation I, group 4 produced *no inversion* very frequently with *yes/no* questions; in elicitation II usage of *no inversion* halved, and it stayed at approximately the same level in elicitation III (60.63 %; 29.63 %; 30.39 %). With *wh*-questions *no inversion* was far less frequently produced than with *yes/no* questions, although usage slightly increased from elicitation I to elicitation III (4.3 %; 1.98 %; 9.09 %).

Production of *verb inversion* with *yes/no* questions increased slightly over the study (0.79 %; 2.65 %; 2.94 %). With *wh*-questions, *verb inversion* was more frequently produced than with *yes/no* questions in elicitations I and III (8.6 %; 1.98 %; 7.27 %). Usage of *verb inversion* was relatively stable in elicitation I and III, but decreased in elicitation II.

Usage of *aux inversion* more than doubled from elicitation I to elicitation II with *yes/no* questions. *Aux inversion* was less frequently produced in elicitation III than it was in elicitation II. Comparing the production rates of *aux inversion* in elicitation III and elicitation I shows that *aux inversion* was more frequently produced (10.24 %; 23.81 %; 21.08 %) in elicitation III. The production of *aux inversion* with *wh*-questions was relatively stable (31.18 %; 30.69 %; 31.82 %). *Aux inversion* was produced more frequently with *wh*-questions than with *yes/no* questions.

The production of *do-support* in *yes/no* questions increased throughout the study for group 4. Usage more than doubled from elicitation I to elicitation II. Although *do-support* was less frequently used in elicitation III, it was nevertheless applied more frequently in elicitation III than in elicitation I (8.66 %; 22.22 %; 16.18 %). *Do-support* was more often used with *wh*-questions than with *yes/no* questions in all three elicitations (25.81 %; 41.58 %; 27.27 %). *Do-support* was more frequently used in elicitation III than in elicitation I, although only marginally so. Usage of *do-support* in elicitation II peaked.

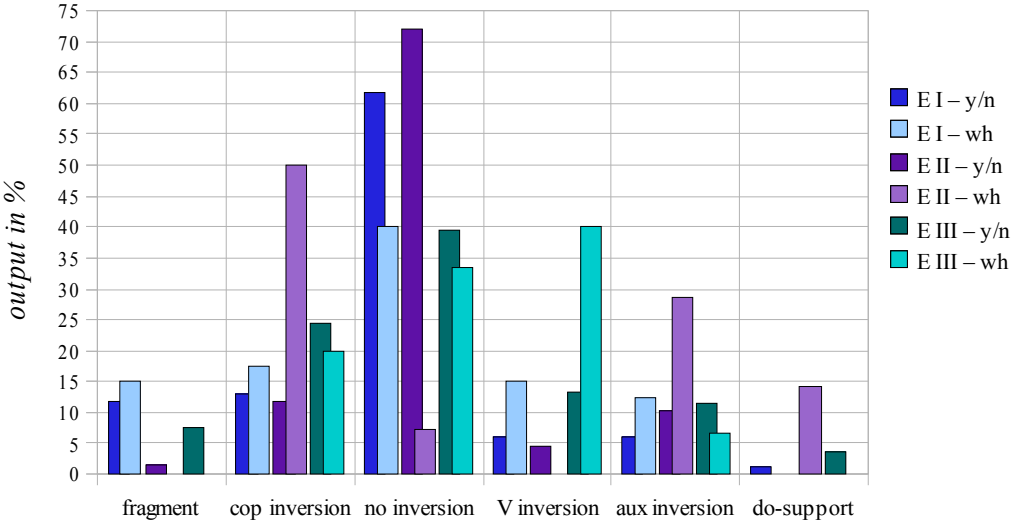
Of the total output of group 4, the least frequently used category with unstructured *yes/no* questions in all three elicitations was *verb inversion* (0.79 %; 2.65 %; 2.94 %). The categories least frequently produced by group 4 to form unstructured *wh*-questions were *fragment* (3.23 %; 2.73 %) in elicitations I and III and *no inversion* and *verb inversion* (both 1.98 %) in elicitation II.

Of group 4's total output, the most frequently produced category to form unstructured *yes/no* questions was *no inversion* (60.63 %; 29.63 %; 30.39 %) in all elicitations. In unstructured *wh*-questions the most frequently employed category in elicitations I and III was *aux inversion* (31.18 %; 31.82 %); in elicitation III it was *do-support* (41.58 %).

Group 5

The following *Diagram 4.5* generated from *Table 4.16 below* gives an overview of the output produced by group 5. Three of the study's participants belong to this group; all of them had been learning English for 5.6 years when the study started, all have English as their first L2.

Diagram 4.5: IL Analysis - unstructured questions – group 5



Group 5 produced *fragment*s in all three elicitations with *yes/no* questions (11.9 %; 1.47 %; 7.55 %). Production of *fragments* with *yes/no* questions declined

throughout the study; *fragments* were more frequently produced in elicitation III than in elicitation II, but less frequent than in elicitation I. With *wh*-questions *fragments* were only produced in elicitation I (15 %). In elicitation I, *fragments* were more often produced in *wh*-questions than in *yes/no* questions.

Usage of *cop inversion* with *yes/no* questions more than doubled from elicitation II to elicitation III, though *cop inversion* was less frequently used in elicitation II than in elicitation I (13.1 %; 11.76 %; 24.53 %). *Cop inversion* was more frequently produced in *wh*-questions than in *yes/no* questions (17.5 %; 50 %; 20 %).

Table 4.16: IL Analysis - unstructured questions – group 5

category	elicitation I				elicitation II				elicitation III			
	yes/no Qs		wh Qs		yes/no Qs		wh Qs		yes/no Qs		wh Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
fragment	10	11.9	6	15	1	1.47	-	-	4	7.55	-	-
cop inversion	11	13.1	7	17.5	8	11.76	7	50	13	24.53	3	20
no inversion	52	61.9	16	40	49	72.06	1	7.14	21	39.62	5	33.33
V inversion	5	5.95	6	15	3	4.41	-	-	7	13.21	6	40
aux inversion	5	5.95	5	12.5	7	10.29	4	28.57	6	11.32	1	6.67
do-support	1	1.19	-	-	-	-	2	14.29	2	3.77	-	-
total	84	100	40	100	68	100	14	100	53	100	15	100

Production of *no inversion* in *yes/no* questions rose from elicitation I to elicitation II, then declined in elicitation III to a level lower than the initial one in elicitation I (61.9 %; 72.06 %; 39.62 %). With *wh*-questions *no inversion* occurred less frequently than in *yes/no* questions. Usage of *no inversion* decreased immensely in elicitation II, to then again increase in elicitation III to more than four times the production level of elicitation II (40 %; 7.14 %; 33.33 %).

Although usage of *verb inversion* in *yes/no* questions decreased from elicitation I to elicitation II, *verb inversion* was more frequently produced in elicitation III than in the preceding elicitations (5.95 %; 4.41 %; 13.21 %). With *wh*-questions *verb inversion* was only produced in elicitations I and III, usage increased from elicitation I to elicitation III (15 %; 0 % 40 %). If used, *verb inversion* was produced more often with *wh*-questions than with *yes/no* questions in the respective elicitations.

Group 5 hardly used *aux inversion* to form *yes/no* questions (5.95 %; 10.29 %; 11.32 %). Usage of *aux inversion* with *yes/no* questions increased slightly during the study. *Aux inversion* was more frequently produced with

wh-questions than with *yes/no* questions (12.5 %; 28.57 %; 6.67 %) in elicitations I and II.

Group 5 produced *do-support* to form *yes/no* questions in elicitations I and III (1.19 %; 0 %; 3.77 %). Overall, *do-support* was more frequently produced in *wh*-questions than in *yes/no* questions, although group 5 only used *do-support* to form *wh*-questions in elicitation II (0 %; 14.29 %; 0 %).

Of group 5's total output, the least frequently used categories produced in unstructured *yes/no* questions were *do-support* in elicitations I and III (1.19 %; 3.77 %) and *fragments* (1.47 %) in elicitation II. The least frequently used categories to form unstructured *wh*-questions were *aux inversion* in elicitations I and III (12.5 %; 6.67 %) and *no inversion* (7.14 %) in elicitation II.

Of the total output of group 5, *no inversion* was the most frequently employed category to ask unstructured *yes/no* questions in all elicitations (61.9 %; 72.06 %; 39.62 %). With unstructured *wh*-questions the most frequently employed categories were *no inversion* in elicitation I (40 %), *cop inversion* in elicitation II (50 %) and *verb inversion* in elicitation III (40 %).

Group 6

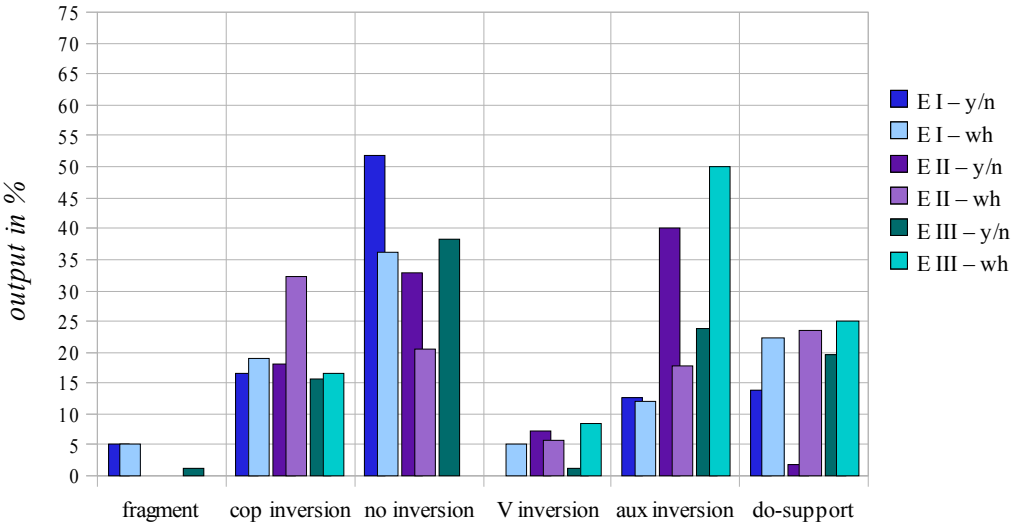
The following *Fehler: Referenz nicht gefunden* generated from *Table 4.17 below* gives an overview of the output produced by group 6. Five of the study's participants belong to this group. All of them had been learning English for 6.6 years when the study started, all have English as their first L2.

Group 6 produced *fragment*s with decreasing frequency in elicitations I and III to form *yes/no* questions (5.06 %; 0 %; 1.32 %). With *wh*-questions *fragments* were only produced in elicitation I (5.17 %).

Usage of *cop inversion* as a means to form *yes/no* questions was relatively stable throughout all elicitations (16.46 %; 18.18 %; 15.79 %) for group 6. In elicitations I and III usage of *cop inversion* to form *wh*-questions is comparable to the rate with which *cop inversion* was used to ask *yes/no* questions, although it was slightly more frequently employed to form *wh*-questions. The exception to

this is usage of *cop inversion* with *wh*-questions in elicitation II, where it was the most frequently used category to form *wh*-questions (18.97 %; 32.35 %; 16.67 %).

Diagram 4.6: IL Analysis - unstructured questions – group 6



During the study, the overall usage of *no inversion* decreased, although production of *no inversion* was higher in elicitation III than in elicitation II (51.9 %; 32.73 %; 38.16 %). With *wh*-questions *no inversion* was decreasingly produced in elicitations I and II (36.21 %; 20.59 %; 0 %). Group 6 produced more *yes/no* than *wh*-questions with *no inversion* with *no inversion*.

Table 4.17: IL Analysis - unstructured questions – group 6

category	elicitation I				elicitation II				elicitation III			
	yes/no Qs		wh Qs		yes/no Qs		wh Qs		yes/no Qs		wh Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
fragment	4	5.06	3	5.17	-	-	-	-	1	1.32	-	-
cop inversion	13	16.46	11	18.97	10	18.18	11	32.35	12	15.79	2	16.67
no inversion	41	51.9	21	36.21	18	32.73	7	20.59	29	38.16	-	-
V inversion	-	-	3	5.17	4	7.27	2	5.88	1	1.32	1	8.33
aux inversion	10	12.66	7	12.07	22	40	6	17.65	18	23.68	6	50
do-support	11	13.92	13	22.41	1	1.82	8	23.53	15	19.74	3	25
total	79	100	58	100	55	100	34	100	76	100	12	100

Group 6 only used *verb inversion* as a means to form *yes/no* questions in elicitations II and III. Usage of *verb inversion* decreased from elicitation II to elicitation III (7.27 %; 1.32 %) Usage of *verb inversion* with *wh*-questions slightly increased throughout the study (5.17 %; 5.88 %; 8.33 %).

Group 6 produced *aux inversion* in all three elicitations to form *yes/no* questions. Production of *aux inversion* rose throughout the study, although in elicitation III *aux inversion* was less frequently used than in elicitation II (12.66 %; 40 %; 23.68 %). In elicitations I and II *aux inversion* was less frequently used to form *wh*-questions than it was used to form *yes/no* questions, whereas in elicitation III *aux inversion* was used more than twice as often with *wh*-questions (12.07 %; 17.65 %; 50 %).

Except in elicitation II, *do-support* was increasingly produced to form *yes/no* questions (13.92 %; 1.82 %; 19.74 %). Group 6 produced *do-support* with *wh*-questions more frequently than with *yes/no* questions. Usage of *do-support* slightly increased throughout the study (22.41 %; 23.53 %; 25 %).

The least frequently produced categories in unstructured *yes/no* questions were *fragment* (5.06 %; 1.32 %) in elicitations I and III and *do-support* (1.82 %) in elicitation II. The least frequently used categories to ask unstructured *wh*-questions were *fragment* (5.17 %) in elicitation I and *verb inversion* (5.88 %; 8.33 %) in elicitations II and III.

Of group 6's total output, the categories most frequently used to ask unstructured *yes/no* questions were *no inversion* in elicitations I and III (51.9 %; 38.16 %) and *aux inversion* in elicitation II (40 %). With unstructured *wh*-questions the most frequently employed categories were *no inversion* in elicitation I (36.21 %), *cop inversion* in elicitation II (32.35 %) and *aux inversion* in elicitation III (50 %).

Summarizing, it can be said that usage of the categories in the unstructured tasks among all groups hardly varies in the lesser marked categories. Only in the most marked category *do-support* differences in usage are evident. This difference can be related to the proficiency of the different groups.

4.1.3.2 Structured Questions

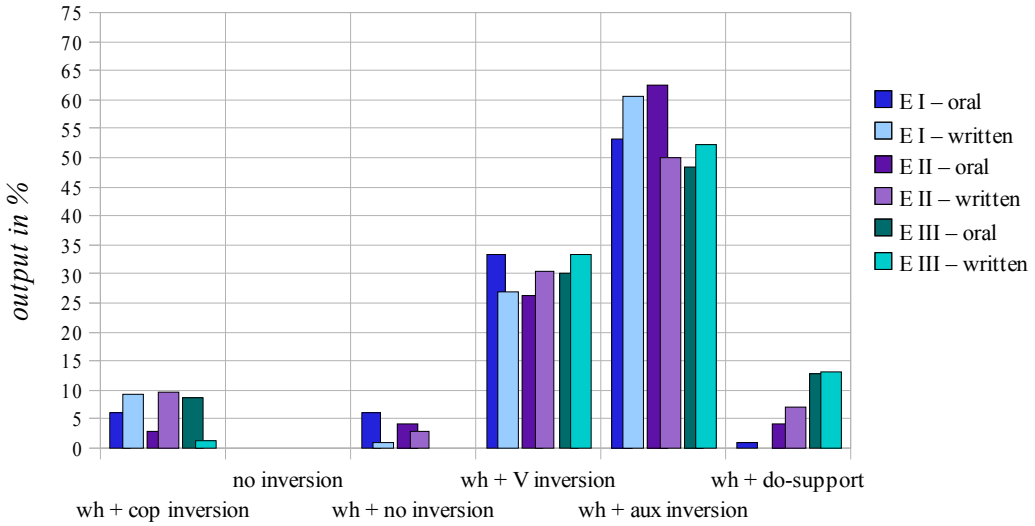
The following diagrams and tables focus on the categories (cf. *4.1.2 above*) that were produced by each group in the structured tasks to form structured questions, i.e. interrogatives based on trigger sentences, and whether production varies throughout the three elicitations. Diagrams focusing on production differences in each category are given in *9.2.1.2 below*.

The output that was produced during the structured elicitations represents a more formal IL variety. The participants were given trigger sentences aimed at eliciting a certain response, e.g. usage of *do-support*.

Group 1

The following *Diagram 4.7* generated from *Table 4.18 below* gives an overview of the output that was produced by group 1.

Diagram 4.7: IL Analysis - structured questions – group 1



In oral questions, group 1's production of *wh + cop inversion* increased slightly during the study (6.25 %; 2.78 %; 8.57 %). In elicitations I and II, *wh + cop inversion* was employed more often in written questions than in oral

questions. Oral questions with *wh + cop inversion* were more frequently produced than written questions with *wh + cop inversion* (9.38 %; 9.72 %; 1.45 %) in elicitation III.

Table 4.18: IL Analysis - structured questions – group 1

category	elicitation I				elicitation II				elicitation III			
	oral Qs		written Qs		oral Qs		written Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh + cop inversion	6	6.25	9	9.38	2	2.78	7	9.72	6	8.57	1	1.45
no inversion	-	-	-	-	-	-	-	-	-	-	-	-
wh + no inversion	6	6.25	1	1.04	3	4.17	2	2.78	-	-	-	-
wh + V inversion	32	33.33	26	27.08	19	26.39	22	30.56	21	30	23	33.33
wh + aux inversion	51	53.13	60	60.5	45	62.5	36	50	34	48.57	36	52.17
wh + do-support	1	1.04	-	-	3	4.17	5	6.94	9	12.86	9	13.04
total	96	100	96	100	72	100	72	100	70	100	69	100

Although group 1 did not produce *non-inverted yes/no* questions in any of the structured tasks, they produced interrogatives with *wh + no inversion*. In both oral and written questions group 1 only used *wh + no inversion* in elicitations I and II. Usage of *wh + no inversion* in oral questions decreased slightly (6.25 %; 4.17 %; 0 %), whereas usage of *wh + no inversion* increased slightly in written questions (1.04 %; 2.78 %; 0 %). In elicitation I, *wh + no inversion* was produced more often in oral than in written questions. In elicitation II group 1 produced as many oral as written questions with *wh + no inversion.*

Approximately a third of both oral and written questions produced by group 1 were formed with *wh + verb inversion*, making *wh + verb inversion* the second highest produced category. Overall usage of *wh + verb inversion* in oral questions decreased. Even though usage increased from elicitation II to elicitation III, the production rate of *wh + verb inversion* in elicitation III is slightly lower than in elicitation I (33.33 %; 26.39 %; 30 %). Usage of *wh + verb inversion* in written questions continually increased throughout the study (27.08 %; 30.56 %; 33.33 %). In elicitations I and III, *wh + verb inversion* was used more often in oral questions, whereas in elicitation II *wh + verb inversion* was produced more frequently in written questions.

Group 1 produced *wh + aux inversion* to form both oral (53.13 %; 62.5 %; 48.57 %) and written questions (60.5 %; 50 %; 52.17 %). In elicitations I and III, *wh + aux inversion* was more frequently produced in written questions; whereas

in elicitation II, *wh + aux inversion* occurred more frequently in oral questions. In both oral and written contexts, production of questions with *wh + aux inversion* decreased, although, in elicitation II usage of *wh + aux inversion* rose in oral questions, before decreasing in elicitation III. In written questions, *wh + aux inversion* was least frequently used in elicitation II. Although production of *wh + aux inversion* increased in elicitation III, it was nevertheless less frequently produced than in elicitation I.

Production of *wh + do-support* in oral (1.04 %; 4.17 %; 12.86 %) and written questions (0 %; 6.94 %; 13.04 %) increased for group 1 throughout the study. In both contexts group 1 was clearly progressing in the acquisition of using *do-support*.

Of the total output of group 1, the categories that were used least frequently to form oral structured questions were *wh + do-support* (1.04 %) in elicitation I and *wh + cop inversion* (2.78 %; 8.57) in elicitation II and III. The least frequently used categories in written structured questions were, in elicitations I and II, *wh + no inversion* (1.04 %; 2.78 %) and, in elicitation III, *wh + cop inversion* (1.45 %).

The most frequently produced category to ask oral structured questions in all elicitations was *wh + aux inversion* (53.13 %; 62.5 %; 48.57 %). In written structured questions *wh + aux inversion* was also the most frequently employed category in all three elicitations (60.5 %; 50 %; 52.17 %).

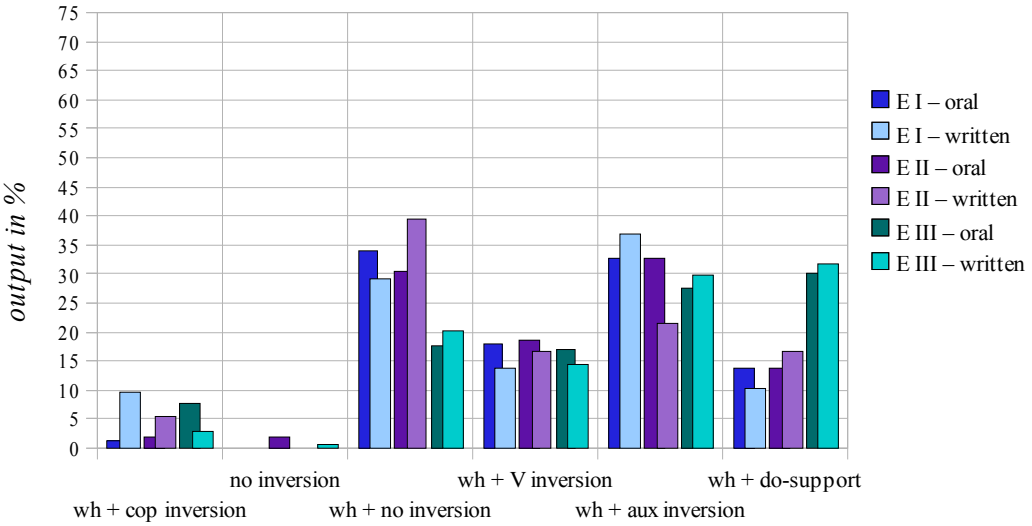
Group 2

The following *Diagram 4.8* generated from *Table 4.19 below* gives an overview of the output produced by group 2.

Usage of *wh + cop inversion* in oral questions increased for group 2 throughout the study (1.39 %; 2.08 %; 7.75 %). Group 2 used *wh + cop inversion* more frequently in written questions than in oral questions in elicitations I and II, but less frequently than in oral questions (9.72 %; 5.56 %; 2.9 %) in elicitation III.

In elicitation II, group 2 employed *no inversion* in oral questions (2.08 %) and in elicitation III in written questions (0.72 %). Although it was produced more often in oral questions, usage of *no inversion* is very low in both contexts.

Diagram 4.8: IL Analysis - structured questions – group 2



Group 2 produced questions with *wh + no inversion* in both oral and written tasks in all three elicitations. Usage of *wh + no inversion* in oral questions declined throughout the study (34.03 %; 30.56 %; 17.61 %). In written questions, production of *wh + no inversion* increased from elicitation I to elicitation II, but in elicitation III the production rate was lower than in both elicitations I and II (29.17 %; 39.58 %; 20.29 %). With the exception of elicitation I, where *wh + no inversion* was produced more often in oral questions, *wh + no inversion* was employed more often in written questions.

Table 4.19: IL Analysis - structured questions – group 2

category	elicitation I				elicitation II				elicitation III			
	oral Qs		written Qs		oral Qs		written Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh + cop inversion	2	1.39	14	9.72	3	2.08	8	5.56	11	7.75	4	2.9
no inversion	-	-	-	-	3	2.08	-	-	-	-	1	0.72
wh + no inversion	49	34.03	42	29.17	44	30.56	57	39.58	25	17.61	28	20.29
wh + V inversion	26	18.06	20	13.89	27	18.75	24	16.67	24	16.9	20	14.49
wh + aux inversion	47	32.64	53	36.81	47	32.64	31	21.53	39	27.46	41	29.71
wh + do-support	20	13.89	15	10.42	20	13.89	24	16.67	43	30.28	44	31.88
total	144	100	144	100	144	100	144	100	142	100	138	100

For group 2, usage of *wh + verb inversion* to form oral questions was relatively stable in elicitations I and II (18.06 %; 18.75 %). In elicitation III *wh + verb inversion* was produced slightly less frequently than in the preceding elicitations (16.9 %). In written questions, *wh + verb inversion* was less frequently produced than in oral questions. In elicitation III, usage of *wh + verb inversion* decreased, although it was still more frequently used than in elicitation I (13.89 %; 16.67 %; 14.49 %).

In elicitations I and II, usage of *wh + aux inversion* was stable in oral questions (32.64 %; 32.64 %). Production of *wh + aux inversion* dropped slightly in elicitation III (27.46 %) in oral questions. Group 2 used *wh + aux inversion* to form written questions most frequently in elicitation I. In elicitations I and III *wh + aux inversion* was less frequently produced in oral questions, although in elicitation III written questions with *wh + aux inversion* were less often produced than oral questions with *wh + aux inversion* in elicitation II (36.81 %; 21.53 %; 28.99 %).

Production *wh + do-support* increased in both oral (13.89 %; 13.89 %; 30.28 %) and written (10.42 %; 16.67 %; 31.88 %) questions throughout the three elicitations. In elicitation I, more oral questions were produced with *wh + do-support*. In elicitation II, more written questions were produced with *wh + do-support*, and in elicitation III the production rates of *wh + do-support* for both oral and written questions are approximately the same.

Of the total output of group 2, the categories that were least frequently produced to form oral structured questions were, in elicitation I, *wh + cop inversion* (1.39 %), in elicitation II, *wh + cop inversion* and *no inversion* (both 2.08 %), and, in elicitation III, *wh + cop inversion* (7.75 %). The least frequently used categories in written structured questions were *wh + cop inversion* (9.72 %; 5.56 %) in elicitations I and II and, in elicitation III, *wh + fragment* and *no inversion* (both 0.72 %).

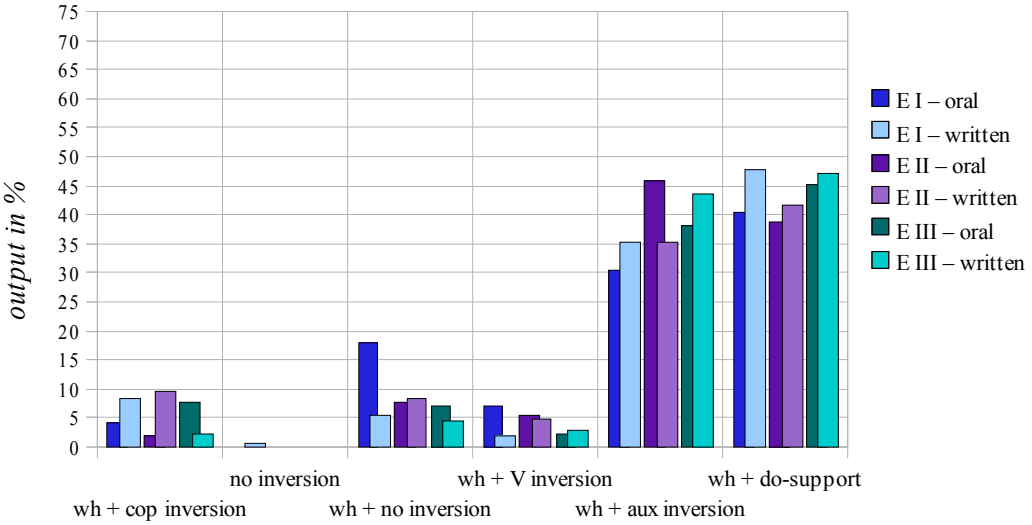
The most frequently produced category to ask oral structured questions was *wh + no inversion* in elicitation I (34.03 %), *wh + aux inversion* (32.64 %) in elicitation II and, in elicitation III, *wh + do-support* (30.28 %). In written structured questions the most frequently used categories were, in elicitation I,

wh + aux inversion (36.81 %), in elicitation II, *wh + no inversion* (39.58 %) and, in elicitation III, *wh + do-support* (31.88 %).

Group 3

The following *Diagram 4.9* generated from *Table 4.20 below* gives an overview of the output that was produced by group 3.

Diagram 4.9: IL Analysis - structured questions – group 3



Usage of *wh + cop inversion* in oral structured questions increased slightly (4.17 %; 2.08 %; 7.75 %). In oral structured question, the production rate of *wh + cop inversion* was lower in elicitation II than it was in elicitation I, but higher in elicitation III. In written structured questions, *wh + cop inversion* was employed more often in oral questions in elicitations I and II, but less frequently in elicitation III (8.33 %; 9.72 %; 2.17 %). Overall usage of *wh + cop inversion* throughout the study decreased for group 3 in written questions after usage slightly increased in elicitation II.

Group 3 did not produce *non-inverted* oral questions without interrogative pronoun, but a *non-inverted* written interrogative was produced in elicitation I (0.69 %).

Table 4.20: IL Analysis - structured questions – group 3

category	elicitation I				elicitation II				elicitation III			
	oral Qs		written Qs		oral Qs		written Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh + cop inversion	6	4.17	12	8.33	3	2.08	14	9.72	11	7.75	3	2.17
no inversion	-	-	1	0.69	-	-	-	-	-	-	-	-
wh + no inversion	26	18.06	8	5.56	11	7.64	12	8.33	10	7.04	6	4.35
wh + V inversion	10	6.94	3	2.08	8	5.56	7	4.86	3	2.11	4	2.9
wh + aux inversion	44	30.56	51	35.42	66	45.83	51	35.42	54	38.03	60	43.48
wh + do-support	58	40.28	69	47.92	56	38.89	60	41.67	64	45.07	65	47.1
total	144	100	144	100	144	100	144	100	142	100	138	100

Group 3 produced *wh + no inversion* in both oral (18.06 %; 7.64 %; 7.04 %) and written questions (5.56 %; 8.33 %; 4.35 %). Production of *wh + no inversion* decreased in oral questions. In written questions production of *wh + no inversion* slightly increased in elicitation II before decreasing in elicitation III to a level lower than the initial production rate. Except in elicitation II, group 3 employed *wh + no inversion* more often in oral than in written questions.

In oral questions, group 3 used *wh + verb inversion* with decreasing frequency throughout the elicitations (6.94 %; 5.56 %; 2.11 %). In written questions usage of *wh + verb inversion* was relatively stable in elicitations I and III; however, there the usage of *wh + verb inversion* slightly increased in elicitation II (2.08 %; 4.86 %; 2.9 %). In elicitations I and II, *wh + verb inversion* was more frequently used in oral than in written questions. In elicitation III, *wh + verb inversion* was produced with almost the same frequency in both oral and written questions.

Group 3 produced *wh + aux inversion* with varying frequency in oral structured questions (30.56 %; 45.83 %; 38.03 %). Overall usage of *wh + aux inversion* increased throughout the study. Although it was most frequently produced in elicitation II, the production rate in elicitation III was above the one in elicitation I. In written questions, usage of *wh + aux inversion* increased throughout the study (35.42 %; 35.42 %; 43.48 %). Except for elicitation II, *wh + aux inversion* was produced more often in written structured questions than in oral ones.

Group 3 produced *wh + do-support* increasingly in oral structured questions, although, in elicitation II, *wh + do-support* was less frequently produced than it had been in elicitation I (40.28 %; 38.89 %; 45.07 %). With the

exception of elicitation II, where usage of *wh + do-support* decreased, production of *wh + do-support* in written questions was stable (47.92 %; 41.67 %; 47.1 %). In all three elicitations, *wh + do-support* was more often used in written structured questions by group 3.

Of the total output of group 3, the categories that were employed least frequently to form oral structured questions were: in elicitations I and II, *wh + cop inversion* (4.17 % and 2.08 % respectively) and, in elicitation III, *wh + verb inversion* (2.11 %). The least frequently used categories in written structured questions were: in elicitation I, *no inversion* (0.69 %), in elicitation II, *wh + verb inversion* (4.86 %) and, in elicitation, III *wh + cop inversion* (2.17 %).

The most frequently produced categories to ask oral structured questions were in elicitations I and III *wh + do-support* (40.28 %; 45.07 %) and in elicitation II *wh + aux inversion* (45.83 %). In all three elicitations, *wh + do-support* was the most frequently produced category in written structured questions (47.92 %; 41.67 %; 47.1 %).

Group 4

The following *Diagram 4.10* generated from *Table 4.21 below* gives an overview of the output that was produced by group 4.

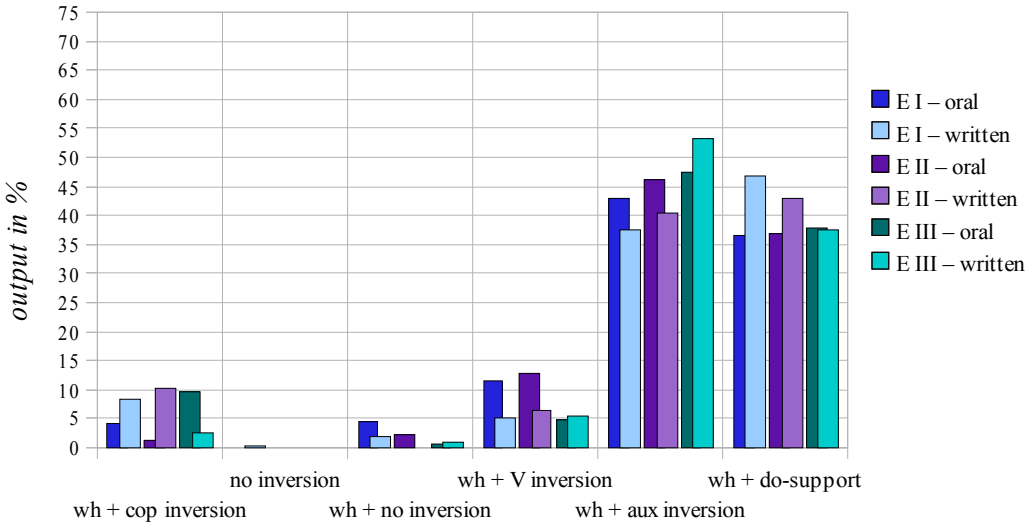
In oral structured questions, overall usage of *wh + cop inversion*, increased (4.17 %; 1.39 %; 9.57 %). Overall usage of *wh + cop inversion* in written questions decreased after peaking in elicitation II (8.33 %; 10.19 %; 2.72 %). In elicitations I and II, *wh + cop inversion* was more often produced in written structured questions, while it was more frequently employed in oral structured questions in elicitation III.

Group 4 did not produce *non-inverted yes/no* questions in oral structured questions and only once, in elicitation I, in written structured questions (0.46 %).

Non inverted questions with interrogative pronoun were used in both oral (4.63 %; 2.31 %; 0.53 %) and written (1.85 %; 0 %; 1.09 %) structured questions;

wh + no inversion was more frequently employed in oral questions. Usage of *wh + no inversion* decreased in both contexts throughout the study.

Diagram 4.10: IL Analysis - structured questions – group 4



In oral structured questions, *wh + verb inversion* was, after a slightly increased usage in elicitation II, less frequently used in elicitation III than in elicitation I (11.57 %; 12.96 %; 4.79 %). Usage of *wh + verb inversion* in written questions was relatively stable throughout the study (5.09 %; 6.48 %; 5.43 %). Except in elicitation III, *wh + verb inversion* was less frequently used in written questions.

Table 4.21: IL Analysis - structured questions – group 4

category	elicitation I				elicitation II				elicitation III			
	oral Qs		written Qs		oral Qs		written Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh + cop inversion	9	4.17	18	8.33	3	1.39	22	10.19	18	9.57	5	2.72
no inversion	-	-	1	0.46	-	-	-	-	-	-	-	-
wh + no inversion	10	4.63	4	1.85	5	2.31	-	-	1	0.53	2	1.09
wh + V inversion	25	11.57	11	5.09	28	12.96	14	6.48	9	4.79	10	5.43
wh + aux inversion	93	43.06	81	37.5	100	46.3	87	40.28	89	47.34	98	53.26
wh + do-support	79	36.57	101	46.76	80	37.04	93	43.06	71	37.77	69	37.5
total	216	100	216	100	216	100	216	100	188	100	184	100

Group 4's production of oral questions with *wh + aux inversion* increased slightly during the study (43.06 %; 46.3 %; 47.34 %). Usage of *wh + aux inversion* in written questions also increased, especially from elicitation II to III (37.5 %; 40.28 %; 53.26 %). Group 4 produced more oral structured

questions with *wh + aux inversion* in elicitations I and II than written questions with *wh + aux inversion*.

Usage of *wh + do-support* in oral questions slowly increased throughout the study (36.57 %; 37.04 %; 37.77 %), whereas usage of *wh + do-support* in written questions decreased (46.76 %; 43.06 %; 37.5 %). Nevertheless, *wh + do-support* was more often produced in elicitations I and II in written questions. In elicitation III, *wh + do-support* was produced with approximately the same frequency in both oral and written questions.

Of the total output of group 4, the categories that were produced least frequently to form oral structured questions were, in elicitations I and II, *wh + cop inversion* (4.17 %; 1.39 %) and, in elicitation III, *wh + no inversion* (0.53 %). The least frequently used categories in written structured questions were in elicitation I *no inversion* (0.46 %), in elicitation II *wh + verb inversion* (6.48 %) and in elicitation III *wh + no inversion* (1.09 %).

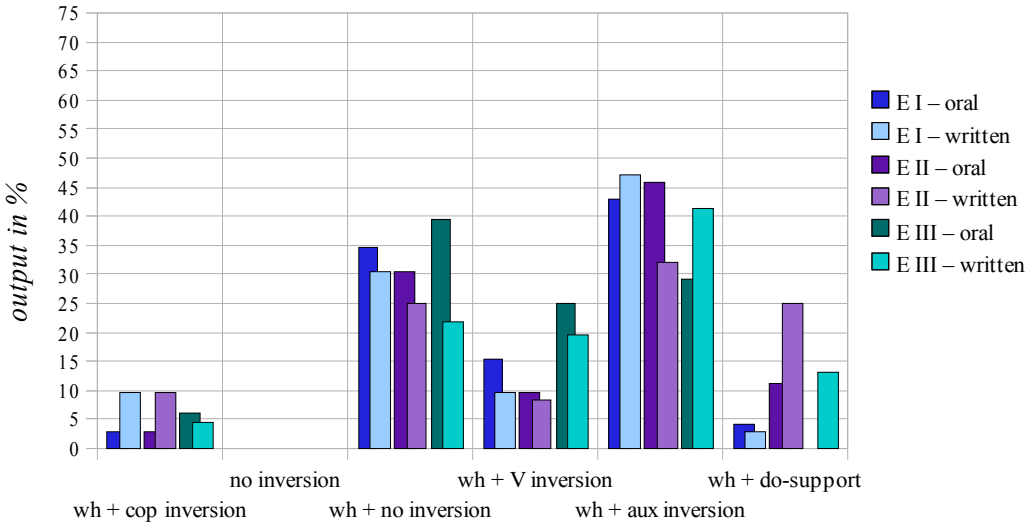
The most frequently produced category to ask oral structured questions in all elicitations was *wh + aux inversion* (43.06 %; 46.3 %; 47.34 %). The most frequently employed categories to form written structured questions were *wh + do-support* in elicitations I and II (46.76 %; 43.06 %) and *wh + aux inversion* in elicitation III (53.26 %).

Group 5

The following *Diagram 4.11* generated from *Table 4.22 below* gives an overview of the output that was produced by group 5.

Production of *wh + cop inversion* was stable in both oral (2.78 %; 2.78 %; 6.25 %) and written questions for group 5 in elicitations I and II (9.72 %; 9.72 %; 4.35 %). In these two elicitations, *wh + cop inversion* was more frequently used in written questions. In elicitation III, *wh + cop inversion* was produced more often in oral questions, but less often in written questions. In elicitation III, usage *wh + cop inversion* is higher in oral than in written questions.

Diagram 4.11: IL Analysis - structured questions – group 5



Group 5 did not produce *non-inverted* oral or written structured *yes/no* questions. This contrasts to the production of questions in both contexts with *wh + no inversion.* In oral questions, usage of *wh + no inversion* generally increased, (34.72 %; 30.56 %; 39.58 %). Written structured questions *wh + no inversion* were less frequently produced than oral structured questions. Usage of *wh + no inversion* decreased during the study (30.56 %; 25 %; 21.74 %) for written questions.

Table 4.22: IL Analysis - structured questions – group 5

category	elicitation I				elicitation II				elicitation III			
	oral Qs		written Qs		oral Qs		written Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh + cop inversion	2	2.78	7	9.72	2	2.78	7	9.72	3	6.25	2	4.35
no inversion	-	-	-	-	-	-	-	-	-	-	-	-
wh + no inversion	25	34.72	22	30.56	22	30.56	18	25	19	39.58	10	21.74
wh + V inversion	11	15.28	7	9.72	7	9.72	6	8.33	12	25	9	19.57
wh + aux inversion	31	43.06	34	47.22	33	45.83	23	31.94	14	29.17	19	41.3
wh + do-support	3	4.17	2	2.78	8	11.11	18	25	-	-	6	13.04
total	72	100	72	100	72	100	72	100	48	100	46	100

Usage of *wh + verb inversion* in both oral (15.28 %; 9.72 %; 25 %) and written (9.72 %; 8.33 %; 19.57 %) questions follows the same trend: after a decrease in usage in elicitation II, usage of *wh + verb inversion* increased in both contexts to a level higher than the initial one in elicitation I. In all three elicitations, group 5 produced more oral structured questions with *wh + verb inversion* than written structured questions.

Production of *wh + aux inversion* in oral questions was relatively stable in elicitations I and II, but decreased in elicitation III (43.06 %; 45.83 %; 29.17 %). Usage of *wh + aux inversion* in written questions was more variable (47.22 %; 31.94 %; 41.3 %). In elicitation I, *wh + aux inversion* was more frequently employed to form oral structured questions, while in elicitations II and III *wh + aux inversion* was more often used in written questions.

Group 5 only produced oral questions with *wh + do-support* in elicitations I and II, (4.17 %; 11.11 %; 0 %). In written questions *wh + do-support* was produced in all three elicitations (2.78 %; 25 %; 13.04 %). Production of *wh + do-support* increased throughout the study, although most written questions with *wh + do-support* were produced in elicitation II. Except for elicitation I, where more oral questions were produced with *wh + do-support*, its usage was higher in the written tasks.

Of the total output of group 5, the category least frequently used to form oral structured questions was *wh + cop inversion* (2.78 %; 2.78 %; 6.25 %) in all elicitations. The least frequently used categories in written structured questions were in elicitation I *wh + do-support* (2.78 %), in elicitation II *wh + verb inversion* (8.33 %) and in elicitation III *wh + cop inversion* (4.35 %).

The most frequently produced categories to ask oral structured questions were *wh + aux inversion* (44.44 %; 45.83 %) in elicitations I and II and *wh + no inversion* (39.58 %) in elicitation III. In written structured questions *wh + aux inversion* was the most frequently used category in all three elicitations (47.22 %; 33.33 %; 41.3 %).

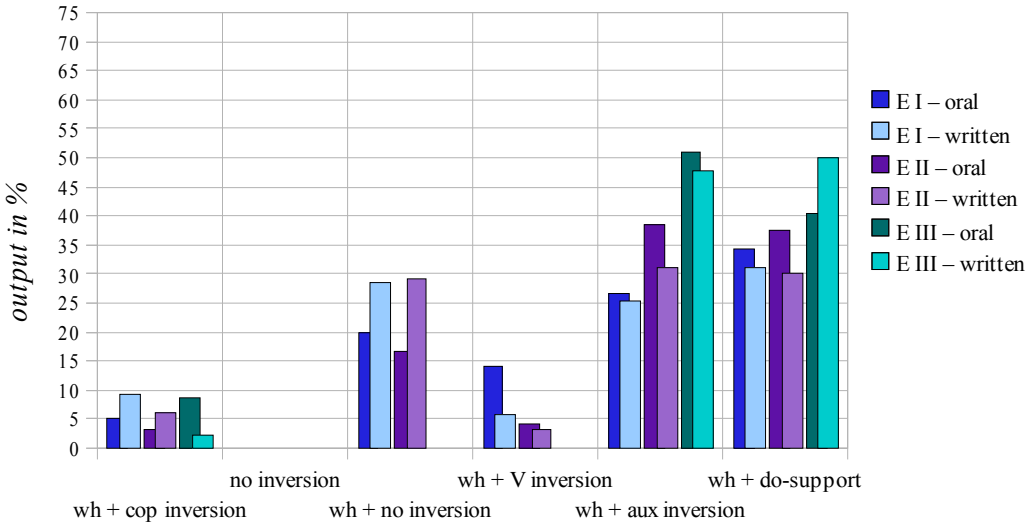
Group 6

The following *Diagram 4.12* generated from *Table 4.23 below* gives an overview of the output that was produced by group 6.

In oral questions usage of *wh + cop inversion* decreased slightly in elicitation II, to then increase again in elicitation III, where it was produced more often than in elicitation I (5%; 3.13 %; 8.51 %). Production of *wh + cop inversion*

in written questions decreased throughout the study (9.24 %; 6.25 %; 2.17 %). *Wh + cop inversion* was more frequently produced in written questions than in oral ones in elicitations I and II; in elicitation III, *wh + cop inversion* occurred more often in oral questions.

Diagram 4.12: IL Analysis - structured questions – group 6



Group 6 did not produce any *non-inverted* oral or written *yes/no* questions, although *non-inverted wh*-questions were produced in both oral (20 %; 16.67 %; 0 %) and written (28.57 %; 29.17 %; 0 %) structured questions in elicitations I and II. In oral questions, *wh + no inversion* was produced less frequently in elicitation II than in elicitation I, whereas production of *wh + no inversion* in written questions was stable in elicitations I and II.

Table 4.23: IL Analysis - structured questions – group 6

category	elicitation I				elicitation II				elicitation III			
	oral Qs		written Qs		oral Qs		written Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh + cop inversion	6	5	11	9.24	3	3.13	6	6.25	4	8.51	1	2.17
no inversion	-	-	-	-	-	-	-	-	-	-	-	-
wh + no inversion	24	20	34	28.57	16	16.67	28	29.17	-	-	-	-
wh + V inversion	17	14.17	7	5.88	4	4.17	3	3.13	-	-	-	-
wh + aux inversion	32	26.67	30	25.21	37	38.54	30	31.25	24	51.06	22	47.83
wh + do-support	41	34.17	37	31.09	36	37.5	29	30.21	19	40.43	23	50
total	120	100	119	100	96	100	96	100	47	100	46	100

In both oral and written structured questions, *wh + verb inversion* was only produced in elicitations I and II. In both contexts, its usage decreased.

Wh + verb inversion was more frequently produced in oral questions (14.17 %; 4.17 %; 0 %) than in written questions (5.88 %; 3.13 %; 0 %).

Production of *wh + aux inversion* increased in both oral (26.67 %; 38.54 %; 51.06 %) and written structured questions (25.21%; 31.25 %; 47.83 %) throughout the study. In all three elicitations, *wh + aux inversion* was more often produced in oral questions than in written ones.

Production of *wh + do-support* in oral questions increased throughout the study for group 6 (34.17 %; 37.5 %; 40.43 %). In written questions usage of *wh + do-support* also increased (31.09 %; 30.21 %; 50 %), although in elicitation II *wh + do-support* was slightly less frequently produced than in elicitation I. In elicitations I and II, *wh + do-support* was produced more often in oral structured questions, although in elicitation III, more written questions were produced with *wh + do-support*.

Of the total output of group 6, the category least frequently produced to form oral structured questions was *wh + cop inversion* in all elicitations (5 %; 3.13 %; 8.51 %). The least frequently employed categories in written structured questions were *wh + verb inversion* (5.88 %; 3.13 %) in elicitations I and II and, in elicitation III, *wh + cop inversion* (2.17 %).

The most frequently produced categories to ask oral structured questions were, in elicitation I, *wh + do-support* (34.17 %) and, in elicitations II and III, *wh + aux inversion* (38.54 %; 51.06 %). The most frequently employed categories to form written structured questions were *wh + do-support* in elicitations I and III (31.09 %; 50 %) and *wh + aux inversion* (31.25 %) in elicitation II.

Summarizing, it can be said that usage of the different categories in the structured tasks among the groups again hardly varies in the less marked categories. Only with *do-support*, the most marked category, differences in usage are evident. This can be related to the proficiency of the groups. Usage of the other categories is governed again more by context than by proficiency.

4.1.4 Distribution of Types

In the following section, I look at the relation between 'given task and produced type', first giving a general overview of how often each of the types introduced in *4.1.2.1 above* was produced in each of the four tasks, and then moving to a more detailed analysis that includes the six groups.

4.1.4.1 Task Differences

The tables below focus on the relation between 'given task and produced type'. Once again the tables are sorted according to absolute frequency; the most frequently produced categories are discussed first.

The columns 'unstructured' and 'structured' refer to the task type. The absolute and relative numbers refer to how frequently each type was produced in the respective task over all three elicitations. Within each table the types are listed according to their frequency in the corpus, e.g. the type *wh aux S V (X)* was produced 768 times in written structured questions, which, in relative numbers, amounts to 10.53 % (cf. *Appendix 9.2.2*).

To focus on the relation between given task and produced type, the types I introduced in *4.1.2.1 above* are further generalised. If a type is produced with a variant in both *yes/no* and *wh*-questions, it is represented with a bracketed '*(wh)*'. The types that were only produced in *wh*-questions are represented with '*wh*'. Therefore, the generalised type *(wh) aux S aux V (X)* has two variants, in *yes/no* questions it was produced as *aux S aux V (X)* and in *wh*-questions as *wh aux S aux V (X)*. Types such as *wh aux V (X)* were not produced in *yes/no* questions, they were only produced in *wh*-questions.

Aux inversion

Table 4.24 below shows in which tasks *aux inversion* was used to form questions. Of the eight types that belong to this category, three have variants in both *yes/no* and *wh*-questions. The remaining five types were only produced in *wh*-questions.

Some of the types that were produced in this category are clearly transitory stages in the acquisition of *aux inversion*. Types such as *wh aux V S (X)*, where the whole verb phrase is inverted with the subject, or *(wh) aux S O V (X)*, where other elements are fronted to invalid sentence positions, clearly indicate development or backsliding to an earlier stage.

Table 4.24:task differences - aux inversion

type	unstructured				structured			
	yes/no Qs		wh Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) aux S V (X)	323	4.43	195	2.67	698	9.57	768	10.53
wh aux V (X)	-	-	16	0.22	139	1.91	52	0.71
wh aux V S (X)	-	-	4	0.05	14	0.19	17	0.23
wh aux aux V S (X)	-	-	-	-	18	0.25	-	-
(wh) aux S aux V (X)	3	0.04	2	0.03	9	0.12	2	0.03
(wh) aux S O V (X)	6	0.08	-	-	1	0.01	1	0.01
wh aux aux V (X)	-	-	1	0.01	1	0.01	2	0.03
wh aux S (X)	-	-	-	-	-	-	1	0.01

The most frequently produced type *(wh) aux S V (X)* occurs in both structured and unstructured tasks. The production rate in the structured tasks is similar in both contexts, whereas in the unstructured tasks, questions using the variant without *wh* were more frequently produced.

The remaining types were all produced far less frequently than *(wh) aux S V (X)*.

Of interest is *wh aux aux V S (X)*, which only occurs in oral structured questions. This is a clear example of the task influencing the produced type: *wh aux aux V S (X)* was only produced in elicitation III in task II and only with sentence 17.

trigger *He suggests that <u>the snack bar</u> could be put in the reference section.*
response *What could be put in the reference section?* (Grace-EIII-TII-17)

Although usage of *wh aux aux V S (X)* is clearly restricted to a certain trigger sentence it is not restricted to group.

Another interesting case is the type *wh aux V (X)*. The type was only produced with *wh*-questions, its variant *aux V (X)* was not produced in unstructured *yes/no* questions. It was produced most frequently with structured oral *wh*-questions (1.91 %), a rate almost three times higher than the production rate in written structured questions (0.69 %). The production rate of *wh aux V (X)* in written structured questions is itself more than three times higher than the rate this type was produced in oral unstructured *wh*-questions (0.22 %).

Once again, although not as explicit as for *wh aux aux V S (X)*, the production rates for *wh aux V (X)* indicate that the task, and at least for the structured questions, the trigger sentences influence the types that are produced.

Do-support

Table 4.25 below shows in which tasks *do-support* was used to form interrogatives. Of the seven types that belong to this category, four occur with variants that are used in both *yes/no* and *wh*-questions. Of the remaining types, two are exclusively used with *wh*-questions and one occurs only with *yes/no* questions.

Table 4.25: task differences - do-support

type	unstructured				structured			
	yes/no Qs		wh Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) do S V (X)	349	4.78	232	3.18	575	7.88	641	8.79
(wh) do S aux V (X)	3	0.04	-	-	25	0.34	14	0.19
(wh) do V S (X)	2	0.03	2	0.03	7	0.1	4	0.05
wh do V (X)	-	-	-	-	3	0.04	9	0.12
(wh) do S cop (X)	3	0.04	1	0.01	1	0.01	-	-
wh do S O V (X)	-	-	-	-	-	-	1	0.01
do S do V (X)	1	0.01	-	-	-	-	-	-

Of the types that were produced, the most frequently used was *(wh) do S V (X)*, which was produced in all tasks. The production rate of *(wh) do S V (X)* is similar to the production rate of *(wh) aux S V (X)*, but slightly lower. Usage of *do S V (X)* in unstructured *yes/no* questions is higher (4.78 %) than usage of *(wh) do S V (X)* in unstructured *wh*-questions (3.18 %). *(wh) do S V (X)* was produced more often in the structured than in the unstructured

tasks; this distribution is comparable to the usage pattern of *(wh) aux S V (X)*, the most frequent type in *aux inversion*. Usage of *(wh) do S V (X)* is marginally higher in the written tasks (8.79 %) than in the oral tasks (7.88 %).

The remaining types were far less frequently produced than *(wh) do S V (X)*. With the exception of *wh do V (X)*, which was only used in the structured tasks, the other types show evidence of development, in that the participants were either working out a new rule or backshifted to an old rule. Types showing development are, for example *(wh) do S aux V (X)* or *(wh) do V S (X)*. The types that show development can be classified into two groups. Types like *(wh) do S aux V (X)* have an additional auxiliary; in these types *do* functions as a marker for an interrogative structure, whereas in types like *(wh) do V S (X)* the word order has to be sorted out. Types showing word order problems or an additional auxiliary are very rare.

No inversion

In *Table 4.26 below* shows in which tasks no *inversion* was used to form questions. In this category 12 types were produced, more types than in any other category.

Table 4.26: task differences - no inversion

type	unstructured				structured			
	yes/no Qs		wh Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) S V (X)	315	4.32	60	0.82	175	2.4	149	2.04
(wh) S aux V (X)	133	1.82	34	0.47	90	1.23	108	1.48
(wh) S cop (X)	190	2.6	21	0.29	29	0.4	15	0.21
wh O S V (X)	-	-	-	-	1	0.01	2	0.03
S do V (X)	3	0.04	-	-	-	-	-	-
S aux V wh (X)	-	-	-	-	1	0.01	1	0.01
S V wh (X)	-	-	-	-	1	0.01	1	0.01
S aux aux V (X)	2	0.03	-	-	-	-	-	-
S cop Sc wh (X)	-	-	-	-	1	0.01	-	-
S V (X) wh	-	-	1	0.01	-	-	-	-
O V wh do S V (X)	-	-	-	-	-	-	1	0.01
wh O aux S V (X)	-	-	-	-	1	0.01	-	-

Only three of the 12 types that belong to this category occur in both *yes/no* and *wh*-questions.

Of the remaining nine types two were used exclusively in *yes/no* questions, i.e. *S do V (X)* and *S aux aux V (X)*. The remaining seven types were used exclusively in *wh*-questions, although only in two of these types the *wh*-pronoun is positioned question-initially, i.e. *wh O S V (X)* and *wh O aux S V (X)*. For the other types the *wh*-pronoun is placed tag-like at the end of the question or between the verb and another element, i.e. *S aux V wh (X)*, *S V wh (X)*, *S cop Sc wh (X)*, *S V (X) wh*, and *O V wh do S V (X)*.

The three types that occur with variants for both *yes/no* and *wh*-questions, i.e. *(wh) S V (X), (wh) S aux V (X)*, and *(wh) S cop (X)* are also the most frequently produced types in this category. The production rate for all of these types is higher in *yes/no* questions than it is in unstructured *wh*-questions. For *(wh) S V (X)* and *(wh) S cop (X)* more oral structured questions were produced than written structured ones. For *(wh) S aux V (X)* the production pattern is reversed, here more written than oral structured questions were produced.

Cop inversion

Table 4.27 below shows the distribution of *cop inversion* across the different tasks. Only one of the six *cop inversion* types has a variant in both *yes/no* and *wh*-questions. One of the remaining types occurs with *yes/no* questions, the other types occur exclusively in *wh*-questions.

Table 4.27: task differences - cop inversion

type	unstructured				structured			
	yes/no Qs		wh Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) cop S (X)	474	6.5	220	3.02	71	0.97	140	1.92
wh cop (X)	-	-	9	0.12	25	0.34	11	0.15
cop S cop (X)	3	0.04	-	-	-	-	-	-
wh cop Sc cop (X)	-	-	-	-	2	0.03	-	-
wh cop Sc S (X)	-	-	-	-	1	0.01	-	-
wh cop S cop (X)	-	-	-	-	1	0.01	-	-

Most questions with *cop inversion* were produced as *(wh) cop S (X)*-questions. Most questions of this type were produced in the unstructured tasks. In the structured part, almost twice as many written as oral questions were produced with this type. Compared to the output of unstructured questions,

(wh) cop S (X) was less frequently used in the structured tasks, again an artefact of the task itself, *cop inversion* was triggered far less frequently than either *aux inversion* or *do-support*.

The remaining types, especially *cop S cop (X)*, *wh cop Sc cop (X)*, *wh cop Sc S (X)* and *wh cop S cop (X)* were produced very infrequently, and each type is restricted to just one task.

Verb inversion

Table 4.28 below shows in which tasks *verb inversion* was used to form questions. *Verb inversion* is the category with the fewest produced types. All other categories are subject to more variation among the produced types.

Table 4.28: task differences - verb inversion

type	unstructured				structured			
	yes/no Qs		wh Qs		oral Qs		written Qs	
	abs.	%	abs.	%	abs.	%	abs.	%
(wh) V S (X)	120	1.64	119	1.63	263	3.6	215	2.95
wh V (X)	-	-	14	0.19	18	0.25	1	0.01
V O (X)	2	0.03	-	-	-	-	-	-
wh V S aux (X)	-	-	-	-	1	0.01	-	-
wh V aux S (X)	-	-	-	-	1	0.01	-	-

One of the five produced types in this category occurs with a variant in both question types; of the remaining four types, one was produced exclusively in *yes/no* questions, *V O (X)*, and this occurred very infrequently. The remaining three types were produced with *wh*-questions. *Wh V (X)* was produced in three tasks; its production rate is highest in oral structured questions and lowest in written structured questions. Both *wh V S aux (X)* and *wh V aux S (X)* occur only in oral structured questions and both are examples of *verb inversion*, although an auxiliary is part of the structure produced.

With the exception of *wh V S aux (X)* and *wh V aux S (X)*, the other types in this category are examples of a stage in the acquisition of interrogative structures. The questions that were produced with both *wh V S aux (X)* and *wh V aux S (X)* are examples of a performance rather than a developmental problem, such as mixing two rules.

Fragment

Table 4.29 below gives an overview of the tasks in which *fragments* were produced. Without exception, *fragments* were only produced in the unstructured, more communicatively orientated tasks.

Of the six types that were produced in this category, two occur with variants in both question types. All other types only occurred with *yes/no* questions.

Table 4.29: task differences - fragment

type	unstructured				structured			
	yes/no Qs		wh Qs		oral Qs		written Qs	
	Abs.	%	abs.	%	abs.	%	abs.	%
(wh) S (X)	53	0.73	6	0.08	-	-	-	-
(wh) (X)	14	0.19	18	0.25	-	-	-	-
V (X)	10	0.14	-	-	-	-	-	-
aux S (X)	1	0.01	-	-	-	-	-	-
do S (X)	1	0.01	-	-	-	-	-	-
S aux (X)	1	0.01	-	-	-	-	-	-

Usage of phrases instead of sentences was discouraged during the elicitations, it therefore was not produced in the structured tasks and was very rare in the unstructured tasks.

The most productive *fragment S (X)* makes up just 0.73 % of the total output. If produced, *fragments* were efficiently used to gain information.

Table 4.30 below summarises the types which make up 1 % or more of the total output. Of the 58 types (cf. *4.1.2.1 above*) into which I generalised the questions, only 14 meet this condition.

Table 4.30: frequent types

category	type			unstructured				structured			
		output total		yes/no Qs		wh Qs		oral Qs		written Qs	
		abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
aux inversion	(wh) aux S V (X)	1984	27.2	323	4.43	195	2.67	698	9.57	768	10.53
	wh aux V (X)	205	2.81	-	-	16	0.22	139	1.91	52	0.71
do-support	(wh) do S V (X)	1797	24.63	349	4.78	232	3.18	575	7.88	641	8.79
no inversion	(wh) S V (X)	699	9.58	315	4.32	60	0.82	175	2.4	149	2.04
	(wh) S aux V (X)	365	5	133	1.82	34	0.47	90	1.23	108	1.48
	S cop (X)[1]	190	2.6	190	2.6	-	-	-	-	-	-
cop inversion	(wh) cop S (X)	905	12.41	474	6.5	220	3.02	71	0.97	140	1.92
V inversion	(wh) V S (X)	717	9.82	120	1.64	119	1.63	263	3.6	215	2.95

[1.] type also has a variant with *wh*; but was produced < 1 %

These 14 types, which from here on are referred to as frequent types, make up 94.05 % of the total output. The remaining 44 types, which from here on are referred to as infrequent types, make up the remaining 5.95 % of the total output.

In summary, the majority of the types that were produced constitute a minority of the output. Most of the types either occur in one task only, or, if they occur in several tasks, they were produced extremely rarely.

4.1.4.2 Group Differences

In the following discussion, I focus on the effect the task has on the output of each group, showing if types described as frequent/infrequent in *4.1.4.1 above* were favoured by one of the groups, or if the production of frequent/infrequent types can be related to a certain task type.

For each category I first discuss which types were produced in unstructured questions, moving than to a comparison of the types that were produced in the structured tasks.

I use only the generalised types with the bracketed '*(wh)*' (cf. *4.1.4.1 above*) when discussing the types that were produced in the unstructured tasks because only for these a distinction is relevant. If a type that was used in one of the structured tasks also has a variant without '*wh*', it is not specifically marked in the tables below.

The following tables refer to the output each group produced in each task. Relative numbers are used to make the groups comparable.

Aux inversion

Table 4.31 below gives an overview of the proportion with which each group produced types in the category *aux inversion* in unstructured *yes/no* and

wh-questions. Types that are labelled with superscript symbols occur with a frequency above 1 % in the corpus.

Table 4.31:group differences - unstructured questions – aux inversion

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
(wh) aux S V (X) ◆ ■	1	9.52	6.25	14	12.5	3.74	7.69	10.24	29.03	5.95	7.5	11.39	12.07
	2	24.68	18.75	12.17	10	24.44	8.7	23.28	29.7	10.29	28.57	40	17.65
	3	22.3	37.21	11.17	9.23	8.93	40	20.59	30	11.32	6.67	23.68	41.67
wh aux V (X) ■	1	-	3.75	-	2.5	-	1.33	-	2.15	-	5	-	-
	2	-	-	-	6	-	-	-	0.99	-	-	-	-
	3	-	4.65	-	-	-	-	-	-	-	-	-	8.33
wh aux V S (X)	1	-	1.25	-	2.5	-	-	-	-	-	-	-	-
	2	-	6.25	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	0.91	-	-	-	-
(wh) aux S aux V (X)	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	1.48	1.45	-	-	-	-	-	-
	3	-	-	-	-	-	-	0.49	0.91	-	-	-	-
aux S O V (X)	1	0.95	-	2	-	-	-	-	-	-	-	1.27	-
	2	-	-	-	-	-	-	0.53	-	-	-	-	-
	3	0.68	-	-	-	-	-	-	-	-	-	-	-
wh aux aux V (X)	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	1.54	-	-	-	-	-	-	-	-

◆: frequency in corpus in unstructured yes/no Qs > 1 % ■: frequency in corpus in unstructured wh Qs > 1 %

The production of *(wh) aux S V (X)*, the most frequently produced type in this category, mirrors the output patterns of the category *aux inversion* in the unstructured tasks (cf. *Diagram 4.42* in appendix *9.2.1.1 below*) for all groups. The production rates for both variants of *(wh) aux S V (X)* vary throughout the elicitations for all groups in both tasks. No group shows a clear-cut preference for *(wh) aux S V (X)* in any of the tasks, although all groups produced most of their *aux inversion* questions with *(wh) aux S V (X)* in both question types. Only group 4 produced *(wh) aux S V (X)* with consistency, but only with *wh*-questions. For most groups, production of *wh aux S V (X)* was higher than *aux S V (X)*. Although *wh aux V (X)* makes up 2.81 % of the total output, it does not have a variant that was produced in *yes/no* questions. Although all groups produced *wh aux V (X)*, the individual groups did not do so in all elicitations. Over all three elicitations, group 2 produced *wh aux V (X)* the most frequently, but when looking at the elicitations separately, *wh aux V (X)* was produced the most frequently by group 6. Group 3 produced the least questions following the pattern *wh aux V (X)*.

A comparison of the production of infrequent types shows that group 5 produced no infrequents and group 6 only produced questions with *aux S O V (X)*. Group 4 produced the most infrequent types. When comparing the production

rates of all infrequent types in unstructured questions, group 6 produced the fewest infrequent types throughout all of the unstructured tasks, whereas group 1 produced the most.

Looking at the production of infrequent types in the different question types, the picture is slightly different; group 2 produced the most questions with infrequent types in *yes/no* and *wh*-questions. Group 4 produced the least in *yes/no* questions and group 3 the least in *wh*-questions.

Table 4.32 below gives an overview of the proportion with which each group produced types in the category *aux inversion* in structured oral and written questions.

Usage of the frequent types *wh aux S V (X)* and *wh aux V (X)* in the structured tasks is comparable to the usage of *(wh) aux S V (X)* and *(wh) aux V (X)* in the unstructured tasks, although *wh aux V (X)* was only frequently produced in oral structured questions. Again, their usage pattern generally mirrors the usage pattern of *wh + aux inversion* (cf. *Diagram 4.48* in appendix *9.2.1.2 below*), although it is reversed for group 4 – elicitation II, and for group 6 – elicitation I and III.

Table 4.32: group differences - structured questions – aux inversion

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
wh aux S V (X) ●▲	1	41.67	53.13	18.06	28.47	19.44	31.25	31.02	28.7	31.94	37.5	16.67	20.17
	2	55.56	50	27.08	20.14	38.19	34.72	37.04	39.81	37.5	29.17	32.29	30.21
	3	44.29	50.72	23.94	27.54	34.51	43.48	41.49	52.72	16.67	32.61	46.81	47.83
wh aux V (X) ●	1	10.42	6.25	13.19	4.86	10.42	4.17	11.57	6.94	9.72	5.56	9.17	5.04
	2	5.56	-	5.56	0.69	6.94	0.69	7.87	-	6.94	1.39	6.25	-
	3	-	-	0.7	1.45	-	-	0.53	0.54	-	4.35	-	-
wh aux V S (X)	1	1.04	3.13	1.39	3.47	-	-	0.46	1.39	1.39	4.17	-	-
	2	1.39	-	-	0.69	-	-	0.93	0.46	-	1.39	-	-
	3	-	-	0.7	-	0.7	-	-	-	8.33	-	-	-
wh aux aux V S (X)	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	2.86	-	1.41	-	2.11	-	3.72	-	4.17	-	4.26	-
wh aux S aux V (X)	1	-	-	-	-	0.69	-	-	0.46	-	-	0.83	-
	2	-	-	-	-	0.69	-	0.46	-	1.39	-	-	-
	3	1.43	-	-	-	0.7	-	1.06	-	-	2.17	-	-
wh aux aux V (X)	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	1.04
	3	-	-	0.7	-	-	-	-	-	-	2.17	-	-
wh aux S O V (X)	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	1.45	-	-	-	-	0.53	-	-	-	-	-
wh aux S (X)	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	0.72	-	-	-	-	-	-	-	-

●: frequency in corpus in oral structured Qs > 1 % ▲: frequency in corpus in written structured Qs > 1 %

Production of *wh aux S V (X)* and *wh aux V (X)* varies for all groups throughout the elicitations, all groups produced *wh aux S V (X)* more often than any other type of this category in both oral and written tasks. Generally, *wh aux S V (X)* is used more often in written than in oral questions. With the exception of group 4, all other groups used *wh aux S V (X)* more frequently in written questions in elicitations I and III. Though all groups produced *wh aux V (X)*, it constitutes a smaller part of the groups' total output than *wh aux S V (X)*. If *wh aux V (X)* was produced in an elicitation with both oral and written questions, it was generally produced more frequently in oral questions, with only groups 2 and 4 deviating from this pattern in elicitation III.

With the exception of group 3, infrequent types were produced more frequently in written structured questions. All groups produced questions with infrequent types in the structured tasks, and for all, the production rate is higher than it is in unstructured questions. For group 5 this difference is especially pronounced – group 5 did not use infrequent types with unstructured questions although their usage of infrequent types with structured questions made up 36.48 % of their total output.

A comparison of the production of infrequent types in unstructured and structured tasks shows that in unstructured tasks fewer infrequent types were produced. Four infrequent types were used in the unstructured tasks while six were produced with both oral and written structured questions. Also, the absolute production rate of infrequent types was higher in the structured tasks. This indicates that the task type, i.e. unstructured vs. structured and oral vs. written has an influence on the questions that are produced. In the unstructured tasks, the test persons have no trigger sentences that ideally lead to the formation of a certain type, therefore fewer infrequent types occur. In contrast to this, in the structured tasks, both task type and medium influence the questions produced. The trigger sentences demand a certain response, sometimes compelling the test persons to respond to material that is too difficult.

Do-support

Table 4.33 below shows the proportion of the types each group produced in the category *do-support* in unstructured *yes/no* and *wh*-questions.

Only one of the types produced, *(wh) do S V (X)*, is a frequent type, i.e. amounts to more than 1 % in the corpus, all other types in this category are infrequent types. Usage of both variants of *(wh) do S V (X)* in both *yes/no* and *wh*-questions mirrors the usage of *do-support* in unstructured questions (cf. *Diagram 4.43* in appendix *9.2.1.1 below*).

Table 4.33: group differences - unstructured questions – do-support

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
(wh) do S V (X) ◆ ■	1	-	-	7	15	47.66	43.59	8.66	25.81	1.19	-	13.92	22.41
	2	6.49	-	20.87	40	40.74	42.03	21.69	41.58	-	14.29	1.82	23.53
	3	6.08	-	24.02	41.54	36.61	14.67	15.69	27.27	3.77	-	19.74	25
(wh) do V S (X)	1	-	1.25	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	2	0.74	-	0.53	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
(wh) do S cop (X)	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	1.48	1.45	-	-	-	-	-	-
	3	-	-	-	-	0.89	-	-	-	-	-	-	-
do S aux V (X)	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	0.74	-	-	-	-	-	-	-
	3	-	-	0.56	-	-	-	0.49	-	-	-	-	-
do S do V (X)	1	-	-	-	-	0.93	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

◆: frequency in corpus in unstructured yes/no Qs > 1 % ■: frequency in corpus in unstructured wh Qs > 1 %

Usage of *(wh) do S V (X)* with the different question types does not follow a clear-cut pattern for any of the groups. Groups 2, 4 and 6 used *do-support* more frequently in *wh*-questions. Group 1 produced *(wh) do S V (X)* in *yes/no* questions from elicitation II onwards, but not with *wh*-questions. Usage of *(wh) do S V (X)* varied for group 3, in two out of three elicitations *(wh) do S V (X)* was produced more often with *yes/no* questions. Although group 5 produced *yes/no* questions with *(wh) do S V (X)*, it was only used in elicitations I and III and, compared to the output of group 1, less frequently. With *wh*-questions, *(wh) do S V (X)* was only produced in elicitation II. Of the groups, only group 2 gradually increased the usage of *(wh) do S V (X)* in both contexts. For group 6 production of *(wh) do S V (X)* increased only with *wh*-questions. For group 1, production of *do-support* was more or less steady. For group 3, usage of *(wh) do S V (X)*

decreased in both contexts throughout the study. Group 4 increasingly produced questions with *(wh) do S V (X)*; however, the increase was not continual; although it rose throughout the study, the highest production level was reached in elicitation II.

The infrequent types that were produced in the unstructured tasks are all developmental, i.e. new rules are tested, such as *do + V inversion*, or the operator *do* functioning as the question marker in structures with *cop* or *aux*.

As with *(wh) do S V (X)*, production of infrequent types varied immensely throughout the groups. Group 1 used the fewest different infrequent types and group 4 had the lowest proportion of infrequent types produced. Group 3 used most infrequent types and had the highest proportion of infrequents in their output. Groups 5 and 6 did not produce unstructured questions with infrequents.

Table 4.34 below shows the proportion of the types each group produced in the category *do-support* in oral and written structured questions. No clear-cut usage pattern for the frequent type *wh do S (X)* is apparent in structured questions, (cf. *Diagram 4.49* in appendix *9.2.1.2 below*). Production of the frequent type *wh do S V (X)* in the structured tasks is comparable to the usage of *(wh) do S V (X)* in the unstructured tasks.

Table 4.34: group differences - structured questions – do-support

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
wh do S V (X) ●▲	I	1.04	-	13.89	10.42	35.42	45.14	35.19	44.44	2.78	2.78	32.5	30.25
	II	4.17	6.94	12.5	15.97	36.11	37.5	36.11	38.43	11.11	25	36.46	30.21
	III	12.86	13.04	27.46	31.88	41.55	47.1	35.11	37.5	-	10.87	40.43	50
wh do S aux V (X)	I	-	-	-	-	2.78	0.69	0.93	-	-	-	-	-
	II	-	-	0.69	-	2.08	4.17	0.46	3.24	-	-	1.04	-
	III	-	-	2.82	-	2.82	-	2.66	-	-	-	-	-
wh do V S (X)	I	-	-	-	-	0.69	-	0.46	-	1.39	-	0.83	-
	II	-	-	0.69	-	0.69	-	-	1.39	-	-	-	-
	III	-	-	-	-	0.7	-	-	-	-	2.17	-	-
wh do V (X)	I	-	-	-	-	1.39	2.08	-	2.31	-	-	0.83	0.84
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
wh do S cop (X)	I	-	-	-	-	-	-	0.46	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
wh do S O V (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	0.69	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

●: frequency in corpus in oral structured Qs > 1 % ▲: frequency in corpus in written structured Qs > 1 %

Generally, usage of *wh do S (X)* is higher in the written structured tasks. This pattern is only reversed in three cases, once for group 2 in elicitation I and twice for group 6 in elicitations I and III.

Usage of *do-support* in structured questions varies for all groups throughout the elicitations. For group 4, production of *wh do S V (X)* is stable during all elicitations in oral structured questions. For all other groups, production of *wh do S V (X)* varies; it increased for groups 1, 2, 3 and 6 in oral structured questions during the data gathering period. Though group 5 also increasingly produced oral interrogatives with *wh do S V (X)* during the first two elicitations, its usage ceased in elicitation III in oral structured questions.

Production of *wh do S V (X)* in written questions increased for all groups except for group 4, where usage decreased. Groups 1, 2 and 6 gradually increased their usage of *wh do S V (X)* in written questions over all three elicitations. For group 3 production of *wh do S V (X)* decreased in elicitation II before rising in elicitation III. Although production of *wh do S V (X)* rose from elicitation I to elicitation III for group 5, usage of *wh do S V (X)* peaked in elicitation II.

Comparing the infrequent types produced in the structured tasks to those produced in the unstructured tasks, it is apparent that more infrequent types were produced in the unstructured tasks (for both, number of types and relative production rate for the groups).

Group 1 did not use infrequent types. Groups 4 and 5 produced less infrequents in oral structured questions, while the remaining groups 2, 3 and 6 produced fewer infrequent types in written structured questions.

Group 4 has the highest variation of infrequent types produced, and group 3 has the highest proportion of infrequents in their total output. The fewest different infrequent types were produced by group 5. Of the groups that produced infrequent types, group 6 has the lowest proportion of the total number of infrequents produced, though only marginally so in contrast to group 5.

No inversion

Table 4.35 below gives an overview of the proportion with which each group produced types in the category *no inversion* in unstructured *yes/no* and *wh*-questions.

The production of the frequent types mirrors the usage of *no inversion* in unstructured questions (cf. *Diagram 4.40* in appendix *9.2.1.1 below*).

Table 4.35: group differences - unstructured questions – no inversion

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
(wh) S V (X) ◆■	I	8.57	1.25	26	20	17.76	5.13	39.37	1.08	33.33	30	31.65	15.52
	II	15.58	-	16.52	4	3.7	5.8	12.7	1.98	30.88	7.14	25.45	5.88
	III	5.41	2.33	5.59	6.15	5.36	5.33	9.8	4.55	16.98	13.33	13.16	-
(wh) S aux V (X) ◆■	I	4.76	-	7	-	2.8	5.13	7.09	2.15	15.48	10	6.33	17.24
	II	6.49	-	0.87	-	2.22	10.14	6.88	-	27.94	-	5.45	8.82
	III	5.41	-	2.79	-	4.46	1.33	9.31	4.55	1.89	-	11.84	-
(wh) S cop (X) ◆	I	5.71	-	9	7.5	6.54	-	13.39	1.08	13.1	-	13.92	3.45
	II	5.19	-	5.22	2	2.96	-	10.05	-	13.24	-	1.82	5.88
	III	12.84	-	10.06	9.23	5.36	4	11.27	-	20.75	20	11.84	-
S do V (X)	I	-	-	-	-	0.93	-	0.79	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	1.32	-
S aux aux V (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	0.87	-	-	-	-	-	-	-	-	-
	III	0.68	-	-	-	-	-	-	-	-	-	-	-
S V (X) wh	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	0.74	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

◆: frequency in corpus in unstructured yes/no Qs > 1 % ■: frequency in corpus in unstructured wh Qs > 1 %

Of the six types that represent the output in the unstructured tasks, two were produced with a frequency above 1 % with both *yes/no* and *wh*-questions, while one type has a variant that was produced with a frequency above 1 % with *yes/no* questions, and the other variant was produced with a frequency below 1 % with *wh*-questions. None of the types that were produced with a frequency below 1 % occur in both contexts.

All groups produced *S V (X)* with *yes/no* questions in all elicitations. In *wh*-questions *wh S V (X)* is used only in two of the three elicitations by groups 1 and 6, whereas the other groups used it in all elicitations. In *wh*-questions, *(wh) S V (X)* is the most frequently produced type throughout all the tasks except for groups 3 and 6 in elicitation II. Generally, *non-inverted* questions with *(wh) S V (X)* were produced more frequently with *yes/no* questions than with *wh*-questions, with the exception of groups 2 and 3, who produced more

wh-questions than *yes/no* questions with *(wh) S V (X)* in only one elicitation. Group 2 produced more *wh*-questions with *(wh) S aux V (X)* in two elicitations, and group 6 did so in one.

Although *(wh) S aux V (X)* occurs in the corpus with a frequency above 1 %, it was less frequently produced than *(wh) S V (X)*. Of all the groups, only group 3 produced *(wh) S aux V (X)* with both variants in all tasks. Groups 1 and 2 produced questions with *(wh) S aux V (X)* only with *yes/no* questions. Although groups 4 and 6 produced *(wh) S aux V (X)* in *wh*-questions, they did so only during two of the three elicitations, whereas group 5 only produced *(wh) S aux V (X)* with *wh*-questions only in one elicitation.

Only the variant of *(wh) S cop (X)* that was produced with *yes/no* questions has a frequency above 1 % in the corpus; with *wh*-questions its frequency is below 1 %. All groups produced *(wh) S cop (X)* in *yes/no* questions in all three elicitations. The infrequent variant of *(wh) S cop (X)* in *wh*-questions was not produced by group 1. Of the groups that used *(wh) S cop (X)* with *wh*-questions, group 2 used it in all elicitations, group 6 in the first two elicitations, and groups 3, 4 and 5 employed *(wh) S cop (X)* in one elicitation each. *(wh) S cop (X)* was employed more frequently in *wh*-questions than in *yes/no* questions by group 6 in elicitation II.

The infrequents that were used in this category are basically declaratives with rising intonation. Of their total output, group 5 has the highest proportion of infrequent questions types produced. Fewest infrequent types were produced by group 1. Group 3 has the highest variation of infrequent types used, although their overall production rate is relatively low.

Table 4.36 below gives an overview of the proportion with which each group produced types in the category *no inversion* in structured oral and written questions.

In the structured tasks, more variation within the types produced is evident. Two of these types were produced with a frequency above 1 % in the corpus.

Once again, in most tasks and for most groups more *non-inverted* questions were produced in the oral than in the written tasks. Exceptions to this can be found with *wh S V (X)* for groups 2 and 6 in one elicitation; and with *wh S aux V (X)* in two elicitations for groups 2 and 6, and in one elicitation for groups 3, 4 and 5.

Table 4.36: group differences - structured questions – no inversion

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
wh S V (X) ●▲	I	5.21	-	22.22	17.36	7.64	2.08	1.85	0.93	20.83	19.44	11.67	15.97
	II	2.78	2.78	20.14	16.67	4.86	4.86	1.85	-	19.44	19.44	9.38	14.58
	III	-	-	9.86	11.59	1.41	0.72	-	0.54	27.08	15.22	-	-
wh S aux V (X) ●▲	I	-	-	7.64	10.42	5.56	3.47	1.39	0.46	8.33	11.11	4.17	11.76
	II	1.39	-	10.42	18.06	2.08	2.78	0.46	-	11.11	5.56	6.25	11.46
	III	-	-	7.04	7.97	4.93	3.62	0.53	0.54	10.42	6.52	-	-
wh S cop (X)	I	1.04	-	4.17	1.39	4.86	-	1.39	0.46	5.56	-	2.5	0.84
	II	-	-	-	4.17	0.69	0.69	-	-	-	-	1.04	3.13
	III	-	-	0.7	0.72	0.7	-	-	-	2.08	-	-	-
wh O S V (X)	I	-	1.04	-	-	-	-	-	-	-	-	0.83	-
	II	-	-	-	0.69	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
S aux V wh (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	0.69	-	-	-	-	-	-	-	-	-
	III	-	-	-	0.72	-	-	-	-	-	-	-	-
S V wh (X)	I	-	-	-	-	-	0.69	-	-	-	-	-	-
	II	-	-	0.69	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
S cop Sc wh (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	0.69	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
O V wh do S V (X)	I	-	-	-	-	-	-	-	0.46	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
wh O aux S V (X)	I	-	-	-	-	-	-	-	-	-	-	0.83	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

●: frequency in corpus in oral structured Qs > 1 % ▲: frequency in corpus in written structured Qs > 1 %

Comparable to the production of the frequent types in the unstructured tasks, group 1 again produced very few *non-inverted* questions, and, the majority of the *non-inverted* questions that group 1 produced were produced in oral structured questions.

Usage of the frequent types in structured questions varies within the groups. For groups 1 and 2 the production rates of both *wh S V (X)* and *wh S aux V (X)* decreased throughout the study in both contexts. Groups 3 and 4 produced fewer questions with *wh S V (X)* in both contexts, for *wh S aux V (X)* the production level decreased in oral questions, while the production rate of *wh S aux V (X)* remained stable in written contexts. For group 5 production of both *wh S V (X)* and *wh S aux V (X)* increased in oral questions, but decreased in

written ones. The performance of group 6 is comparable to the performance of groups 3 and 4; usage of *wh S V (X)* decreased in both contexts, although for *wh S aux V (X)* it is stable in oral questions, but decreased in written ones.

In the structured tasks, more variation within the infrequent types is evident. More infrequents were produced in the structured tasks.

Of the *non-inverted* infrequents that were produced, only *wh S cop (X)* was produced in both unstructured and structured tasks. Usage for all other infrequent types is restricted to either the structured or the unstructured tasks. The infrequent types in the unstructured tasks have either a declarative word order or a declarative word order to which an interrogative pronoun is added sentence initially or finally. The infrequent types in the structured tasks have a different structure. Except for *wh S cop (X)*, all other infrequents show an uncommon word order, indicating problems with the trigger sentences.

The fewest infrequent types were produced by group 5; the most variation in the production of infrequent types is shown by group 2.The relative production rate for unstructured infrequents is lowest for group 1, and highest for group 2.

With the exception of group 2, infrequents were produced more frequently in oral questions.

Cop inversion

Table 4.37 below gives an overview of the proportion with which each group produced types in the category *cop inversion* in unstructured *yes/no* and *wh*-questions. In this category only one type *(wh) cop S (X)* occurs in the corpus with a rate higher than 1 %. The remaining types all occur with less than 1 %. Compared to the variation within the other categories, *cop inversion* has the lowest amount of different types produced in both task types.

All groups produced *(wh) cop S (X)*, although none of the groups shows a clear preferred usage for either *cop S (X)* or *wh cop S (X)*; groups 1, 2 and 3 produced more questions with *cop S (X)* than with *wh cop S (X)* in two out of three elicitations, while groups 4, 5 and 6 produced more questions with

(wh) cop S (X) with *wh*-questions than with *yes/no* questions in two out of three elicitations.

Table 4.37: group differences - unstructured questions – cop inversion

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
(wh) cop S (X) ◆■	I	43.81	32.5	22	25	14.02	23.08	14.96	26.88	13.1	15	16.46	15.52
	II	24.68	37.5	28.7	12	19.26	15.94	17.46	22.77	11.76	50	18.18	32.35
	III	33.78	25.58	34.64	18.46	33.04	25.33	22.06	21.82	24.53	20	15.79	16.67
wh cop (X)	I	-	1.25	-	5	-	-	-	0.99	-	2.5	-	3.45
	II	-	-	-	2	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	1.33	-	-	-	-	-	-
cop S cop (X)	I	-	-	-	-	0.93	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	0.68	-	0.56	-	-	-	-	-	-	-	-	-

◆: frequency in corpus in unstructured yes/no Qs > 1 % ■: frequency in corpus in unstructured wh Qs > 1 %

None of the infrequent types produced in the unstructured tasks occurs in both contexts. Groups 4, 5 and 6 each produced one infrequent type. Group 4 has the lowest proportion of their overall output of infrequent types. Group 2 both uses most infrequent types and has the highest proportion of infrequents in their output.

Table 4.38 below gives an overview of the proportion with which each group produced types in the category *cop inversion* in structured oral and written questions. Of the types that represent *cop inversion*, only one type, *wh cop S (X)*, and only in written interrogatives, was produced with a frequency above 1 % in the corpus, even though *wh cop S (X)* is an infrequent type. All groups except group 5 produced more oral questions with *wh cop S (X)* in elicitation III.

Table 4.38: group differences - structured questions – cop inversion

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
wh cop S (X) ▲	I	6.25	8.33	1.39	8.33	4.17	8.33	4.17	6.94	2.78	8.33	5	9.24
	II	2.78	9.72	1.39	5.56	2.08	9.72	1.39	8.8	2.78	8.33	3.13	6.25
	III	4.29	1.45	3.52	2.9	3.52	2.17	5.32	2.72	-	4.35	4.26	2.17
wh cop (X)	I	-	1.04	-	1.39	-	-	-	1.39	-	1.39	-	-
	II	-	-	-	-	-	-	-	1.39	-	1.39	-	-
	III	2.86	-	4.23	-	3.52	-	4.26	-	4.17	-	4.26	-
wh cop Sc cop (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	1.43	-	-	-	0.7	-	-	-	-	-	-	-
wh cop Sc S (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	0.69	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
wh cop S cop (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	2.08	-	-	-

●: frequency in corpus in oral structured Qs > 1 % ▲: frequency in corpus in written structured Qs > 1 %

Variation in the infrequent types produced in the structured tasks is higher than in the unstructured tasks. Again, as described for all other categories above, more infrequent types were produced in the structured tasks. This is true for the absolute number of types, and for the relative proportion of types produced for all groups with the exception of group 2.

Three of the infrequents produced in this category show evidence of rule testing. In the types that have a double *cop*, the first *cop* functions as a question marker, whereas the second *cop* functions as the verbal element. This is comparable to types like *wh do S aux V (X)*, or *wh do S cop (X)*, where *do* also functions as a question marker while *aux* or *cop* function as the verbal element.

The number of different infrequent types produced is lowest for groups 4 and 6, although group 4 produced both oral and written questions with *wh cop (X)*. All the other groups produced two of the purely infrequent types. Of these, groups 1, 2 and 5 used *wh cop (X)* with both oral and written interrogatives. Relative production of infrequents was lowest for group 2 and highest for group 1.

Verb inversion

Table 4.39 below gives an overview of the proportion with which each group produced types in the category *verb inversion* in unstructured *yes/no* and *wh*-questions.

Table 4.39: group differences - unstructured questions – verb inversion

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
(wh) V S (X) ◆■	I	24.76	42.5	5	2.5	1.87	12.82	0.79	6.45	5.95	15	-	5.17
	II	14.29	37.5	14.78	22	0.74	14.49	2.65	1.98	4.41	-	7.27	5.88
	III	6.76	23.26	9.5	12.31	0.89	5.33	2.45	4.55	11.32	33.33	1.32	8.33
wh V (X)	I	-	2.5	-	7.5	-	-	-	2.15	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	4.65	-	1.54	-	-	-	2.73	-	6.67	-	-
V O (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	0.49	-	1.89	-	-	-
◆: frequency in corpus in unstructured yes/no Qs > 1 % ■: frequency in corpus in unstructured wh Qs > 1 %													

Only three types were employed to form unstructured questions and of these, only one type *(wh) V S (X)* was produced with an overall frequency above 1 %.

With four exceptions, *(wh) V S (X)* was produced more often in *wh*-questions. Groups 2, 4, 5 and 6 each produced *(wh) V S (X)* more frequently in oral questions in one elicitation; for group 2 this was the case in elicitation I, for the others in elicitation II.

Throughout the study group 1's production of *(wh) V S (X)* decreased in both contexts. Usage of *(wh) V S (X)* first increased for group 2, then decreased once again, although not below the production rate in elicitation I in both contexts. Overall production of *(wh) V S (X)* decreased for group 3, in both contexts, although in *wh*-questions production of *(wh) V S (X)* peaked in elicitation II. For group 4, usage of *(wh) V S (X)* first increased in *yes/no* questions, then decreased, although not below the production rate in elicitation I; although production of *(wh) V S (X)* in *wh*-questions decreased throughout the study, the lowest production level was during elicitation II. Although the production of *(wh) V S (X)* by group 5 decreased slightly in elicitation II, the general trend is increased usage in *yes/no* and *wh*-questions. Group 6 only produced *yes/no* questions with *(wh) V S (X)* in elicitations II and III, usage decreased from elicitation II to elicitation III; with *wh*-questions production of *(wh) V S (X)* slowly increased throughout the study.

In both unstructured *yes/no* and *wh*-questions only two infrequent types were produced, and both only occur in one context. Groups 3 and 6 did not produce infrequent types with unstructured questions, groups 1 and 2 produced one of the infrequent types in *wh*-questions and groups 4 and 5 produced both infrequent types. Group 4 has the lowest proportion of infrequent types in their overall output. Group 2 has the highest proportion of infrequents in their output.

Table 4.40 below gives an overview of the proportion with which each group produced types in the category *verb inversion* in structured oral and written questions. In the other categories, more variants were produced in the structured

than in the unstructured tasks. Again, only one type *wh V S (X)* was produced with an overall frequency above 1 %.

Table 4.40: group differences - structured questions – verb inversion

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
wh V S (X) ●▲	I	28.13	27.08	17.36	13.89	6.25	2.08	10.19	5.09	12.5	9.72	11.67	5.88
	II	25	30.56	18.06	16.67	5.56	4.17	12.04	6.48	9.72	8.33	3.13	3.13
	III	30	33.33	16.9	14.49	2.11	2.9	4.79	5.43	25	19.57	-	-
wh V (X)	I	4.17	-	0.69	-	0.69	-	1.39	-	2.78	-	2.5	-
	II	1.39	-	0.69	-	-	0.69	0.46	-	-	-	1.04	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
wh V S aux (X)	I	1.04	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
wh V aux S (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	0.46	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

●: frequency in corpus in oral structured Qs > 1 % ▲: frequency in corpus in written structured Qs > 1 %

Generally, with the exception of group 1 in elicitations II and III and groups 3 and 4 in elicitation III, *wh V S (X)* was produced more frequently in oral than in written questions.

Usage of *wh V S (X)* varies throughout the groups and the production level was stable only for group 4 in written questions. Production of *wh V S (X)* rose for groups 1, 2 and 6 in both contexts throughout the study. For group 2 production of *wh V S (X)* decreased in oral questions, after a slightly increased production rate in elicitation II; usage of *wh V S (X)* increased in written questions, although in elicitation III production of *wh V S (X)* decreased once more. For group 3 production of *wh V S (X)* decreased in oral questions, and, as was the case for group 2, increased in written questions. While production of *wh V S (X)* decreased after peaking in elicitation II for group 4 in oral questions, production of *wh V S (X)* increased in written questions; although the production level declined again in elicitation III, it was nevertheless higher than in elicitation I. Production of *wh V S (X)* first decreased and then increased in both contexts for group 5. Usage of *wh V S (X)* decreased for group 6 in both contexts and was not produced in elicitation III.

Although more infrequent types were produced in the structured tasks than in the unstructured, the relative production rate of infrequent types with structured questions was lower than their relative production rate with unstructured question for all groups who produced infrequent types in unstructured questions.

Groups 2, 3, 5 and 6 used only one of the infrequent types, although group 3 produced it in both contexts. Groups 1 and 2 both produced questions with two infrequent types, although both groups only produced infrequent types in oral questions.

With the exception of group 3, infrequent types were produced only in oral questions. Groups 2 and 3 have the lowest proportion of infrequent types produced with structured tasks, while group 1 has the highest proportion of infrequent types produced.

Fragment

Table 4.41 below gives an overview of the proportion with which each group produced types in the category *fragment* in unstructured *yes/no* and *wh*-questions. None of the types belonging to this category occur with a frequency above 1 % in the corpus, therefore all of the produced types were classified as infrequents.

Table 4.41: group differences - unstructured questions – fragment

type	E	group 1		group 2		group 3		group 4		group 5		group 6	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
(wh) S (X)	I	0.95	2.5	5	-	2.8	2.56	4.72	1.08	8.33	2.5	3.8	1.72
	II	1.3	-	-	-	0.74	-	2.12	-	-	-	-	-
	III	2.03	-	1.12	-	1.79	-	5.39	-	5.66	-	1.32	-
(wh) (X)	I	-	5	2	-	-	-	-	2.15	3.57	12.5	1.27	3.45
	II	-	-	-	-	-	-	2.12	-	-	-	-	-
	III	0.68	2.33	-	-	0.89	1.33	0.49	2.73	1.89	-	-	-
V (X)	I	0.95	-	-	-	-	-	-	-	-	-	-	-
	II	1.3	-	-	-	-	-	-	-	-	-	-	-
	III	2.7	-	-	-	1.79	-	0.98	-	-	-	-	-
aux S (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	1.47	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
do S (X)	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	0.49	-	-	-	-	-
S aux (X)	I	-	-	1	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

◆: frequency in corpus in unstructured yes/no Qs > 1 % ■: frequency in corpus in unstructured wh Qs > 1 %

In addition to this, *fragments* were only produced in the unstructured tasks. All groups employed *fragments* to some extent to fulfil the tasks. Especially group 5 used *fragments* to a higher extent in elicitation I with both *yes/no* and

wh-questions. Fewest *fragments* were produced by group 6, but those types that were produced were used in both contexts.

Most variation in the types employed is found with group 4. Of their overall output, group 5 produced the highest proportion of *fragments*, whereas group 2 produced the fewest.

Summarising the results from above: all categories that were produced with both unstructured and structured tasks show more variation in the number of types produced in the structured tasks. This variation was generally restricted to the number of infrequent types produced. The frequent types that were produced with unstructured tasks were also frequent in both structured tasks.

Generally speaking, with the exception of *fragments*, where all groups produced more *fragments* in *yes/no* than in *wh*-questions, in the remaining five categories most groups produced more infrequent types in unstructured *wh*-questions than in unstructured *yes/no* questions (relative proportion of each group's total output). For most groups the proportion of infrequent types produced in oral structured questions is higher than in written structured questions.

When comparing the production of unstructured infrequent types to the production of structured infrequent types no such clear-cut picture emerges. In *aux inversion* and *do-support*, all groups that produced infrequent types with both unstructured and structured questions, produced more (relative proportion) infrequent types with structured questions.

In the categories *no inversion* and *cop inversion*, all groups, but group 2, produced more (relative proportion) infrequent types in structured questions. Although all groups produced infrequent types in structured questions with *verb inversion*, infrequent types were not produced with unstructured questions by groups 3 and 6. Those groups who produced infrequent types in *verb inversion* in both unstructured and structured questions produced more (relative proportion) infrequent types in unstructured questions.

Higher variation in the structured tasks can be attributed to the task itself: the test persons were allowed to decide themselves which structures they

produced in the unstructured tasks, whereas in the structured tasks their output was influenced by trigger-sentences, therefore leading to more variation.

4.2 Error Analysis

In the next section, I describe the results of the modified Error Analyses. The SEA focuses on the sentence structure of the produced output while the SEA^{+} focuses on whether the interrogatives elicited in the structured tasks are appropriate responses to the triggers given, whereas the focus of the EA is, except for semantics, on any other differences between the participants' ILs and the TL norm. The EA^{+} once again includes whether the interrogatives elicited in the structured tasks are appropriate responses to the triggers given.

4.2.1 SEA in Produced Category

In the following SEA, I only consider deviations that are directly linked to the sentence structure of interrogatives (cf. *3.2.4.2 above*).

4.2.1.1 Unstructured Questions

In *Table 4.42 below* I give an overview of how many structurally tasklike *yes/no* and *wh*-questions were produced by each group during the three elicitations in the six categories introduced in *4.1.2 above*. A graphical representation of the results is given in *4.2.1.3 below* for the categories *cop inversion, aux inversion*, and *do-support*.

Fragments played a minor role in the formation of both *yes/no* and *wh*-questions in all groups; *fragments* were produced more frequently with *yes/no*

questions (cf. *Table 4.41 above*). Group 1 is the only group which produced fewer tasklike *fragments* in *yes/no* than in *wh*-questions. If *fragments* were produced by the other groups in an elicitation with both question types, more tasklike *fragments* were produced with *yes/no* than with *wh*-questions.

Table 4.42: tasklike unstructured questions – SEA

	E	fragment		cop inversion		no inversion		V inversion		aux inversion		do-support	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
group 1	I	50	100	100	100	100	-	-	8.33	90.91	88.89	Ø	-
	II	50	Ø	100	100	100	Ø	-	-	100	75	100	Ø
	III	62.5	100	98.04	100	100	-	-	8.33	94.12	94.44	100	Ø
group 2	I	100	Ø	100	100	100	-	-	25	87.5	71.43	100	100
	II	Ø	Ø	100	100	96.3	-	-	-	100	100	100	95.24
	III	100	Ø	98.41	100	100	-	-	-	100	85.71	95.45	100
group 3	I	100	-	93.75	100	100	-	-	20	100	100	96.15	100
	II	100	Ø	100	100	100	-	-	-	94.29	85.71	93.22	96.67
	III	100	100	100	100	100	-	-	-	100	100	97.62	100
group 4	I	83.33	66.67	100	100	100	-	-	25	100	100	100	100
	II	87.5	Ø	100	100	100	-	-	-	97.78	100	95.24	100
	III	100	100	100	100	100	-	-	50	97.67	94.29	96.97	100
group 5	I	100	100	100	100	98.08	-	-	-	100	80	100	Ø
	II	100	Ø	100	100	100	-	-	Ø	100	100	Ø	100
	III	100	Ø	100	100	100	-	-	33.33	100	100	100	Ø
group 6	I	100	66.67	100	100	100	-	Ø	-	70	100	100	100
	II	Ø	Ø	100	100	100	-	-	-	100	100	100	100
	III	100	Ø	100	100	100	Ø	-	100	100	100	100	100
Ø: no questions produced in this category													

All groups produced structurally correct interrogatives with *cop inversion* in *wh*-questions in all elicitations. In *yes/no* questions only groups 4, 5 and 6 employed *cop inversion* correctly with all the interrogatives, whereas groups 1, 2 and 3 did so in two out of three elicitations.

All *non-inverted wh*-questions produced were erroneous, while almost all *non-inverted yes/no* questions produced are tasklike because *non-inverted yes/no* questions are structurally declarative sentences. *Non-inverted yes/no* questions differ from declaratives only in their intonation pattern: rising intonation for *non-inverted* questions and no change in intonation if the utterance is intended as a declarative.

All *yes/no* questions that were formed with *verb inversion* are erroneous because this structure is not grammatical in the TL. In *wh*-questions *verb inversion* is possible if the questioned element is the subject, in these cases the word order is *WH*-PHRASE – VERB – X (Quirk et al.: 1985: 238). If the questioned element is the object, *verb inversion* leads to erroneous structures. In some of the produced *wh*-questions the questioned element was the subject; these are

represented by the structurally correct output in the *verb inversion* category. Although interrogatives with *verb inversion* are in most cases erroneous, they are nevertheless an important stage in the acquisition of *do-support*.

The proportion of structurally correct questions with *aux inversion* is for most groups higher in *yes/no* questions. The only exception to this is group 6 in elicitation I and group 1 in elicitation III, although for group 1 the difference is minimal.

With *do-support* the results are mixed. Group 1 only produced interrogatives with *do-support* in elicitations II and III with *yes/no* questions, and the only attempted production of *do-support* with *wh*-questions failed. Of the *do-support* questions that group 2 produced, all were structurally correct in two out of three elicitations with both questions types. In elicitation I, only structurally tasklike interrogatives were produced with both question types, however, in elicitations II, no structural errors occurred with *yes/no* questions, while some of the *wh*-questions are structurally incorrect in elicitation II. Compared to elicitation II, the distribution of correct and incorrect interrogatives produced in elicitation III is reversed. All *wh*-questions are structurally correct, while some of the *yes/no* questions are structurally incorrect. Group 3 produced more structurally correct *wh*-questions than *yes/no* questions with *do-support* in all three elicitations. In elicitations I and III all *wh*-questions with *do-support* are structurally correct. Group 4 produced structurally correct *wh*-questions in all elicitations, however, only in elicitation I, all *yes/no* questions were structurally correct. Group 5 produced very few *do-support* questions, but if produced, all were structurally correct. Group 6 had no difficulties with the production of structurally correct *do-support* questions in both contexts. Group 6 produced only structurally tasklike interrogatives with *do-support* in elicitation II in oral questions and in elicitations II and III in written questions.

4.2.1.2 Structured Questions

In *Table 4.43 below* I give an overview of how many structurally tasklike questions were produced in the structured tasks by each group. A graphical representation of the results is given in *4.2.1.3 below* for the categories *cop inversion, aux inversion*, and *do-support*.

In the structured tasks, the test persons were supposed to respond to trigger sentences which were supposed to elicit *wh*-questions with either *copula*, *auxiliary* or *do-support*.

Wh + cop inversion is the category with the fewest structural problems. With just one exception, group 3 in elicitation III, all written *wh*-questions in which *cop inversion* was employed are structurally correct. With the exception of groups 3 and 6, all groups produced fewer structurally tasklike oral than written *wh*-questions with *cop inversion*.

Table 4.43: tasklike structured questions – SEA

	E	wh + cop inversion		no inversion		wh + no inversion		wh + V inversion		wh + aux inversion		wh + do-support	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
group 1	I	83.33	100	Ø	Ø	-	-	-	-	80.39	83.33	100	Ø
	II	100	100	Ø	Ø	-	-	-	-	80	100	100	100
	III	83.33	100	Ø	Ø	Ø	Ø	-	-	70.59	94.44	100	100
group 2	I	100	100	Ø	Ø	-	-	-	-	91.49	75.47	95	93.33
	II	66.67	100	-	Ø	-	-	-	-	97.87	100	85	91.67
	III	100	100	Ø	-	-	-	-	-	84.62	90.24	86.05	95.45
group 3	I	100	100	Ø	-	-	-	-	-	97.73	100	86.21	92.75
	II	100	100	Ø	Ø	-	-	-	-	93.94	96.08	91.07	90
	III	90.91	66.67	Ø	Ø	-	-	-	-	87.04	98.33	87.5	95.38
group 4	I	100	100	Ø	-	-	-	-	-	97.85	93.83	96.2	95.05
	II	100	100	Ø	Ø	-	Ø	-	-	95	100	93.75	89.25
	III	88.89	100	Ø	Ø	-	-	-	-	95.51	100	92.96	100
group 5	I	100	100	Ø	Ø	-	-	-	-	100	85.29	66.67	100
	II	100	100	Ø	Ø	-	-	-	-	84.85	91.3	100	100
	III	66.67	100	Ø	Ø	-	-	-	-	57.14	78.95	Ø	83.33
group 6	I	100	100	Ø	Ø	-	-	-	-	96.88	100	95.12	94.59
	II	100	100	Ø	Ø	-	-	-	-	100	100	94.44	100
	III	100	100	Ø	Ø	Ø	Ø	Ø	Ø	100	100	100	100
Ø: no questions produced in this category													

None of the groups produced structurally tasklike interrogatives with *aux inversion* in all elicitations with both oral and written tasks. Groups 1, 3 and 6 produced more structurally correct written than oral interrogatives with *aux inversion* in all elicitations. Groups 2, 4 and 5 follow the same trend though only in two out of three elicitations.

When looking at how many structurally tasklike questions were produced, the most variation occurs with *do-support*. The most striking result is that group 1, the group with the least exposure to English, produced only structurally correct interrogatives in this category. Groups 2 and 3, in two out of three elicitations, produced more structurally correct written than oral interrogatives with *do-support*, whereas group 4 produced more oral than written structurally correct interrogatives with *do-support* in two out of three elicitations. Group 5 produced oral *wh*-questions with *do-support* only in elicitations I and II. In elicitation I, group 5 produced fewer structurally correct questions than in the corresponding written task, while in elicitation II all elicited *wh*-questions requiring *do-support* were structurally correct. Group 6 produced more structurally tasklike oral than written interrogatives in elicitation I, while in elicitation II more structurally tasklike written than oral interrogatives requiring *do-support* were produced. In elicitation III group 6 produced only structurally tasklike *wh*-questions with *do-support* in both tasks.

Table 4.43 above shows that more structurally correct interrogatives were generally produced in task III where written *wh*-questions were elicited. Although this pattern is not as clearly evident with *aux inversion* and *do-support* as with *cop inversion*, the results nevertheless show that in written tasks more structurally correct interrogatives were produced.

4.2.1.3 Unstructured vs. Structured

A comparison of the tasklike questions that were produced in the different task types shows that the performance differs if the medium of the task is changed. This corresponds to Larsen-Freeman's (1976: 126) observation that differing error rates can be found, especially if the tasks involve spoken and written tests.

Table 4.44 below gives an overview of the categories in which structurally tasklike questions were produced with both unstructured (tasks I.a and I.b) and

structured (tasks II and III) questions. From *Table 4.44* the diagrams below are generated for *cop inversion, aux inversion*, and *do-support* respectively, showing how many of the produced interrogatives were judged as tasklike by the SEA in the structured and unstructured tasks.

Table 4.44: tasklike structured and unstructured questions – SEA

	E	cop inversion				aux inversion				do-support			
		unstructured		structured		unstructured		structured		unstructured		structured	
		y/n	wh	or.	wr.	y/n	wh	or.	wr.	y/n	wh	or.	wr.
group 1	I	100	100	83.33	100	90.91	88.89	80.39	83.33	Ø	-	100	Ø
	II	100	100	100	100	100	75	80	100	100	Ø	100	100
	III	98.04	100	83.33	100	94.12	94.44	70.59	94.44	100	Ø	100	100
group 2	I	100	100	100	100	87.5	71.43	91.49	75.47	100	100	95	93.33
	II	100	100	66.67	100	100	100	97.87	100	100	95.24	85	91.67
	III	98.41	100	100	100	100	85.71	84.62	90.24	95.45	100	86.05	95.45
group 3	I	93.75	100	100	100	100	100	97.73	100	96.15	100	86.21	92.75
	II	100	100	100	100	94.29	85.71	93.94	96.08	93.22	96.67	91.07	90
	III	100	100	90.91	66.67	100	100	87.04	98.33	97.62	100	87.5	95.38
group 4	I	100	100	100	100	100	100	97.85	93.83	100	100	96.2	95.05
	II	100	100	100	100	97.78	100	95	100	95.24	100	93.75	89.25
	III	100	100	88.89	100	97.67	94.29	95.51	100	96.97	100	92.96	100
group 5	I	100	100	100	100	100	80	100	85.29	100	Ø	66.67	100
	II	100	100	100	100	100	100	84.85	91.3	Ø	100	100	100
	III	100	100	66.67	100	100	100	57.14	78.95	100	Ø	Ø	83.33
group 6	I	100	100	100	100	70	100	96.88	100	100	100	95.12	94.59
	II	100	100	100	100	100	100	100	100	100	100	94.44	100
	III	100	100	100	100	100	100	100	100	100	100	100	100
mean		99.46	100	93.32	98.15	96.27	93.08	89.49	93.74	98.42	92.28	92.35	95.3
Ø: no questions produced in this category													

Cop inversion

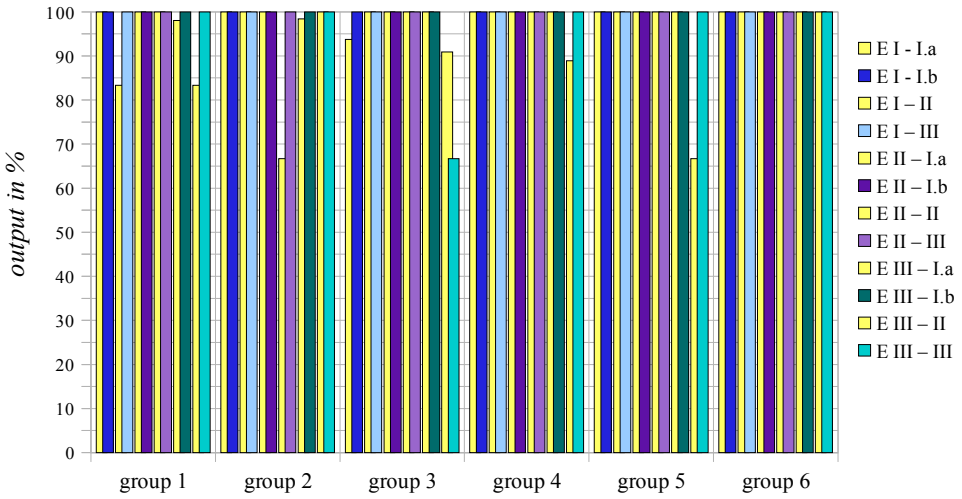
The following *Diagram 4.13 below* generated from *Table 4.44 above* shows which of the produced interrogatives with *cop inversion* were judged as tasklike by the SEA.

A ranking of the tasks in which the most structurally correct interrogatives with *cop inversion* were produced shows that the groups performed best with unstructured *wh*-questions (task I.b). In this task none of the groups produced structurally incorrect interrogatives with *cop inversion*. The second place is taken by structured written interrogatives (task III) with *cop inversion*, in this task only group 3 produced structurally incorrect questions during elicitation III.

The third place in this ranking is taken by unstructured *yes/no* questions (task I.a). Although quantitatively fewer structurally erroneous interrogatives were produced than with unstructured *wh*-questions, more groups produced structurally

erroneous interrogatives. With structured oral questions (task II), the most structural deviations were produced. With exception of group 6, all groups produced deviant structures with *cop inversion* in at least one elicitation.

Diagram 4.13: SEA – structured and unstructured questions with cop inversion

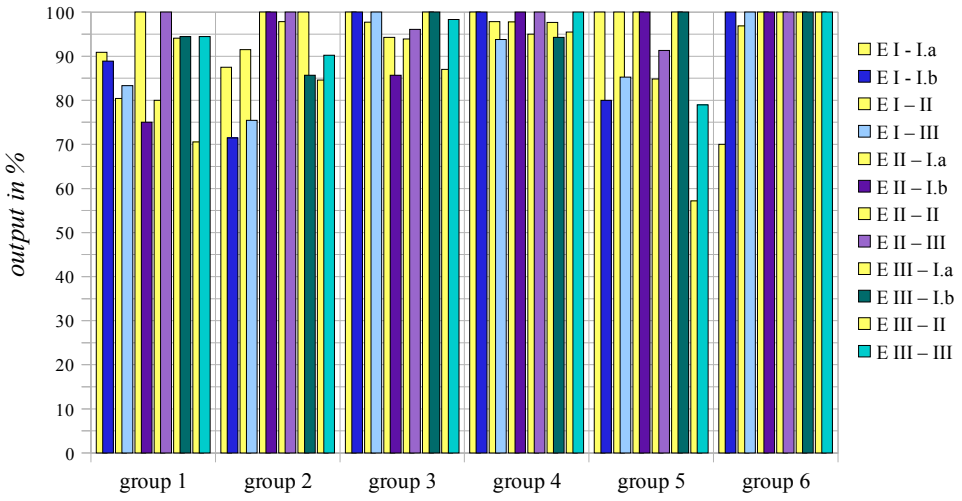


Aux inversion

The following *Diagram 4.14 below* generated from *Table 4.44 above* shows which of the produced interrogatives with *aux inversion* were judged as tasklike by the SEA.

With *aux inversion* the most structurally correct interrogatives were produced with unstructured *yes/no* questions (task I.a). In this task, no structural deviations occurred in interrogatives with *aux inversion* in the majority of the elicitations. In written structured questions (task III) the test persons produced slightly more erroneous interrogatives than in task I.a; fewer erroneous structures were produced in task III than with unstructured *wh*-questions (task I.b). Most structurally deviant questions with *aux inversion* were produced with structured oral questions (task II).

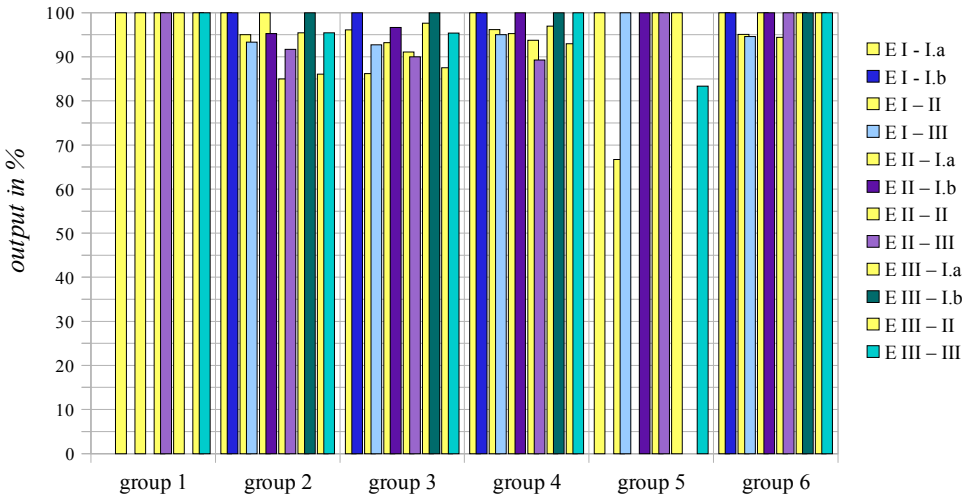
Diagram 4.14: SEA – structured and unstructured questions with aux inversion



Do-support

The following *Diagram 4.15 below* generated from *Table 4.44 above* shows which of the produced interrogatives with *do-support* were judged as tasklike by the SEA.

Diagram 4.15: SEA – structured and unstructured questions with do-support



The fewest problems with the sentence structure in *do-support* questions occurred in oral unstructured questions (task I.a). In written structured questions

(task III) the test persons produced slightly more *do-support* questions with deviant sentence structures, although fewer erroneous questions were produced than in oral structured *wh*-questions (task II). Most structurally incorrect interrogatives occurred with unstructured *wh*-questions (task I.b).

Summarising the findings from above, it can be said that for *aux inversion* and *do-support* the most structurally correct interrogatives were found in unstructured *yes/no* questions, followed by structured written questions. With *aux inversion* most incorrect interrogatives were produced in oral structured questions. With *do-support* most structurally incorrect interrogatives were produced with unstructured *wh*-questions. For *cop inversion* the distribution of erroneous structures is different; the fewest structural problems occurred with unstructured *wh*-questions, the most in oral structured *wh*-questions.

4.2.1.4 SEA^{+}

In the following analysis, I focus on the interrogatives that were produced in one of the following categories, *cop inversion, aux inversion* or *do-support*. The interrogatives produced in these categories are considered tasklike only if they are both structurally correct and an appropriate response (cf. *3.2.4.2 above*) to the given trigger sentence.

In *4.2.4 below* I give an overview of all the structures that were produced when one of the above mentioned categories should have been elicited, showing which of the elicited structures are inappropriate and/or structurally incorrect.

Table 4.45 below gives an overview of how many of the interrogatives that were produced with *cop inversion, aux inversion*, *and do-support* in tasks II and III are considered as tasklike if appropriateness is included. A graphical representation of the results is given in *Diagram 4.16*, *Diagram 4.17,* and *Diagram 4.18 below* for the categories *cop inversion, aux inversion*, and *do-support* respectively, comparing the results of the SEA to those of the SEA^{+}.

Each group produced interrogatives with *cop inversion* in all elicitations in both oral and written structured tasks. Overall, all groups produced more appropriate written than oral interrogatives with *cop inversion*. All oral questions that group 1 produced with *cop inversion* in elicitation II were appropriate; all written questions that they produced in elicitations II and III were also appropriate. Group 6 produced non-tasklike interrogatives with *cop inversion* in elicitation I in oral questions, all other interrogatives with *cop inversion* that group 6 produced were appropriate. The remaining groups 2, 3, 4 and 5 produced as many appropriate oral as written or more written appropriate interrogatives with *cop inversion* in two out of three elicitations.

Table 4.45: tasklike structured questions – SEA^{+}

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
cop inversion	I	50	66.67	100	78.57	50	100	77.78	88.89	100	100	50	100
	II	100	100	66.67	100	100	100	100	90.91	100	85.71	100	100
	III	83.33	100	100	100	90.91	66.67	88.89	100	66.67	100	100	100
aux inversion	I	50.98	48.33	80.85	52.83	90.91	80.39	74.19	65.43	61.29	52.94	81.25	80
	II	64.44	72.22	89.36	87.1	84.85	84.31	74	70.11	57.58	73.91	83.78	73.33
	III	70.59	77.78	58.97	60.98	64.81	80	59.55	71.43	50	63.16	75	68.18
do-support	I	100	Ø	75	93.33	79.31	86.96	84.81	76.24	66.67	100	82.93	81.08
	II	100	100	80	83.33	83.93	88.33	78.75	76.34	87.5	83.33	86.11	100
	III	100	100	67.44	79.55	82.81	86.15	88.73	97.1	Ø	66.67	100	86.96
Ø: no questions produced in this category													

All groups produced interrogatives with *aux inversion* in all tasks. Groups 1 and 5 produced more written appropriate interrogatives with *aux inversion* in elicitations II and III. Groups 2, 3 and 4 performed better in questions with *aux inversion* in oral than in written questions in elicitations I and II, while group 6 produced more appropriate questions with *aux inversion* in all three elicitations in oral structured questions. None of the groups produced only appropriate interrogatives with *aux inversion*.

Interrogatives with *do-support* were only produced by groups 2, 3, 4 and 6 in both task types in all three elicitations. Group 1 did not produce interrogatives with *do-support* in written questions in elicitation I, while group 5 did not produce oral questions with *do-support* in elicitation III. Group 1 is the only group that produced only appropriate questions with *do-support*. Groups 2 and 3 produced more written than oral appropriate interrogatives with *do-support* interrogatives in all elicitations. Group 5 produced more written than oral appropriate

interrogatives with *do-support* in elicitations I and III. Groups 4 and 6 produced more oral than written appropriate questions with *do-support* in two elicitations, group 4 in elicitation I and II and group 6 in elicitations I and III.

In *Table 4.46 below* I show how much the task type influences tasklike production by comparing the judgement for word order with the judgement for appropriateness.

From *Table 4.46* the diagrams below are generated for *cop inversion, aux inversion*, and *do-support* respectively, showing differences in judgement if the SEA and the SEA^+ are compared.

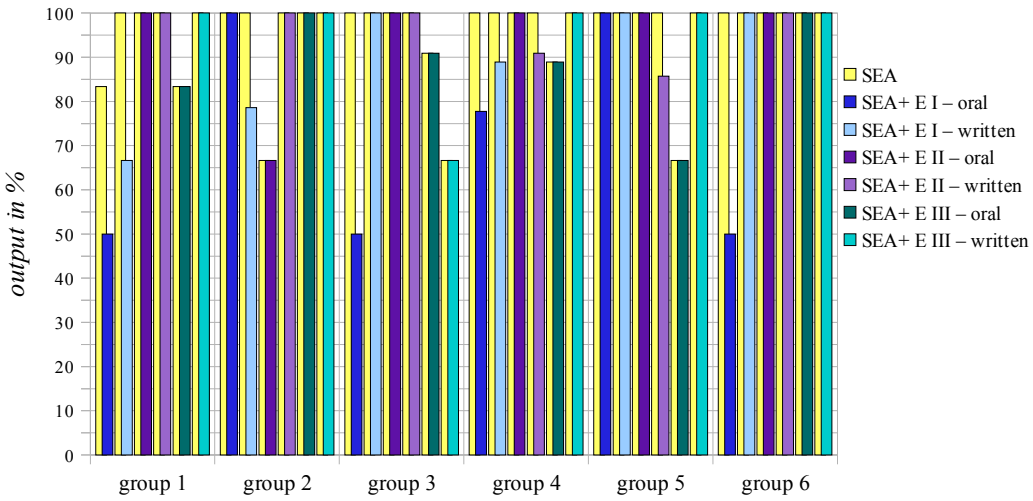
Table 4.46: tasklike structured questions – SEA^+ vs. SEA

	E	cop inversion				aux inversion				do-support			
		SEA^+		SEA		SEA^+		SEA		SEA^+		SEA	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
group 1	I	50	66.67	83.33	100	50.98	48.33	80.39	83.33	100	Ø	100	Ø
	II	100	100	100	100	64.44	72.22	80	100	100	100	100	100
	III	83.33	100	83.33	100	70.59	77.78	70.59	94.44	100	100	100	100
group 2	I	100	78.57	100	100	80.85	52.83	91.49	75.47	75	93.33	95	93.33
	II	66.67	100	66.67	100	89.36	87.1	97.87	100	80	83.33	85	91.67
	III	100	100	100	100	58.97	60.98	84.62	90.24	67.44	79.55	86.05	95.45
group 3	I	50	100	100	100	90.91	80.39	97.73	100	79.31	86.96	86.21	92.75
	II	100	100	100	100	84.85	84.31	93.94	96.08	83.93	88.33	91.07	90
	III	90.91	66.67	90.91	66.67	64.81	80	87.04	98.33	82.81	86.15	87.5	95.38
group 4	I	77.78	88.89	100	100	74.19	65.43	97.85	93.83	84.81	76.24	96.2	95.05
	II	100	90.91	100	100	74	70.11	95	100	78.75	76.34	93.75	89.25
	III	88.89	100	88.89	100	59.55	71.43	95.51	100	88.73	97.1	92.96	100
group 5	I	100	100	100	100	61.29	52.94	100	85.29	66.67	100	66.67	100
	II	100	85.71	100	100	57.58	73.91	84.85	91.3	87.5	83.33	100	100
	III	66.67	100	66.67	100	50	63.16	57.14	78.95	Ø	66.67	Ø	83.33
group 6	I	50	100	100	100	81.25	80	96.88	100	82.93	81.08	95.12	94.59
	II	100	100	100	100	83.78	73.33	100	100	86.11	100	94.44	100
	III	100	100	100	100	75	68.18	100	100	100	86.96	100	100
mean		84.68	93.19	93.32	98.15	70.69	70.14	89.49	93.74	84.87	87.37	92.35	95.3
Ø: no questions produced in this category													

Cop inversion

The following *Diagram 4.16 below* generated from *Table 4.46 above* shows which of the produced interrogatives with *cop inversion* were judged as tasklike by the SEA and how many of these were judged as appropriate if the trigger is included in the analysis.

Diagram 4.16: SEA vs. SEA^{+} – structured questions with cop inversion



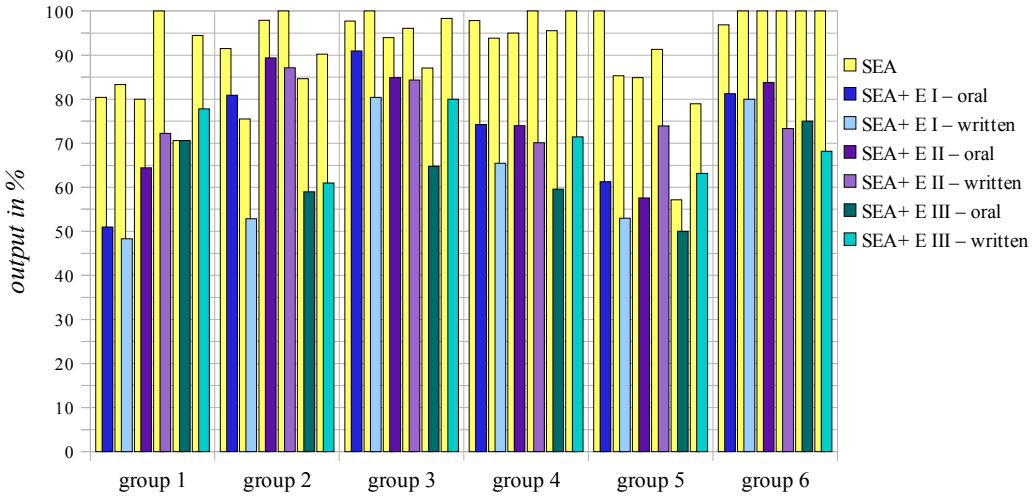
The task types had least effect on the interrogatives that were produced with *cop inversion*. Most groups performed equally well in both word order and appropriateness judgement with *cop inversion* in both structured tasks.

Aux inversion

The following *Diagram 4.17 below* generated from *Table 4.46 above* shows which of the produced interrogatives with *aux inversion* were judged as tasklike by the SEA and how many of these were judged as appropriate if the trigger is included in the analysis.

In interrogatives with *aux inversion* the difference is more pronounced. With the exception of group 1 in task II in elicitation III, in none of the other tasks was a group able to perform equally well in both judgement types.

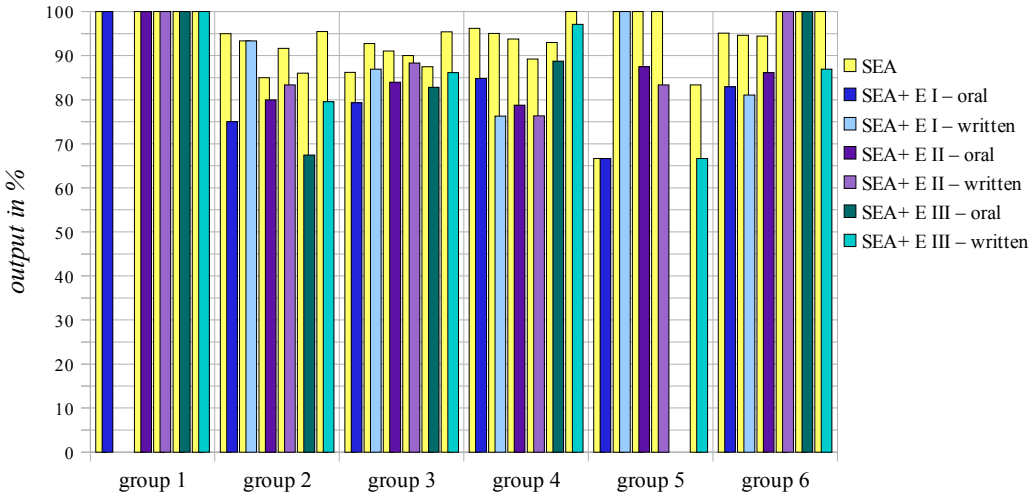
Diagram 4.17: SEA vs. SEA$^+$ – structured questions with aux inversion



Do-support

The following *Diagram 4.18 below* generated from *Table 4.46 above* shows which of the produced interrogatives with *do-support* were judged as tasklike by the SEA and how many of these were judged as appropriate if the trigger is included in the analysis.

Diagram 4.18: SEA vs. SEA$^+$ – structured questions with do-support



Although the difference between the judgement for appropriateness and word order is more pronounced for *do-support* than for *cop inversion*, it is less pronounced than it is for *aux inversion*. Group 1 performed equally well in the production of *do-support* questions in both judgement types in both task types throughout the study. Group 5 did the same in elicitation I in both task types and group 6 in oral questions in elicitation III and in written questions in elicitation II.

The comparison above shows that although all groups have generally mastered the sentence structures of English interrogatives (cf. *4.2.1.3 above*), appropriateness is still problematic for most, especially in interrogatives with *aux inversion* and *do-support*, but hardly for interrogatives with *cop inversion*. If differences occur between correct word order and appropriateness, the difference is usually higher than 5 %. Groups 2, 3 and 4 produced interrogatives with *do-support* where the difference between word order and appropriateness lies below 5 %: group 2 in elicitation II in oral questions, group 3 in elicitation II in written questions and in elicitation III in oral questions, and group 4 in elicitation III with both oral and written questions.

4.2.2 EA in Produced Category

The following analysis differs from those above. Sentence structure, morphology, concord and negation are included in this analysis, whereas in the above analyses only structural properties and appropriateness of the triggered responses were considered, showing how many of the interrogatives produced in the categories *cop inversion*, *aux inversion*, and *do-support* actually adhere to the rules of the TL.

4.2.2.1 Unstructured vs. Structured

Table 4.47 below gives an overview of the categories in which morphologically and structurally correct interrogatives were produced in both unstructured and structured tasks. The results shown in *Table 4.47* are comparable to the structural analysis in *Table 4.44 above*; however, because morphological properties are included in the following analysis, fewer structures are considered as correct.

From *Table 4.47* the diagrams below are generated for *cop inversion, aux inversion*, and *do-support* respectively, showing how many of the produced interrogatives were judged as tasklike by the EA in the unstructured and structured tasks.

Table 4.47: tasklike unstructured and structured questions – EA

	E	cop inversion				aux inversion				do-support			
		unstructured		structured		unstructured		structured		unstructured		structured	
		y/n	wh	or.	wr.	y/n	wh	or.	wr.	y/n	wh	or.	wr.
group 1	I	97.83	100	83.33	100	36.36	22.22	60.78	66.67	Ø	-	-	Ø
	II	100	83.33	100	100	63.16	75	75.56	83.33	100	Ø	66.67	60
	III	94.12	90.91	83.33	100	61.76	77.78	70.59	94.44	100	Ø	22.22	44.44
group 2	I	100	100	100	100	62.5	71.43	87.23	67.92	71.43	83.33	50	73.33
	II	100	100	66.67	100	71.43	87.5	95.74	93.55	79.17	85.71	50	70.83
	III	98.41	100	100	75	75	85.71	76.92	78.05	63.64	48.15	25.58	43.18
group 3	I	93.75	100	83.33	100	75	100	97.73	98.04	36.54	76.47	51.72	69.57
	II	100	100	100	100	88.57	85.71	93.94	88.24	77.97	86.67	58.93	75
	III	100	100	90.91	66.67	90	100	85.19	96.67	64.29	63.64	56.25	67.69
group 4	I	100	100	100	100	84.62	100	93.55	88.89	54.55	79.17	63.29	66.34
	II	100	100	100	100	86.67	100	90	94.25	80.95	80.95	68.75	73.12
	III	100	100	100	100	97.67	91.43	87.64	95.92	72.73	86.67	74.65	89.86
group 5	I	100	100	100	100	60	60	90.32	85.29	100	Ø	33.33	100
	II	100	100	100	100	57.14	100	81.82	86.96	Ø	100	75	61.11
	III	100	100	66.67	100	50	-	50	68.42	100	Ø	Ø	66.67
group 6	I	100	100	100	100	50	100	93.75	100	63.64	53.85	60.98	89.19
	II	100	100	100	100	90.91	100	97.3	93.33	100	50	52.78	72.41
	III	100	100	100	100	100	100	100	90.91	86.67	100	68.42	95.65
mean		99.12	98.57	93.01	96.76	72.27	80.93	84.89	87.27	78.22	71.04	51.68	71.67
Ø: no questions produced in this category													

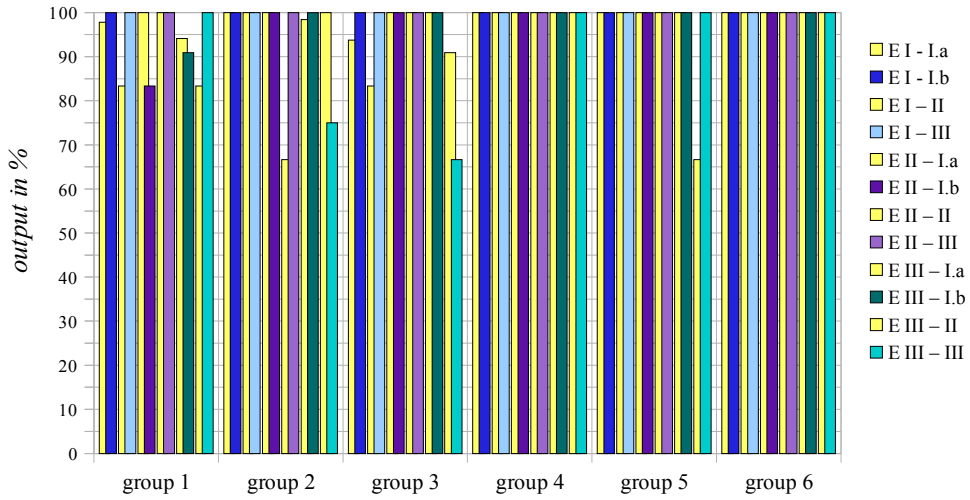
Cop inversion

The following *Diagram 4.19 below* generated from *Table 4.47 above* shows which of the produced interrogatives with *cop inversion* were judged as tasklike by the EA.

A comparison of the questions that were produced in both unstructured and structured tasks shows that the highest number of structurally and

morphologically correct interrogatives with *cop inversion* were produced with unstructured *yes/no* questions (task I.a), followed by unstructured *wh*-questions (task I.b), written structured questions (task III) and oral structured questions (task II). The distribution is similar to the one shown in *Table 4.44 above* which shows the number of structurally correct interrogatives.

Diagram 4.19: EA – structured and unstructured questions with cop inversion

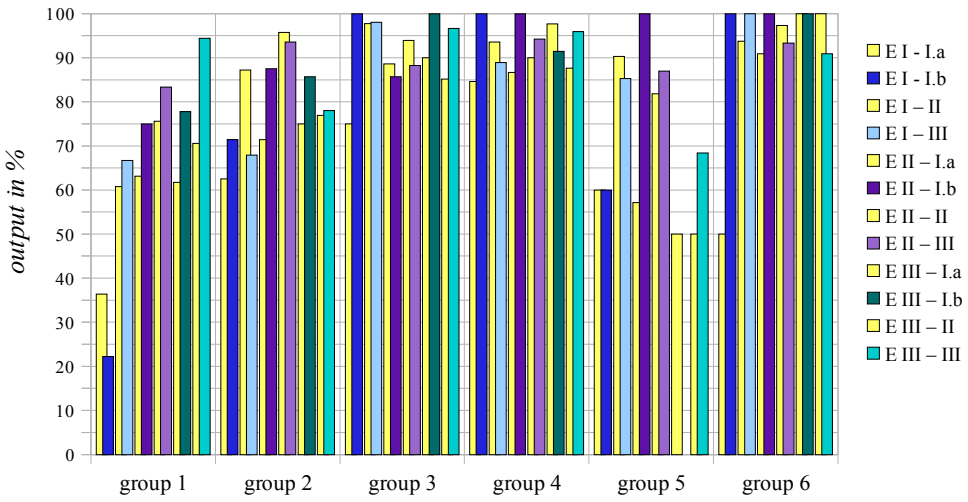


Aux inversion

The following *Diagram 4.20 below* generated from *Table 4.47 above* shows which of the produced interrogatives with *aux inversion* were judged as tasklike by the EA.

With *aux inversion*, the most structurally and morphologically correct interrogatives were produced in written structured questions (task III), followed by oral structured questions (task II). The fewest structurally correct interrogatives with *aux inversion* were produced in task I.a.

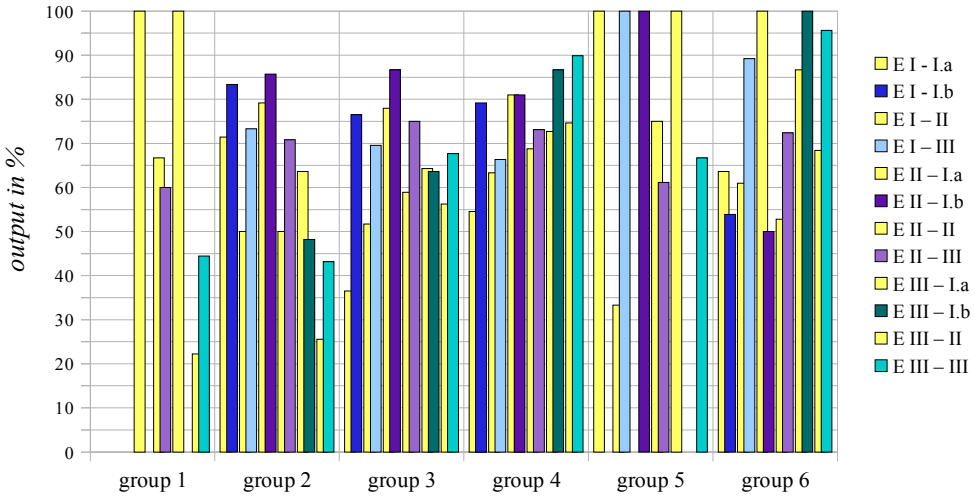
Diagram 4.20: EA – structured and unstructured questions with aux inversion



Do-support

The following *Diagram 4.21 below* generated from *Table 4.47 above* shows which of the produced interrogatives with *do-support* were judged as tasklike by the EA.

Diagram 4.21: EA – structured and unstructured questions with do-support



When looking at the interrogatives that were produced with *do-support*, it is evident that the fewest structurally and morphologically correct questions were produced in this category. When producing interrogatives with *do-support*, the test persons performed best in task I.a. The most structurally and morphologically

correct interrogatives were produced in this category. The most errors concerning both structural and morphological properties occurred when *do-support* was produced in oral structured questions (task III).

Summarising the findings: *Table 4.47 above* shows that the test persons performed best when interrogatives with *cop inversion* were produced, followed by unstructured and structured *wh*-questions with *aux inversion*, unstructured questions with *do-support* in *yes/no* questions with *do-support*, *aux inversion* in unstructured *yes/no* questions and unstructured and structured *wh*-questions with *do-support*.

4.2.2.2 EA$^+$

Table 4.48 below shows the number of the interrogatives that were considered as tasklike by the EA and are also (cf. *Table 4.47 above*) judged as appropriate if the trigger is included in the analysis.

From *Table 4.48* the diagrams below are generated for *cop inversion, aux inversion*, and *do-support*, showing differences in judgement if the EA and the EA$^+$ are compared.

Table 4.48: EA vs. EA$^+$

	E	cop inversion				aux inversion				do-support			
		EA$^+$		EA		EA$^+$		EA		EA$^+$		EA	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
group 1	I	50	66.67	83.33	100	50.98	48.33	60.78	66.67	-	Ø	-	Ø
	II	100	100	100	100	62.22	72.22	75.56	83.33	66.67	60	66.67	60
	III	83.33	100	83.33	100	70.59	77.78	70.59	94.44	22.22	44.44	22.22	44.44
group 2	I	100	78.57	100	100	80.85	52.83	87.23	67.92	35	73.33	50	73.33
	II	66.67	100	66.67	100	89.36	87.1	95.74	93.55	35	66.67	50	70.83
	III	100	75	100	75	58.97	60.98	76.92	78.05	18.6	40.91	25.58	43.18
group 3	I	50	100	83.33	100	90.91	80.39	97.73	98.04	39.66	50.72	51.72	69.57
	II	100	100	100	100	84.85	84.31	93.94	88.24	41.07	58.33	58.93	75
	III	90.91	66.67	90.91	66.67	64.81	80	85.19	96.67	50	55.38	56.25	69.69
group 4	I	77.78	88.89	100	100	74.19	65.43	93.55	88.89	46.84	54.46	63.29	66.34
	II	100	90.91	100	100	74	70.11	90	94.25	53.75	62.37	68.75	73.12
	III	88.89	100	100	100	59.55	71.43	87.64	95.92	70.42	85.51	74.65	89.86

continued overleaf

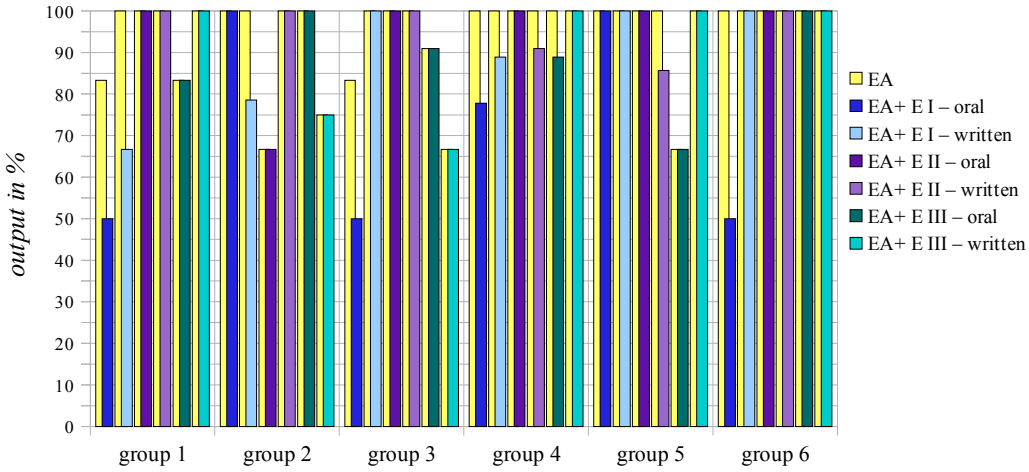
	E	cop inversion				aux inversion				do-support			
		EA+		EA		EA+		EA		EA+		EA	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
group 5	I	100	100	100	100	61.29	52.94	90.32	85.29	33.33	100	33.33	100
	II	100	85.71	100	100	57.58	73.91	81.82	86.96	50	55.56	75	61.11
	III	66.67	100	66.67	100	50	63.16	50	68.42	Ø	50	Ø	66.67
group 6	I	50	100	100	100	81.25	80	93.75	100	43.9	75.68	60.98	89.19
	II	100	100	100	100	83.78	73.33	97.3	93.33	44.44	72.41	52.78	72.41
	III	100	100	100	100	75	68.18	100	90.91	68.42	82.61	68.42	95.65
mean		84.68	91.8	93.01	96.76	70.57	70.14	84.89	87.27	42.31	60.47	51.68	71.67
Ø: no questions produced in this category													

Cop inversion

The following *Diagram 4.22 below* generated from *Table 4.48 above* shows which of the produced interrogatives with *cop inversion* were judged as tasklike by the EA and how many of these were judged as appropriate if the trigger is included in the analysis.

Again, the task types had the least effect on interrogatives that were produced with *cop inversion*. Most groups performed equally well in both word order and appropriateness judgement with *cop inversion* in both structured tasks.

Diagram 4.22: EA vs. EA+ – structured questions with cop inversion

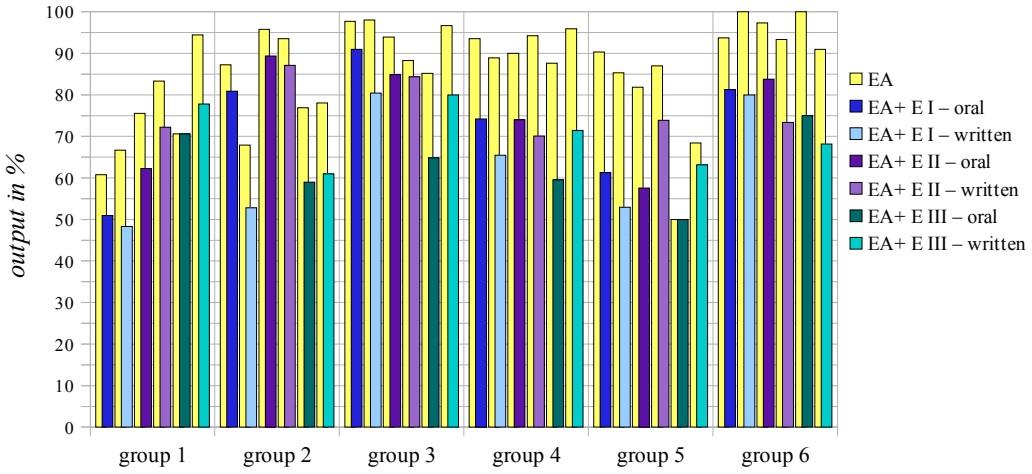


This shows that not only have all groups mastered *cop inversion* in almost all contexts, but also that when *cop inversion* is supposed to be elicited, it is correctly elicited.

Aux inversion

The following *Diagram 4.23 below* generated from *Table 4.48 above* shows which of the produced interrogatives with *aux inversion* were judged as tasklike by the EA and how many of these were judged as appropriate if the trigger is included in the analysis.

Diagram 4.23: EA vs. EA$^+$ – structured questions with aux inversion



The difference between the two judgement types, i.e. EA vs. EA$^+$, is more pronounced for interrogatives with *aux inversion*. With the exceptions of groups 1 and 5 in task II in elicitation III, no other group was able to perform equally well in both judgement types.

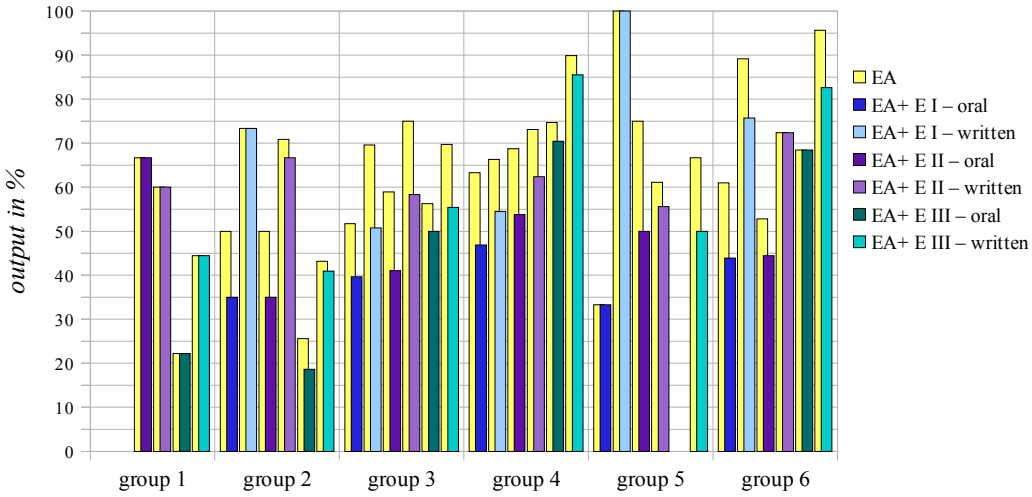
In written questions, none of the groups managed to produce as many appropriate as tasklike interrogatives.

These results show that even when the produced interrogatives are tasklike, they are not necessarily a correct response to a given sentence. This shows that although the rules for the formation of interrogatives with *aux inversion* have partly been acquired (cf. *4.3.2 below*), the participants can not necessarily apply these rules when demanded by context.

Do-support

The following *Diagram 4.24 below* generated from *Table 4.48 above* shows which of the produced interrogatives with *do-support* were judged as tasklike by the EA and how many of these were judged as appropriate if the trigger is included in the analysis.

Diagram 4.24: EA vs. EA$^+$ – structured questions with do-support



When *do-support* was produced, the difference between the two judgement types, i.e. EA vs. EA$^+$, is most pronounced. With the exception of group 1 in task II in elicitation III, in none of the other tasks was a group able to perform equally well in both judgement types.

In oral questions, group 1 produced as many appropriate as tasklike questions with *do-support* in two out of three elicitations and groups 5 and 6 in one out of three elicitation; however, groups 1 and 5 produced very few interrogatives with *do-support* in these instances, whereas the proportion of interrogatives produced with *do-support* is much higher for group 6.

The results for written questions are similar: group 1 produced as many appropriate as tasklike questions with *do-support* in two elicitations and groups 2, 5 and 6 in one elicitation each; however, groups 1, 2 and 5 did not produce interrogatives with *do-support* very frequently in these tasks, whereas the

proportion of written interrogatives produced with *do-support* is much higher for group 6.

A comparison of the mean rates of *aux inversion* and *do-support* shows that when *do-support* is produced, the probability that it is produced in an appropriate context is higher than it is for the production of *aux inversion*, even though more interrogatives with *aux inversion* are tasklike (cf. *4.3.2 below*). This can be explained with the differing markedness values of interrogatives. If the most marked structure, i.e. *do-support*, is produced, and is produced tasklike, the context has been included more thoroughly during the production of this structure, therefore more tasklike and also appropriate structures are produced. This does not mean that usage of *do-support* has been learned more fully than usage of *aux inversion*; it just means that if a more marked structure is used, more attention is paid to form than during the production of a less marked form.

The comparison in *Table 4.48 above* shows that, although all groups have generally mastered the sentence structures of English interrogatives (cf. *Table 4.46 above*), morphological properties and appropriateness are still problematic, especially in interrogatives with *aux inversion* and *do-support*.

4.2.3 EA in More Detail

The following analysis is based on the 283 subtypes (cf. *3.2.4.1 above*) which represent all structures produced during the elicitations. Of these, 203 subtypes were labelled with superscript numbers, indicating rules differing from the TL rules (cf. *4.1.2.2 above*), e.g. *wh V S-sg (X)*[1 2] *– What say he?* (Paul-EI-TI.b-19), where both word order and concord problems are evident. Although the majority of the subtypes are labelled with superscripted numbers, these subtypes only represent 33.98 % of the corpus.

In the following sections, I look at four areas in which some of the interrogatives I elicited differ from the TL rules. I chose to look at differences in

syntax, verbal morphology, concord, and unanalysed negator because most problems occurred in these areas.

The tables in *4.2.3.1* and *4.2.3.2 below* give an overview of how frequently problems arose in each of the four areas with questions in the different tasks. More detailed information on how often each of the superscripted subtypes occurs in each task is provided in appendix *9.2.4 below.*

4.2.3.1 Unstructured Questions

Table 4.49 below summarises how often each group produced unstructured *yes/no* or *wh*-questions that differ in the following areas: concord, syntax, unanalysed negator, and verbal morphology. Both 'syntax' and 'verbal morphology' include a number of different idiosyncrasies (for further detail see appendix *9.2.3* or *9.2.4 below*).

The number of questions produced in each of the four areas varies immensely within both groups and question types throughout the elicitations.

Problems with concord occurred less frequently for groups 1, 2, 5 and 6 in *wh*-questions than they did in *yes/no* questions in all three elicitations, and for groups 2 and 4 in two out of three elicitations.

With syntax, fewer idiosyncratic sentences were produced with *yes/no* questions than with *wh*-questions by all groups except group 4, who produced fewer idiosyncratic *yes/no* questions only in two out of three elicitations.

Generally, unanalysed negators were not produced very frequently in either unstructured or structured tasks. All interrogatives with unanalysed negators have two verbal elements, one that is part of the negator and the other one that is used to form the interrogative, e.g. *Why are the turkeys don't sit in the box?*[3] [4] (Mary-EIII-TI.b-5). Interrogatives with unanalysed negator and no additional idiosyncrasies were only produced in *yes/no* questions, whereas interrogatives with unanalysed negator plus additional idiosyncrasies were produced in both contexts.

Table 4.49: unstructured questions – EA

idiosyncrasy	E	group 1		group 2		group 3		group 4		group 5		group 6	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
concord	I	6.67	-	9	-	3.74	5.13	13.39	3.23	7.14	-	6.33	1.72
	II	11.69	6.25	7.83	-	3.73	1.43	3.7	3.96	14.71	-	5.45	-
	III	5.41	2.33	5.59	1.54	5.36	1.33	2.94	1.82	7.55	-	1.32	-
syntax	I	2.86	11.25	6	27.5	1.87	17.95	0.79	9.68	2.38	30	-	24.14
	II	3.9	6.25	8.7	22	4.48	25.71	3.17	1.98	1.47	7.14	3.64	20.59
	III	6.08	9.3	5.03	24.62	1.79	14.67	2.94	10.91	1.89	33.33	1.32	-
unanalysed negator	I	-	-	-	-	-	-	-	-	-	-	1.27	-
	II	-	-	-	-	1.49	-	-	-	-	-	-	-
	III	-	-	0.56	-	-	-	0.49	-	-	-	-	-
additional verbal morphology	I	-	-	1	2.5	26.17	2.56	0.79	2.15	-	-	3.8	8.62
	II	-	-	4.35	4	2.99	2.86	2.65	2.97	-	-	-	11.76
	III	-	-	2.79	20	8.04	2.67	0.98	1.82	-	-	-	-
incomplete verbal morphology	I	6.67	7.5	4	-	0.93	-	1.57	-	2.38	5	2.53	-
	II	10.39	-	3.48	2	1.49	-	2.12	-	2.94	-	1.82	-
	III	7.43	6.98	1.68	-	0.89	-	-	0.91	5.66	-	-	-
incongruent aux & V	I	-	-	-	2.5	0.93	-	-	-	1.19	-	1.27	-
	II	-	-	0.87	-	-	-	0.53	-	-	-	-	-
	III	-	2.33	0.56	1.54	-	-	-	-	-	-	-	-
V-t not do	I	-	-	-	-	0.93	2.56	0.79	-	-	-	1.27	-
	II	-	-	-	-	-	-	0.53	0.99	-	-	-	-
	III	-	-	0.56	-	-	1.33	-	-	-	-	2.63	-
concord + syntax	I	22.86	33.75	1	10	0.93	5.13	0.79	2.15	3.57	22.5	-	17.24
	II	10.39	37.5	6.09	8	-	7.14	1.06	0.99	2.94	-	3.64	5.88
	III	3.78	18.6	5.59	4.62	-	1.33	0.98	2.73	11.32	26.67	-	-
concord + inc V morph	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	1.47	-	-	-
	III	0.68	-	0.56	-	-	-	-	-	1.89	-	-	-
syntax + unanalysed neg	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	0.68	-	-	-	-	-	-	-	-	-	-	-
syntax + additional V morph	I	-	-	-	-	0.93	-	-	-	-	-	-	-
	II	-	-	-	-	0.75	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
syntax + incomplete V morph	I	0.95	-	-	-	-	-	-	-	-	-	1.27	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	0.68	-	-	-	-	-	-	-	-	-	-	-
syntax + incongruent aux & V	I	-	-	-	-	-	-	-	-	-	2.5	1.27	1.72
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	0.91	-	-	-	-
unanalysed neg + addit V morph	I	-	-	-	-	0.93	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
unanalysed neg + incomplete V morph	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	6.67	-	-

When looking at the distribution of differences in verbal morphology no clear-cut production pattern is evident, although in the majority of cases fewer problems with verbal morphology occurred with *yes/no* questions. For groups 1 and 5 this is true for all elicitations and for groups 2 and 6 for two out of three elicitations. For groups 3 and 4 this pattern is reversed. Group 3 produced fewer questions with idiosyncratic verbal morphology in *wh*-questions than in *yes/no* questions in all three elicitations, and group 4 did so in two out of three elicitations.

Double idiosyncrasies were produced with combinations of all four major areas; however, they were most frequent with concord + syntax. The trend to produce questions with idiosyncrasies in both concord + syntax was higher again with *wh*-questions than with *yes/no* questions for all groups; for groups 2 and 4 this is only the case in two out of three elicitations.

Combinations of idiosyncrasies with the other areas were far less frequent, and if they occurred, they generally occurred in *yes/no* questions.

Table 4.50: sum problem areas – unstructured questions

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh	y/n	wh
sum	I	40.01	52.5	21	42.5	37.36	33.33	18.12	17.21	16.66	60	19.01	53.44
	II	36.37	50	31.32	36	14.93	37.14	13.76	10.89	23.53	7.14	14.55	38.23
	III	24.34	39.54	22.92	53.32	16.08	21.33	8.33	19.1	28.31	66.67	5.27	-

Table 4.50 above shows how much of the total output of each group differs from the TL in the four areas mentioned above. Groups 1 and 2 produced more questions that differ from the TL with *wh*-questions during all three elicitations. Groups 3, 4, 5 and 6 produced more questions that differ from the TL with *wh*-questions in two out of three elicitations. Only group 4 produced more *yes/no* questions that differ from the TL in two out of three elicitations.

4.2.3.2 Structured Questions

Table 4.51 below summarises how often each of the groups produced oral or written structured questions that differ in one of the areas mentioned in *4.2.3 above*.

Again, the number of questions produced in each of the four areas varies immensely within both groups and task types throughout all elicitations.

Except for group 6, all other groups generally produced fewer oral than written structured interrogatives with idiosyncratic concord rules. Groups 1, 4 and 5 did this in all elicitations; whereas groups 2 and 3 did so in two out of three elicitations. For group 6, problems with concord arose only in two of the three

elicitations: in elicitation I only in oral structured questions and in elicitation II in both oral and written questions.

Table 4.51: structured questions – EA

idiosyncrasy	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
concord	I	-	-	2.08	-	4.86	1.39	3.7	5.56	-	-	1.67	-
	II	-	2.78	0.69	0.69	2.08	4.86	1.85	2.31	-	4.17	1.04	1.04
	III	-	1.45	-	4.35	-	4.35	0.53	2.17	-	2.17	-	-
syntax	I	34.38	28.13	45.14	41.67	27.08	9.03	16.67	8.33	47.22	43.06	30	31.93
	II	27.78	31.94	46.53	57.64	15.97	17.36	16.67	10.65	37.5	34.72	18.75	30.21
	III	30	27.54	35.92	30.43	13.38	7.97	9.57	7.07	70.83	41.3	-	2.17
unanalysed negator	I	-	-	-	-	-	-	0.46	-	-	-	-	-
	II	2.78	-	0.69	-	1.39	-	1.39	0.46	-	-	1.04	-
	III	-	-	-	-	-	0.72	-	-	-	-	-	-
additional verbal morphology	I	1.04	-	2.08	2.08	6.94	9.72	4.63	6.94	1.39	-	5.83	1.68
	II	1.39	-	4.17	1.39	9.03	1.39	6.94	3.7	2.78	4.17	12.5	6.25
	III	10	5.8	17.61	10.14	14.08	6.52	6.38	0.54	-	-	12.77	2.17
incomplete verbal morphology	I	8.33	9.38	2.08	2.08	-	0.69	0.46	1.39	1.39	-	0.83	-
	II	1.39	8.33	0.69	-	-	2.78	2.31	1.39	1.39	1.39	-	2.08
	III	-	-	2.11	2.17	-	-	3.19	1.09	-	-	-	2.17
incongruent aux & V	I	10.42	8.33	1.39	6.94	1.39	2.78	0.93	2.78	-	2.78	-	1.68
	II	8.33	-	-	0.69	2.08	0.69	0.46	-	4.17	-	1.04	-
	III	11.43	1.45	4.93	3.62	4.93	2.9	0.53	-	2.08	6.52	-	-
V-t not do	I	-	-	0.69	-	2.08	-	1.39	0.93	-	-	-	-
	II	-	-	-	0.69	-	-	-	0.93	-	-	-	-
	III	-	-	0.7	0.72	-	-	-	0.54	-	-	-	-
concord + syntax	I	7.29	1.04	7.64	4.17	2.78	-	2.31	0.93	4.17	-	5.83	0.84
	II	5.56	1.39	5.56	0.69	0.69	0.69	1.39	0.46	5.56	1.39	2.08	2.08
	III	2.86	7.25	1.41	7.25	1.41	0.72	0.53	-	4.17	8.7	-	-
concord + unanal. neg	I	-	-	0.69	-	-	-	1.39	-	-	-	0.83	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
concord + additional V morph	I	-	-	-	-	-	-	-	-	-	-	1.67	-
	II	-	-	-	-	-	-	-	0.46	-	-	1.04	1.04
	III	-	-	-	-	-	-	-	-	-	-	-	-
concord + incongr aux & V	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	1.43	-	-	-	0.7	-	-	-	-	-	-	-
concord + V-t not do	I	-	-	0.69	-	0.69	-	0.46	-	-	-	1.67	-
	II	-	-	-	-	-	-	-	-	-	1.39	-	-
	III	-	-	-	2.17	-	0.72	-	0.54	-	-	-	-
syntax + unanal. neg	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	0.69	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
syntax + additional V morph	I	-	-	-	-	-	-	-	-	-	-	-	0.84
	II	-	-	-	0.69	-	-	-	-	-	-	-	-
	III	-	-	-	-	0.7	0.72	-	-	-	-	-	-
syntax + incompl V morph	I	-	-	-	-	-	-	-	-	-	-	0.83	-
	II	-	-	0.69	-	-	-	0.46	-	-	-	1.04	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
syntax + incongr aux & V	I	1.04	2.08	0.69	0.69	-	-	-	0.46	1.39	1.39	-	0.84
	II	-	-	1.39	-	-	-	-	-	-	-	1.04	-
	III	-	-	0.7	-	-	-	-	0.54	4.17	-	-	-
unanal. neg + incompl V morph	I	-	-	-	-	-	-	-	-	1.39	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Generally, syntactic idiosyncrasies occurred less frequently in written than in oral structured questions, although the difference is not very pronounced. Group 6 produced fewer syntactically idiosyncratic questions in all oral tasks;

group 1 produced fewer syntactically idiosyncratic questions only in one elicitation in written questions. Groups 2 and 3 produced fewer syntactically idiosyncratic questions in two elicitations in written questions, and groups 4 and 5 produced fewer syntactically idiosyncratic interrogatives in all elicitations in written questions.

Again, interrogative with unanalysed negators were produced very infrequently; though they occurred slightly more often in the structured tasks. If unanalysed negators were produced they were only produced in oral questions even though trigger sentences with negation occurred for both oral and written questions.

When looking at the distributional differences in verbal morphology a clear production pattern is evident. Generally, fewer problems with verbal morphology occurred in written questions. Groups 1 and 6 produced fewer verbally idiosyncratic questions in all elicitations in the written tasks; groups 2, 3 and 4 produced fewer verbally idiosyncratic written questions in elicitations II and III. Only group 5 differs from this pattern, they produced fewer written idiosyncratic questions in one elicitation only.

Deviations where two of the four major areas were affected occurred with all four areas, although they were most frequent with concord + syntax. The trend to produce questions with idiosyncrasies in both concord + syntax was lower in written than in oral questions for all groups in elicitations I and II, but higher in elicitation III for groups 1, 2 and 5. Groups 4 and 6 did not produce written questions with idiosyncratic concord + syntax rules in elicitation III, and for group 3 the production rate does not differ.

Other combinations occurred more frequently than they did with unstructured questions. This is directly attributable to the design of the task. With unstructured questions the test persons were able to choose the structure they wanted to produce whereas this choice was limited with structured questions.

Table 4.52 below shows that in the structured tasks all groups produced more idiosyncratic questions in the oral structured tasks. With the exception of groups 2 and 6, the other groups all produced more idiosyncratic questions in all three oral tasks, whereas groups 2 and 6 did so in elicitations I and III.

Especially in written structured questions, the number of idiosyncratic questions produced is relatively stable for groups 1, 2 and 3. For groups 4 and 6 the number of idiosyncratic written questions declines noticeably whereas for group 5 the number of idiosyncratic questions produced increases after being stable in elicitations I and II.

Table 4.52: sum problem areas – structured questions

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.	or.	wr.
sum	I	62.5	48.96	63.17	57.63	45.82	23.61	32.4	27.32	56.95	47.23	49.16	37.81
	II	47.23	44.44	60.41	62.48	31.93	27.77	31.47	20.36	51.4	47.23	39.57	42.7
	III	55.72	43.49	63.38	60.85	35.2	24.62	20.73	12.49	81.25	58.69	12.77	6.51

In oral structured questions the performance of each group is different. Group 2 is the only group that was stable in the number of idiosyncratic questions produced throughout the study. In contrast to this, group 5 produced more idiosyncratic oral questions. The remaining groups all produced fewer idiosyncratic oral questions in elicitation III than in elicitation I. Even though usage of idiosyncratic questions decreased steadily, only groups 4 and 6 produced fewer idiosyncratic questions in all three elicitations; whereas groups 1 and 3 both produced fewest idiosyncratic questions in elicitation II.

4.2.4 Produced Structures in Relation to Expected Category

In the following discussion, I focus on the interrogatives that were produced in the structured tasks, discussing whether the changes that were made to the expected interrogatives were erroneous only in that they avoid the expected structure, i.e. changes in tense/aspect, or whether these incorrectly triggered structures are also erroneous in syntax, verbal morphology, concord or unanalysed negator or in a combination of these (cf. *4.2.3 above*). In general, when *cop inversion, aux inversion* or *do-support* were supposed to be elicited, such questions with idiosyncrasies in the above mentioned areas were produced.

Table 4.53: correctly elicited in expected category – EA$^+$

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
cop inversion	I	37.5	50	16.67	61.11	25	66.67	38.89	59.26	33.33	77.78	30	73.33
	II	66.67	77.78	33.33	44.44	50	77.78	33.33	74.07	66.67	66.67	75	50
	III	83.33	33.33	91.67	50	83.33	33.33	100	62.5	50	100	100	50
aux inversion	I	65	80.56	63.33	51.85	66.67	75.93	76.67	65.43	63.33	66.67	52	54.55
	II	84.85	96.3	63.64	50	84.85	79.63	74.75	75.31	57.58	62.96	70.45	61.11
	III	85.71	93.33	39.66	41.67	60.34	80	69.74	87.5	35	60	94.74	75
do-support	I	-	Ø	9.72	15.28	31.94	48.61	34.26	50.93	2.78	5.56	30	46.67
	II	5.56	8.33	9.72	22.22	31.94	48.61	39.81	53.7	11.11	27.78	33.33	43.75
	III	5.56	11.11	11.11	25	44.44	50	52.08	61.46	Ø	12.5	54.17	79.17

Table 4.53 above gives an overview of how many of the interrogatives produced in the structured tasks with *cop inversion*, *aux inversion*, and *do-support* are tasklike and successfully elicited. The tables below show in more detail which errors occurred when questions with *cop inversion*, *aux inversion*, or *do-support* were not successfully elicited.

4.2.4.1 Expected Response – Cop Inversion

Table 4.54 below gives an overview of the structures that were produced when *cop inversion* was supposed to be elicited.

Table 4.54: produced when cop inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
cop inversion	I	50	50	16.67	61.11	33.33	66.67	44.44	59.26	33.33	77.78	30	73.33
	II	66.67	77.78	50	44.44	50	77.78	33.33	74.07	66.67	66.67	75	50
	III	100	33.33	91.67	66.67	91.67	50	100	62.5	75	100	100	50
no inversion	I	12.5	-	75	22.22	58.33	5.56	16.67	3.7	66.67	11.11	40	20
	II	-	-	16.67	38.89	33.33	5.56	-	-	33.33	-	25	25
	III	-	-	8.33	16.67	8.33	-	-	-	25	-	-	-
verb inversion	I	25	-	-	-	-	-	-	3.7	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
aux inversion	I	12.5	50	-	16.67	-	27.78	16.67	18.52	-	11.11	10	-
	II	33.33	22.22	16.67	11.11	16.67	5.56	44.44	7.41	-	22.22	-	25
	III	-	66.67	-	-	-	50	-	37.5	-	-	-	50
do-support	I	-	-	8.33	-	8.33	-	22.22	14.81	-	-	20	6.67
	II	-	-	16.67	5.56	-	11.11	22.22	18.52	-	11.11	-	-
	III	-	-	-	16.67	-	-	-	-	-	-	-	-

None of the groups produced only questions with *cop inversion* when these were supposed to be elicited during elicitations I and II, whereas in elicitation III, groups 1, 4 and 6 produced *cop inversion* whenever it was supposed

to be elicited in oral questions, and group 5 produced *cop inversion* in written questions whenever it was supposed to be elicited.

The number of successfully elicited *cop inversion* questions varies considerably among the groups. In elicitation I the number of successfully triggered questions with *cop inversion* is equal or higher in written questions for all groups; in elicitation II, four of the six groups produced more questions with *cop inversion* in written questions. With the exception of group 5 in elicitation III, all the other groups produced more questions with *cop inversion* in oral questions than in written questions.

When *cop inversion* was supposed to be elicited, questions with *no inversion, verb inversion, aux inversion*, and *do-support* were also produced by all groups but group 1, which did not produce questions with *do-support* when *cop inversion* was supposed to be elicited. Groups 1 and 4 are the only groups that produced question forms that are structurally possible questions in English, except in elicitation I, when *cop inversion* should have been produced. The other groups produced in more than one elicitation proportionally more structurally incorrect questions.

Table 4.55 below gives an overview of where the correctly elicited *cop inversion* questions differ from the target language in one of the following areas: syntax, verbal morphology, concord, unanalysed negator, and tense/aspect.

Table 4.55: produced when cop inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
cop inversion	I	50	50	16.67	61.11	33.33	66.67	44.44	59.26	33.33	77.78	30	73.33
	II	66.67	77.78	50	44.44	50	77.78	33.33	74.07	66.67	66.67	75	50
	III	100	33.33	91.67	66.67	91.67	50	100	62.5	75	100	100	50
*tense	I	-	-	-	-	-	-	5.56	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
concord	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	16.67	-	-	-	-	-	-	-	-
*syntax	I	12.5	-	-	-	8.33	-	-	-	-	-	-	-
	II	-	-	16.67	-	-	-	-	-	-	-	-	-
	III	16.67	-	-	-	8.33	-	-	-	25	-	-	-
*tense + neg	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	16.67	-	-	-	-	-	-

Errors in tense are not related to the TL, but to the trigger sentences. Aspectual errors did not occur with correctly elicited questions with *cop inversion*, because if such errors were made the resulting questions would not be questions with *cop inversion*. Errors occurring with the correctly elicited *cop inversion* questions are rare. With the exception of concord, all the other differences that were marked when *cop inversion* was correctly elicited were judged as non-tasklike.

Generally, few errors occurred when questions with *cop inversion* were produced; most errors that occurred when *cop inversion* was employed to form questions were syntactical.

Table 4.56 below gives an overview of the errors that occurred when *no inversion* was produced instead of the expected *cop inversion*.

Table 4.56: produced when cop inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
no inversion	I	12.5	-	75	22.22	58.33	5.56	16.67	3.7	66.67	11.11	40	20
	II	-	-	16.67	38.89	33.33	5.56	-	-	33.33	-	25	25
	III	-	-	8.33	16.67	8.33	-	-	-	25	-	-	-
*syntax	I	12.5	-	75	5.56	58.33	-	16.67	3.7	66.67	-	30	6.67
	II	-	-	16.67	22.22	16.67	5.56	-	-	33.33	-	25	16.67
	III	-	-	8.33	16.67	8.33	-	-	-	25	-	-	-
*tense/aspect + syntax	I	-	-	-	16.67	-	5.56	-	-	-	11.11	10	13.33
	II	-	-	-	16.67	-	-	-	-	-	-	-	8.33
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + syntax + neg	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	16.67	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Generally, all questions that were formed with *no inversion* are syntactically incorrect when *cop inversion* was supposed be elicited. In addition to the incorrect syntax that is inherent in all of these questions, changes to the tense/aspect system of the underlying trigger sentence were made or an unanalysed negator was included in the sentence structure. Groups 3 and 4 are the only groups that produced questions that are marked as deviant in syntax only. All other groups produced structures that are deviant in more than one of the above mentioned areas.

Table 4.57 below gives an overview of the errors that occurred when *verb inversion* was produced instead the expected *cop inversion*.

Table 4.57: produced when cop inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
verb inversion	I	25	-	-	-	-	-	-	3.7	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + concord	I	-	-	-	-	-	-	-	3.7	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + syntax	I	25	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Verb inversion instead of *cop inversion* was produced only by two groups. Group 1 used *verb inversion* instead of *cop inversion* in oral questions and group 4 in written questions. Comparing the usage of *verb inversion* to the usage of *no inversion* instead of the expected *cop inversion*, *verb inversion* is used far less frequently.

Table 4.58 below gives an overview of the errors that occurred when *aux inversion* was produced instead of the expected output *cop inversion*.

All groups produced questions with *aux inversion*, and the majority of these questions would have been structurally correct if the trigger were not included in the judgement, i.e. those that are marked for tense/aspect and to some extent tense/aspect + concord and tense/aspect + negator.

Table 4.58: produced when cop inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
aux inversion	I	12.5	50	-	16.67	-	27.78	16.67	18.52	-	11.11	10	-
	II	33.33	22.22	16.67	11.11	16.67	5.56	44.44	7.41	-	22.22	-	25
	III	-	66.67	-	-	-	50	-	37.5	-	-	-	50
*tense/aspect	I	12.5	50	-	16.67	-	27.78	11.11	14.81	-	11.11	10	-
	II	-	11.11	16.67	11.11	16.67	5.56	44.44	3.7	-	11.11	-	25
	III	-	33.33	-	-	-	33.33	-	37.5	-	-	-	50
*tense/aspect + concord	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	16.67	-	-	-	-	-	-
*tense/aspect + syntax	I	-	-	-	-	-	-	-	3.7	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	33.33	-	-	-	-	-	-	-	-	-	-
*tense/aspect + neg	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	33.33	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + inc verbal morph	I	-	-	-	-	-	-	5.56	-	-	-	-	-
	II	-	11.11	-	-	-	-	-	-	-	11.11	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + addit V morph	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	3.7	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Some of the questions that belong to the category *aux inversion* are incorrect, even though they are formed with AUX-SUBJECT INVERSION, because the verbal morphology on the main verb is omitted. Although other problems with the verbal morphology occur, these are less frequent than the omission of the bound morpheme of the main verb.

Table 4.59 below gives an overview of the errors that occurred when *do-support* was produced instead of the expected output *cop inversion*.

Table 4.59: produced when cop inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
do-support	I	-	-	8.33	-	8.33	-	22.22	14.81	-	-	20	6.67
	II	-	-	16.67	5.56	-	11.11	22.22	18.52	-	11.11	-	-
	III	-	-	-	16.67	-	-	-	-	-	-	-	-
*tense/aspect	I	-	-	8.33	-	8.33	-	16.67	7.41	-	-	10	6.67
	II	-	-	-	-	-	-	11.11	7.41	-	-	-	-
	III	-	-	-	16.67	-	-	-	-	-	-	-	-
*tense/aspect + concord	I	-	-	-	-	-	-	-	7.41	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + syntax	I	-	-	-	-	-	-	-	-	-	-	10	-
	II	-	-	-	-	-	11.11	-	7.41	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + neg	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	16.67	-	-	-	11.11	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + V-t not do	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	5.56	-	-	-	3.7	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + concord + V-t not do	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	11.11	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + syntax + neg	I	-	-	-	-	-	-	5.56	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Questions that are formed with *do-support* are potentially structurally correct questions, at least if the trigger is excluded from the analysis. The majority of the errors that occurred in *do-support* questions, if changes to the tense/aspect values of the trigger sentences are ignored, are attributable to concord, wrongly encoded tense or incomplete verbal morphology, and unanalysed negators. Syntactic problems are present; however, they are not the main problem area with the questions that were formed with *do-support* instead of *cop inversion*.

4.2.4.2 Expected Response – Aux Inversion

Table 4.60 below gives an overview of the structures that were produced when *aux inversion* was supposed to be elicited.

Table 4.60: produced when aux inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
cop inversion	I	2.5	5.56	-	3.7	1.67	-	-	2.47	-	-	6	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	2.63	-	-	-	-	-
no inversion	I	-	-	18.33	27.78	11.67	7.41	3.33	1.23	20	22.22	10	29.55
	II	3.03	-	24.24	44.44	3.03	9.26	1.01	-	27.27	22.22	13.64	36.11
	III	-	-	15.52	21.67	12.07	8.33	1.32	-	30	15	-	-
verb inversion	I	25	8.33	6.67	3.7	3.33	-	7.78	1.23	13.33	3.7	20	2.27
	II	3.03	-	6.06	-	-	-	5.05	3.7	3.03	-	2.27	-
	III	10.71	6.67	8.62	6.67	1.72	3.33	2.63	6.25	-	-	-	-
aux inversion	I	72.5	86.11	70	62.96	68.33	75.93	80	70.37	66.67	74.07	56	54.55
	II	93.94	100	66.67	53.7	86.36	81.48	79.8	79.01	66.67	70.37	72.73	63.89
	III	89.29	93.33	51.72	58.33	68.97	80	82.89	91.25	70	80	100	85
do-support	I	-	-	5	1.85	15	16.67	8.89	24.69	-	-	8	13.64
	II	-	-	3.03	1.85	10.61	9.26	14.14	17.28	3.03	7.41	11.36	-
	III	-	-	24.14	13.33	17.24	8.33	10.53	2.5	-	5	-	15

All groups, except groups 1 and 5, produced questions in all categories in at least one task when *aux inversion* should have been elicited. Group 1 did not produce questions with *do-support* and group 5 did not produce *cop inversion* when *aux inversion* was the expected category (cf. *Table 4.54 above*).

Overall, more changes were made to the expected output *aux inversion* in oral questions. Groups 1 and 5 made more changes to oral than written questions in all three elicitations; groups 3 and 4 made more changes to oral questions in two out of three elicitations, and groups 2 and 6 made more changes to oral than to written questions in one elicitation each. Groups 1 and 6 were the only groups that produced the expected number of questions with *aux inversion* in one task each, group 1 in elicitation II in task III and group 6 in elicitation III in task II. Group 1, except in elicitation I task II, always has the highest amount of correctly elicited questions with *aux inversion*.

Table 4.61 below gives an overview of the errors that occurred when *cop inversion* was produced instead of the expected *aux inversion*.

Table 4.61: produced when aux inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
cop inversion	I	2.5	5.56	-	3.7	1.67	-	-	2.47	-	-	6	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	2.63	-	-	-	-	-
*aspect/tense	I	2.5	5.56	-	3.7	1.67	-	-	2.47	-	-	6	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	2.63	-	-	-	-	-

Few interrogatives with *cop inversion* were formed when *aux inversion* should have been produced. Those questions that were formed with *cop inversion* are structurally correct; they only deviate in that they do not fit to the trigger.

Table 4.62 below gives an overview of the errors that occurred when *no inversion* was produced instead of the expected *aux inversion*.

Table 4.62: produced when aux inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
no inversion	I	-	-	18.33	27.78	11.67	7.41	3.33	1.23	20	22.22	10	29.55
	II	3.03	-	24.24	44.44	3.03	9.26	1.01	-	27.27	22.22	13.64	36.11
	III	-	-	15.52	21.67	12.07	8.33	1.32	-	30	15	-	-
*syntax	I	-	-	16.67	25.93	11.67	7.41	3.33	1.23	16.67	22.22	8	25
	II	3.03	-	21.21	44.44	3.03	9.26	1.01	-	24.24	18.52	11.36	36.11
	III	-	-	15.52	20	10.34	8.33	1.32	-	20	15	-	-
*tense/aspect + syntax	I	-	-	1.67	1.85	-	-	-	-	3.33	-	2	2.27
	II	-	-	1.52	-	-	-	-	-	3.03	3.7	-	-
	III	-	-	-	1.67	-	-	-	-	5	-	-	-
*syntax + incongr aux & V	I	-	-	-	-	-	-	-	-	-	-	-	2.27
	II	-	-	1.52	-	-	-	-	-	-	-	2.27	-
	III	-	-	-	-	-	-	-	-	5	-	-	-
*syntax + addit V morph	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	1.72	-	-	-	-	-	-	-

The extent to which *no inversion* was produced instead of the expected *aux inversion* varies considerably for the different groups. Most errors that were produced in this category concern the sentence structure. Errors concerning both the sentence structure and an additional area are much rarer and were not produced by all groups. Groups 1 and 4, which proportionally produced the fewest *non-inverted* questions, were the only groups that did not produce questions with multiple errors.

Table 4.63 below gives an overview of the errors that occurred when *verb inversion* was produced instead of the expected *aux inversion*.

Usage of *verb inversion* instead of *aux inversion* varies throughout the individual groups.

All the questions that were formed with *verb inversion* have multiple errors. Of these, the most common is a combination of tense/aspect shift + syntax.

Table 4.63: produced when aux inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
verb inversion	I	25	8.33	6.67	3.7	3.33	-	7.78	1.23	13.33	3.7	20	2.27
	II	3.03	-	6.06	-	-	-	5.05	3.7	3.03	-	2.27	-
	III	10.71	6.67	8.62	6.67	1.72	3.33	2.63	6.25	-	-	-	-
*tense/aspect + syntax	I	20	8.33	5	-	1.67	-	5.56	1.23	10	3.7	12	-
	II	3.03	-	1.52	-	-	-	4.04	3.7	-	-	-	-
	III	3.57	6.67	6.9	1.67	-	1.67	2.63	6.25	-	-	-	-
*concord + syntax	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	3.57	-	-	-	1.72	-	-	-	-	-	-	-
*tense/aspect + concord + syntax	I	2.5	-	1.67	1.85	1.67	-	2.22	-	3.33	-	8	2.27
	II	-	-	4.55	-	-	-	-	-	-	-	2.27	-
	III	3.57	-	1.72	5	-	1.67	-	-	-	-	-	-
*tense/aspect + syntax + incongr aux & V	I	2.5	-	-	1.85	-	-	-	-	3.33	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + syntax + inc V morph	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	1.01	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Production of *no inversion* and *verb inversion* when *cop inversion* and *aux inversion* should have been elicited differ immensely. *No inversion* was employed much more frequently when *cop inversion* should have been elicited than it was when *aux inversion* should have been elicited, whereas *verb inversion* was hardly used when *cop inversion* was expected while usage of *verb inversion* instead of *aux inversion* was used by all groups to some extent.

Table 4.64 below gives an overview of where the correctly elicited *aux inversion* questions differ from the TL in one of the following areas: syntax, verbal morphology, concord, and unanalysed negator. Errors in tense are not related to the TL, but to the trigger sentences. Aspectual errors did not occur with correctly elicited questions with *aux inversion* because aspectual changes would not have led to the production of questions with *aux inversion*.

All changes, except usage of unanalysed negator, that were made to the expected output led to incorrect structures. Problems that occurred most

frequently in both oral and written questions concern the sentence structure of the produced questions, followed by changes to the tense/aspect values.

Table 4.64: produced when aux inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
aux inversion	I	72.5	86.11	70	62.96	68.33	75.93	80	70.37	66.67	74.07	56	54.55
	II	93.94	100	66.67	53.7	86.36	81.48	79.8	79.01	66.67	70.37	72.73	63.89
	III	89.29	93.33	51.72	58.33	68.97	80	82.89	91.25	70	80	100	85
*tense	I	-	-	-	-	-	-	-	1.23	-	-	-	-
	II	-	-	1.52	-	-	-	1.01	2.47	-	-	-	2.78
	III	-	-	3.45	3.33	3.45	-	5.26	1.25	-	-	5.26	-
*syntax	I	5	2.78	1.67	9.26	1.67	-	3.33	1.23	3.33	7.41	2	-
	II	6.06	-	1.52	3.7	1.52	1.85	4.04	1.23	6.06	7.41	2.27	-
	III	-	-	1.72	6.67	5.17	-	5.26	2.5	30	5	-	5
unanalysed negator	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	3.03	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*inc V morph	I	2.5	2.78	5	-	-	-	-	2.47	-	-	2	-
	II	-	3.7	-	-	-	-	-	-	-	-	-	-
	III	-	-	1.72	1.67	-	-	1.32	-	-	-	-	5
*incongr aux & V	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	3.45	3.33	-	-	-	-	-	-	-	-
*tense + syntax	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	3.57	-	-	-	-	-	-	-	-	10	-	-
*tense + inc V morph	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	3.03	-	-	-
	III	-	-	-	1.67	-	-	1.32	-	-	-	-	-
*tense + incongr aux & V	I	-	-	-	1.85	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	1.72	-	-	-	-	-	5	5	-	-

Again, some of the deviations that were produced concern the verb phrase. Some of the questions that belong to the category *aux inversion* are incorrect, even though they are formed with AUX-SUBJECT INVERSION, because the verbal morphology on the main verb is omitted. Although other errors concerning the verbal morphology occur, e.g. usage of an auxiliary which is incompatible with the bound morpheme of the main verb, these are even less frequent.

Table 4.65 below gives an overview of the errors that occurred when *do-support* was produced instead of the expected *aux inversion*.

All questions that were produced with *do-support* instead of the expected *aux inversion* are considered as incorrect, although without the inclusion of the trigger sentences many of these sentences would be judged as tasklike.

All questions that were produced with *do-support* instead of *aux inversion* deviate in tense/aspect. To deviations in tense/aspect other deviations are added.

Many of the produced sentences show violations of concord, either, when supposed to be triggered or when incorrectly produced; while concord rules are almost never violated when questions with either *cop inversion* or *aux inversion* were produced, neither, when supposed to be triggered or when incorrectly produced.

Table 4.65: produced when aux inversion was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
do-support	I	-	-	5	1.85	15	16.67	8.89	24.69	-	-	8	13.64
	II	-	-	3.03	1.85	10.61	9.26	14.14	17.28	3.03	7.41	11.36	-
	III	-	-	24.14	13.33	17.24	8.33	10.53	2.5	-	5	-	15
*tense/aspect	I	-	-	3.33	-	5	5.56	3.33	12.35	-	-	6	9.09
	II	-	-	1.52	-	3.03	1.85	8.08	8.64	-	3.7	2.27	-
	III	-	-	5.17	-	3.45	1.67	2.63	2.5	-	5	-	10
*tense/aspect + concord	I	-	-	-	-	1.67	1.85	-	3.7	-	-	-	-
	II	-	-	-	-	-	-	1.01	-	-	-	-	-
	III	-	-	-	1.67	-	1.67	1.32	-	-	-	-	-
*tense/aspect + syntax	I	-	-	-	-	5	1.85	1.11	-	-	-	-	-
	II	-	-	1.52	-	4.55	7.41	1.01	6.17	-	-	2.27	-
	III	-	-	6.9	-	5.17	-	6.58	-	-	-	-	-
*tense/aspect + neg	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	3.03	-	2.02	-	-	-	2.27	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + addit V morph	I	-	-	1.67	-	-	-	1.11	2.47	-	-	2	-
	II	-	-	-	-	-	-	1.01	1.23	3.03	3.7	2.27	-
	III	-	-	8.62	8.33	1.72	1.67	-	-	-	-	-	5
*tense/aspect + incongr aux & V	I	-	-	-	1.85	1.67	7.41	-	6.17	-	-	-	4.55
	II	-	-	-	1.85	-	-	1.01	-	-	-	2.27	-
	III	-	-	3.45	3.33	3.45	3.33	-	-	-	-	-	-
*tense/aspect + V-t not do	I	-	-	-	-	-	-	2.22	-	-	-	-	-
	II	-	-	-	-	-	-	-	1.23	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + concord + syntax	I	-	-	-	-	1.67	-	1.11	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	1.72	-	-	-	-	-	-	-
*tense/aspect + concord + incongr aux & V	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	1.72	-	-	-	-	-	-	-

Other deviations that also occur frequently concern the verbal morphology, e.g. the tense is marked on both *do* and the main verb, or *do* is used although the bound morpheme of the main verb demands a different auxiliary.

4.2.4.3 Expected Response – Do-support

Table 4.66 below gives an overview of the structures that were produced when *do-support* was supposed to be elicited.

Table 4.66: produced when do-support was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
cop inversion	I	2.08	2.08	-	1.39	1.39	-	0.93	-	-	-	-	-
	II	-	-	-	-	-	-	-	1.85	-	2.78	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
no inversion	I	10.42	2.08	40.28	31.94	16.67	5.56	3.7	2.78	41.67	41.67	25	30
	II	5.56	5.56	41.67	36.11	9.72	8.33	3.7	-	33.33	33.33	18.75	25
	III	-	-	20.83	20.83	2.78	1.39	-	2.08	50	29.17	-	-
verb inversion	I	41.67	47.92	30.56	25	11.11	4.17	16.67	8.33	19.44	16.67	11.67	10
	II	50	61.11	31.94	33.33	11.11	9.72	21.3	10.19	16.67	16.67	6.25	6.25
	III	50	58.33	26.39	22.22	2.78	2.78	7.29	5.21	50	37.5	-	-
aux inversion	I	43.75	47.92	6.94	22.22	4.17	6.94	16.67	17.59	30.56	36.11	5	10
	II	36.11	19.44	2.78	-	11.11	8.33	15.74	19.44	30.56	5.56	10.42	8.33
	III	25	16.67	12.5	8.33	19.44	12.5	27.08	22.92	-	12.5	20.83	16.67
do-support	I	2.08	-	22.22	19.44	66.67	83.33	62.04	71.3	8.33	5.56	58.33	50
	II	8.33	13.89	23.61	30.56	68.06	73.61	59.26	68.52	19.44	41.67	64.58	60.42
	III	25	25	40.28	48.61	75	83.33	65.63	69.79	-	20.83	79.17	83.33

When looking at the overall number of questions that were produced instead of the expected *do-support*, it is noticeable that their distribution is very straightforward: all groups produced more structures that were not supposed to be triggered in oral questions. The production rate of the structures that were produced instead of *do-support* decreased for all groups except for group 5 in oral questions and for all groups except for groups 5 and 6 in written questions. Although both groups 5 and 6 made more changes to written questions in elicitation II than in elicitation I, both groups produced more questions with *do-support* in elicitation III than in elicitation I.

Table 4.67 below gives an overview of the errors that occurred when *cop inversion* was produced instead of the expected *do-support*.

Table 4.67: produced when do-support was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
cop inversion	I	2.08	2.08	-	1.39	1.39	-	0.93	-	-	-	-	-
	II	-	-	-	-	-	-	-	1.85	-	2.78	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect	I	2.08	2.08	-	1.39	1.39	-	0.93	-	-	-	-	-
	II	-	-	-	-	-	-	-	1.85	-	2.78	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Cop inversion was very infrequently produced instead of *do-support* in elicitations I and II. All the interrogatives that were produced with *cop inversion* instead of *do-support* are structurally correct questions, the only area in which they differ from the expected response is in tense/aspect.

Table 4.68 below gives an overview of the errors that occurred when *no inversion* was produced instead of the expected *do-support*.

Table 4.68: produced when do-support was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
no inversion	I	10.42	2.08	40.28	31.94	16.67	5.56	3.7	2.78	41.67	41.67	25	30
	II	5.56	5.56	41.67	36.11	9.72	8.33	3.7	-	33.33	33.33	18.75	25
	III	-	-	20.83	20.83	2.78	1.39	-	2.08	50	29.17	-	-
*syntax	I	10.42	2.08	38.89	27.78	12.5	5.56	3.7	2.78	36.11	38.89	16.67	26.67
	II	5.56	5.56	36.11	33.33	9.72	8.33	2.78	-	30.56	33.33	14.58	22.92
	III	-	-	18.06	13.89	2.78	1.39	-	-	37.5	16.67	-	-
*tense/aspect + syntax	I	-	-	-	1.39	2.78	-	-	-	5.56	2.78	3.33	1.67
	II	-	-	-	2.78	-	-	-	-	-	-	-	-
	III	-	-	-	1.39	-	-	-	1.04	-	4.17	-	-
*concord + syntax	I	-	-	1.39	2.78	1.39	-	-	-	-	-	3.33	-
	II	-	-	2.78	-	-	-	-	-	2.78	-	2.08	2.08
	III	-	-	1.39	5.56	-	-	-	-	8.33	8.33	-	-
*syntax + incongr aux & V	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	1.39	-	-	-	-	-	-	-	-	-
	III	-	-	1.39	-	-	-	-	1.04	4.17	-	-	-
*tense/aspect + concord + syntax	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	0.93	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + syntax + addit V morph	I	-	-	-	-	-	-	-	-	-	-	-	1.67
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + syntax + inc V morph	I	-	-	-	-	-	-	-	-	-	-	1.67	-
	II	-	-	1.39	-	-	-	-	-	-	-	2.08	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

The amount of *non-inverted* questions that were produced instead of the expected questions with *do-support* varies considerably throughout the six groups. Groups 1 and 4 produced the fewest *non-inverted* questions when *do-support* should have been elicited, while groups 2 and 5 produced most *non-inverted* questions.

Basically, all of these questions are incorrect because of their syntactic structure; the majority of the sentences that were produced as *non-inverted wh*-questions only deviate in syntax. The minority of the *non-inverted* questions have multiple errors, ranging from concord violations to incorrect usage of verbal morphemes.

Group 1 is the only group that produced *non-inverted* questions that only deviate in syntax, whereas the other groups also produced questions that are erroneous in more than one area. Group 3 is the group that shows the least variation in the production of multiple errors, whereas groups 2 and 6 show at least qualitatively more variation in the sources for multiple errors.

Table 4.69 below gives an overview of the errors that occurred when *verb inversion* was produced instead of the expected *do-support*.

Table 4.69: produced when do-support was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
verb inversion	I	41.67	47.92	30.56	25	11.11	4.17	16.67	8.33	19.44	16.67	11.67	10
	II	50	61.11	31.94	33.33	11.11	9.72	21.3	10.19	16.67	16.67	6.25	6.25
	III	50	58.33	26.39	22.22	2.78	2.78	7.29	5.21	50	37.5	-	-
*syntax	I	22.92	43.75	13.89	20.83	6.94	4.17	13.89	7.41	11.11	16.67	10	10
	II	36.11	58.33	27.78	30.56	9.72	8.33	20.37	10.19	11.11	13.89	6.25	4.17
	III	50	41.67	26.39	18.06	2.78	2.78	6.25	4.17	50	29.17	-	-
*tense/aspect + syntax	I	6.25	2.08	4.17	-	2.78	-	1.85	-	2.78	-	-	-
	II	2.78	-	-	1.39	1.39	-	-	-	-	-	-	-
	III	-	2.78	-	-	-	-	-	1.04	-	-	-	-
*concord + syntax	I	12.5	2.08	12.5	4.17	1.39	-	0.93	0.93	5.56	-	1.67	-
	II	8.33	2.78	4.17	1.39	-	1.39	0.93	-	5.56	2.78	-	2.08
	III	-	13.89	-	4.17	-	-	1.04	-	-	8.33	-	-
*tense/aspect + concord + syntax	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	2.78	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

The amount of questions with *verb inversion* that were produced instead of the expected *do-support* varies throughout the six groups. Groups 1, 2 and group 5 in elicitation III, produced the most questions with *verb inversion* when *do-support* should have been elicited, while groups 3 and 6 produced the fewest questions with *verb inversion*.

Generally, all questions that are formed with *verb inversion* instead of *do-support* are incorrect because of their syntactic structure.

Other sources for errors in this category are concord and tense/aspect shifts, while problems with verbal morphology did not occur when *verb inversion* was produced.

All groups produced questions that are erroneous in more than one area, although the majority of the questions produced are erroneous in syntax only.

Table 4.70 below gives an overview of the errors that occurred when *aux inversion* was produced instead of the expected *do-support*.

Most of the errors that occur in addition to changes in tense/syntax concern verbal morphology. Some of the questions that belong to the category *aux inversion* are incorrect, even though they are formed with AUX-SUBJECT INVERSION, because the verbal morphology of the main verb is omitted. Although other problems with the verbal morphology occur, these are less frequent than the

omission of the bound morpheme of the main verb. This phenomenon, although it occurs with all expected categories when interrogatives with *aux inversion* were produced instead of the expected category, is the least frequent when the expected category was *aux inversion* itself (cf. *Table 4.58* and *Table 4.64 above*) and the most frequent when the expected response was *do-support*. Syntactic errors are infrequent in the questions that were produced with *aux inversion* instead of *do-support*.

Table 4.70: produced when do-support was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
aux inversion	I	43.75	47.92	6.94	22.22	4.17	6.94	16.67	17.59	30.56	36.11	5	10
	II	36.11	19.44	2.78	-	11.11	8.33	15.74	19.44	30.56	5.56	10.42	8.33
	III	25	16.67	12.5	8.33	19.44	12.5	27.08	22.92	-	12.5	20.83	16.67
*tense/aspect	I	8.33	10.42	4.17	6.94	4.17	5.56	14.81	12.96	25	27.78	5	10
	II	16.67	8.33	1.39	-	6.94	1.39	10.19	16.67	22.22	5.56	10.42	4.17
	III	-	13.89	6.94	5.56	12.5	11.11	21.88	20.83	-	4.17	20.83	16.67
*tense/aspect + syntax	I	-	-	-	-	-	-	-	1.85	-	-	-	-
	II	-	-	-	-	-	-	0.93	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + inc V morph	I	14.58	16.67	-	4.17	-	1.39	-	0.93	2.78	-	-	-
	II	2.78	11.11	1.39	-	-	5.56	4.63	2.78	-	-	-	4.17
	III	-	-	2.78	1.39	-	-	4.17	2.08	-	-	-	-
*tense/aspect + incongr aux & V	I	20.83	16.67	1.39	11.11	-	-	1.85	0.93	-	5.56	-	-
	II	16.67	-	-	-	4.17	1.39	-	-	8.33	-	-	-
	III	22.22	2.78	2.78	1.39	6.94	1.39	1.04	-	-	8.33	-	-
*tense/aspect + concord + incongr aux & V	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	2.78	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + syntax + incongr aux & V	I	-	4.17	1.39	-	-	-	-	0.93	-	2.78	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense/aspect + unanalysed neg + inc V morph	I	-	-	-	-	-	-	-	-	2.78	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Table 4.71 below gives an overview of where the correctly elicited *do-support* questions differ from the TL in one of the following areas: syntax, verbal morphology, concord, and unanalysed negator. Errors in tense are not related to the TL, but to the trigger sentences. Aspectual errors did not occur in the correctly elicited questions with *do-support* because if aspectual errors were made the resulting questions are not questions with *do-support*.

Compared to the other two categories, more changes to the expected output that the trigger sentences aimed to elicit were accepted as correctly elicited *do-support* questions. Changes in tense or additional verbal morphology were not judged as incorrect with *do-support* questions because the operator '*do*' was

correctly used to formulate questions (cf. *3.2.4.2 above*). The correct encoding of tense on *do* and not on the main verb or on both *do* and main verb is something that most test persons need to acquire in at least some contexts.

Table 4.71: produced when do-support was supposed to be elicited

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		II	III	II	III	II	III	II	III	II	III	II	III
do-support	I	2.08	-	22.22	19.44	66.67	83.33	62.04	71.3	8.33	5.56	58.33	50
	II	8.33	13.89	23.61	30.56	68.06	73.61	59.26	68.52	19.44	41.67	64.58	60.42
	III	25	25	40.28	48.61	75	83.33	65.63	69.79	-	20.83	79.17	83.33
tense	I	-	-	-	-	4.17	13.89	6.48	-	-	-	5	-
	II	-	-	2.78	1.39	11.11	12.5	2.78	0.93	5.56	-	4.17	-
	III	-	-	-	-	2.78	9.72	1.04	1.04	-	-	-	4.17
concord	I	-	-	4.17	-	8.33	1.39	7.41	6.48	-	-	3.33	-
	II	-	5.56	1.39	1.39	4.17	9.72	2.78	4.63	-	8.33	2.08	2.08
	III	-	2.78	-	5.56	-	5.56	-	4.17	-	4.17	-	-
unanalysed negator	I	-	-	-	-	-	-	0.93	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
addit V morph	I	-	-	2.78	4.17	11.11	18.06	8.33	12.04	2.78	-	6.67	3.33
	II	2.78	-	6.94	2.78	13.89	2.78	11.11	5.56	2.78	5.56	20.83	12.5
	III	19.44	11.11	27.78	12.5	16.67	11.11	12.5	1.04	-	-	25	-
V-t not do	I	-	-	1.39	-	4.17	-	0.93	1.85	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	1.39	2.78	-	-	-	1.04	-	-	-	-
tense + addit V morph	I	2.08	-	-	-	2.78	1.39	-	-	-	-	3.33	-
	II	-	-	1.39	-	4.17	-	1.85	-	-	-	2.08	-
	III	-	-	-	-	9.72	-	-	-	-	-	-	-
concord + neg	I	-	-	1.39	-	-	-	2.78	-	-	-	1.67	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
concord + addit V morph	I	-	-	-	-	-	-	-	-	-	-	3.33	-
	II	-	-	-	-	-	-	-	0.93	-	-	2.08	2.08
	III	-	-	-	-	-	-	-	-	-	-	-	-
concord + V-t not do	I	-	-	1.39	-	1.39	-	0.93	-	-	-	3.33	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	2.78	-	1.39	-	1.04	-	-	-	-
*syntax	I	-	-	-	-	-	-	-	-	-	-	1.67	-
	II	-	-	1.39	1.39	-	-	-	1.85	-	-	-	-
	III	-	-	-	-	1.39	1.39	-	-	-	4.17	-	-
*incongr aux & V	I	-	-	1.39	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	1.39	-	-	-	-	-	-
*tense + syntax	I	-	-	-	-	1.39	-	-	-	-	-	-	-
	II	-	-	-	-	1.39	-	-	-	-	-	-	-
	III	-	-	-	-	-	1.39	-	-	-	-	-	-
*tense + incongr aux & V	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	1.39	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*concord + syntax	I	-	-	-	-	-	-	-	-	2.78	-	-	-
	II	-	-	-	-	1.39	-	0.93	0.93	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*syntax + addit V morph	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	1.39	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
*tense + syntax + addit V morph	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	1.39	-	-	-	-	-	-

The majority of the errors concern the correct encoding of the tense on the operator '*do*' instead of the main verb or on both operator and main verb. The rule

to use an operator when no auxiliary is present in the trigger declarative was followed, although correct encoding of tense and number still need to be sorted out in some contexts.

Shifts in tense from present to past and vice versa were probably not made to alter present to past and vice versa, but resulted more likely from using *do/did* interchangeably as operator.

The minority of the correctly elicited *do-support* questions are considered as non-tasklike. All of these questions have errors concerning either syntax or the morphology of the main verb, which would require *be* or *have* as auxiliary, although *do* was correctly used as an operator with the latter.

4.3 IL Analysis vs. EA/EA$^+$

In the following part, I compare the results of the IL Analysis with the results obtained from the EA/EA$^+$, where appropriateness is included in the judgement of the data. To make the data of the EA/EA$^+$ comparable to the data of the IL Analysis, I recalculated the relative numbers, which in this comparison relate to the whole output each group produced during each task in each elicitation, whereas the relative numbers in *4.2 above* relate to the total output each group produced in each category.

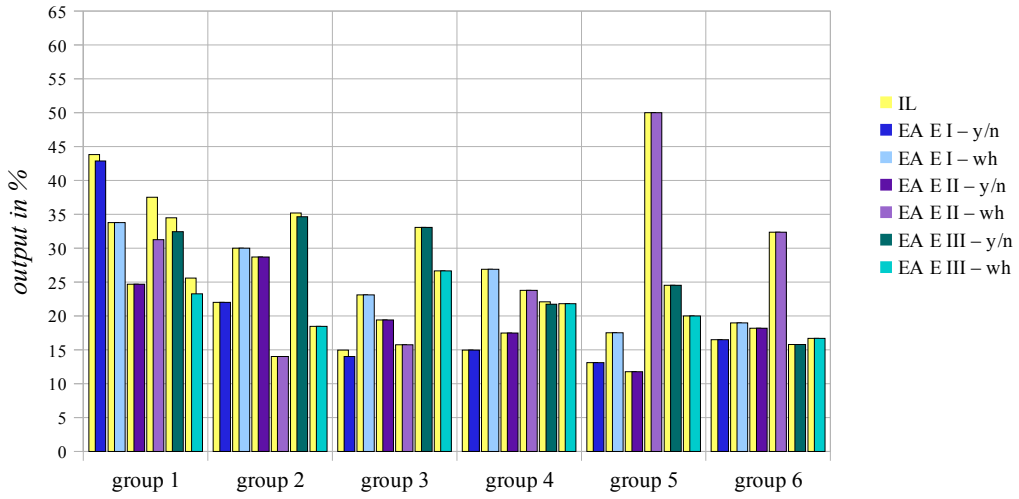
4.3.1 Unstructured Questions – IL vs. EA

The following diagrams and tables focus on the usage of *cop inversion*, *aux inversion*, and *do-support* in unstructured questions, comparing the results gained from the IL analysis and the EA.

Cop inversion

The following *Diagram 4.25* generated from *Table 4.72 below* gives an overview of how frequently *cop inversion* was produced by each group with unstructured *yes/no* and *wh*-questions, i.e. IL analysis, and how often it was correctly produced, i.e. Error Analysis.

Diagram 4.25: IL vs. EA – unstructured questions with cop inversion



Questions with *cop inversion* were produced by all groups to form both unstructured *yes/no* and *wh*-questions with varying frequency.

Table 4.72: IL vs. EA – unstructured questions with cop inversion

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA	IL	EA	IL	EA	IL	EA	IL	EA	IL	EA
yes/no	I	43.81	42.86	22	22	14.95	14.02	14.96	14.96	13.1	13.1	16.46	16.46
	II	24.68	24.68	28.7	28.7	19.4	19.4	17.46	17.46	11.76	11.76	18.18	18.18
	III	34.46	32.43	35.2	34.64	33.04	33.04	22.06	21.74	24.53	24.53	15.79	15.79
wh	I	33.75	33.75	30	30	23.08	23.08	26.88	26.88	17.5	17.5	18.97	18.97
	II	37.5	31.25	14	14	15.71	15.71	23.76	23.76	50	50	32.35	32.35
	III	25.58	23.26	18.46	18.46	26.67	26.67	21.82	21.82	20	20	16.67	16.67
Ø: no questions produced in this category													

When *cop inversion* was used to form questions it is generally structurally and morphologically correct with both question types. With the exception of group 1, all other groups produced only structurally and morphologically correct *wh*-questions with *cop inversion*. With *yes/no* questions, only group 5 and 6 were

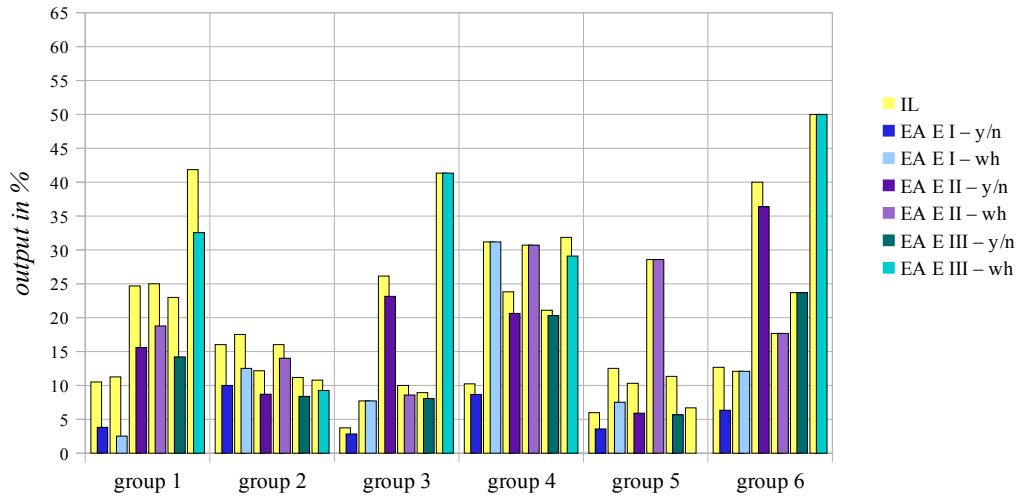
able to produce structurally and morphologically correct interrogatives; groups 2, 3 and 4 did so in two out of three elicitations and group 1 in one elicitation.

Although structural and morphological problems occur during the production of unstructured interrogatives with *cop inversion*, the difference between produced number and tasklike interrogatives with *cop inversion* is very small.

Aux inversion

The following *Diagram 4.26* generated from *Table 4.73 below* gives an overview of how frequently *aux inversion* was produced by each group with unstructured *yes/no* and *wh*-questions, i.e. IL analysis, and how often it was correctly produced, i.e. Error Analysis.

Diagram 4.26: IL vs. EA – unstructured questions with aux inversion



Questions with *aux inversion* were produced by all groups to form both unstructured *yes/no* and *wh*-questions with varying frequency.

In contrast to *cop inversion*, usage of *aux inversion* is more problematic. The difference between produced *aux inversion* and correctly produced *aux inversion* is more pronounced in both contexts than it is for *cop inversion*. Only group 6 produced only correct *yes/no* questions with *aux inversion* in

elicitation III, all the other groups were not able to correctly apply morphological and syntactic rules in the formation of *yes/no* questions with *aux inversion*. Of the other groups, groups 3 and 4 managed to produce almost as many tasklike *yes/no* questions with *aux inversion* in elicitations II and III; there, the difference between produced and tasklike is below 2 %.

The difference between produced *wh*-questions with *aux inversion* and tasklike produced questions is less pronounced than it is for *yes/no* questions, but more pronounced than is for *wh*-questions with *cop inversion*. Group 5 produced only tasklike *wh*-questions with *aux inversion* in one elicitation, while groups 3 and 4 did so in two out of three elicitations and group 6 in all three elicitations. Group 1 is the group with the highest differences between produced questions and tasklike questions.

Table 4.73: IL vs. EA – unstructured questions with aux inversion

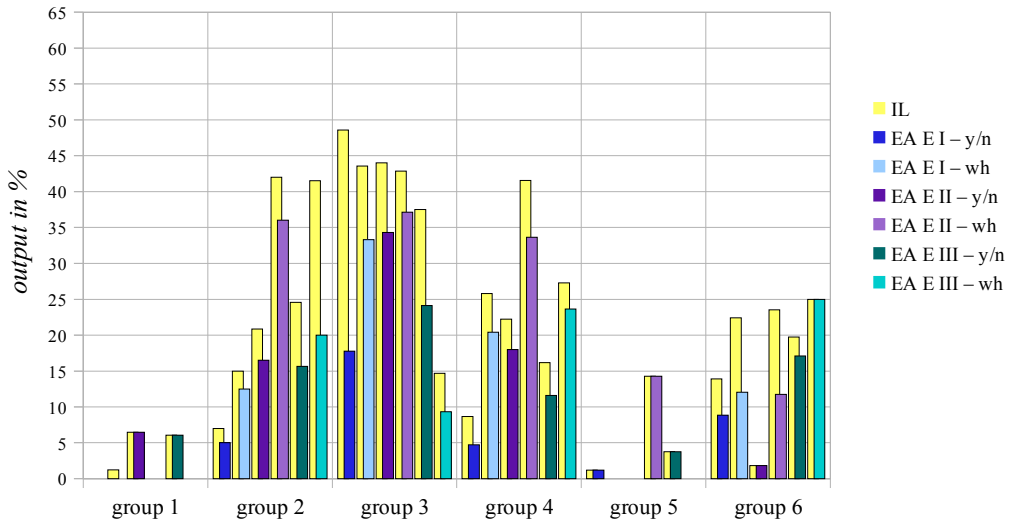
	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA	IL	EA	IL	EA	IL	EA	IL	EA	IL	EA
yes/no	I	10.48	3.81	16	10	3.74	2.80	10.24	8.66	5.95	3.57	12.66	6.33
	II	24.68	15.58	12.17	8.7	26.12	23.13	23.81	20.63	10.29	5.88	40	36.36
	III	22.97	14.19	11.17	8.38	8.93	8.04	21.08	20.29	11.32	5.66	23.68	23.68
wh	I	11.25	2.5	17.5	12.5	7.69	7.69	31.18	31.18	12.5	7.5	12.07	12.07
	II	25	18.75	16	14	10	8.57	30.69	30.69	28.57	28.57	17.65	17.65
	III	41.86	32.56	10.77	9.23	41.33	41.33	31.82	29.09	6.67	-	50	50
Ø: no questions produced in this category													

Compared to *cop inversion*, more structural and morphological problems occur during the production of unstructured interrogatives with *aux inversion*. The difference between the produced number of interrogatives with *aux inversion* and tasklike interrogatives with *aux inversion* is more pronounced. A possible reason for this can be found in the number of tenses that can occur with *aux inversion*. The copula can only be used with two tenses, i.e. present simple and past simple, whereas many more tenses are formed with a variety of auxiliaries. Therefore, possible candidates for the formation of interrogatives with *aux inversion* are more numerous than are the candidates for the formation of interrogatives with *cop inversion*.

Do-support

The following *Diagram 4.27* generated from *Table 4.74 below* gives an overview of how frequently *do-support* was produced by each group with unstructured *yes/no* and *wh*-questions. i.e. IL analysis, and how often it was correctly produced, i.e. Error Analysis.

Diagram 4.27: IL vs. EA – unstructured questions with do-support



Only four of the six groups produced unstructured questions with *do-support* to form both unstructured *yes/no* and *wh*-questions.

Table 4.74: IL vs. EA – unstructured questions with do-support

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA	IL	EA	IL	EA	IL	EA	IL	EA	IL	EA
yes/no	I	Ø	Ø	7	5	48.6	17.76	8.66	4.72	1.19	1.19	13.92	8.86
	II	6.49	6.49	20.87	16.52	44.03	34.33	22.22	17.99	Ø	Ø	1.82	1.82
	III	6.08	6.08	24.58	15.64	37.5	24.11	16.18	11.59	3.77	3.77	19.74	17.11
wh	I	1.25	-	15	12.5	43.59	33.33	25.81	20.43	Ø	Ø	22.41	12.07
	II	Ø	Ø	42	36	42.86	37.14	41.58	33.66	14.29	14.29	23.53	11.76
	III	Ø	Ø	41.54	20	14.67	9.33	27.27	23.64	Ø	Ø	25	25
Ø: no questions produced in this category													

In contrast to *cop* inversion and *aux inversion*, the difference between produced interrogatives and tasklike interrogatives with *do-support* is, in both contexts, more evident. With *yes/no* questions, only groups 1 and 5 managed to produce only tasklike interrogatives with *do-support* in two elicitations. In the other elicitations, these groups did not produce *yes/no* questions with

do-support. Compared to how often the other groups produced *do-support* in *yes/no* questions, both groups 1 and 5 produced relatively few interrogatives with *do-support*. Of the remaining groups, only group 6 produced targetlike interrogatives in one elicitation, and for group 2 the difference between produced and tasklike *yes/no* questions with *do-support* is below 2 % in elicitation I.

The difference between produced *wh*-questions with *do-support* and tasklike produced questions is more pronounced than it is for *yes/no* questions. Only groups 5 and 6 managed to produce only tasklike *wh*-questions with *do-support* in one elicitation each, and both groups used *do-support* to a much higher extent than they did in *yes/no* questions.

Compared to *cop inversion* and *aux inversion*, more structural and morphological problems occur during the production of unstructured interrogatives with *do-support*. The difference between produced number of interrogatives with *do-support* and tasklike interrogatives is most pronounced in this category.

Even though only two tenses, i.e. present simple and past simple, demand the usage of *do-support* in question formation, the acquisition of this rule takes longest because it involves the insertion of an operator, i.e. dummy *do*, whereas both *cop inversion* and *aux inversion* 'only' demand inversion of subject and verb.

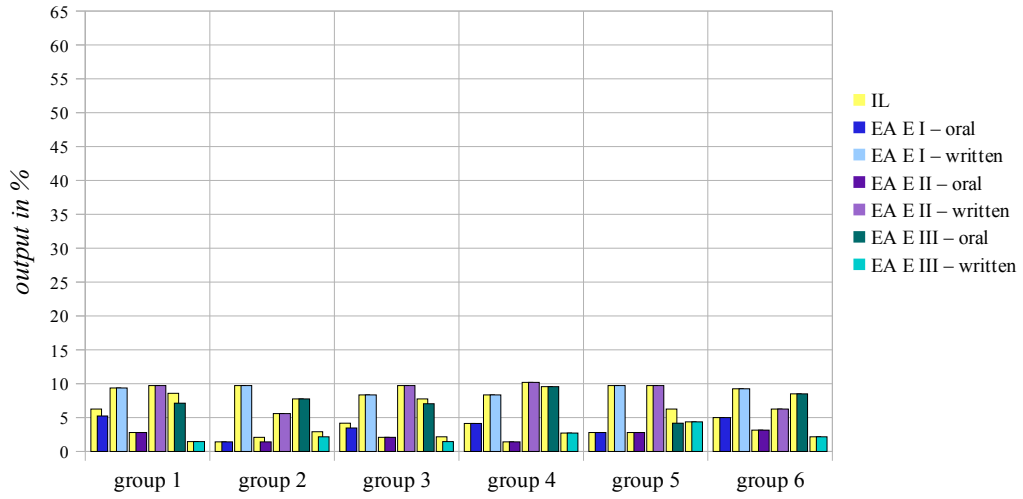
4.3.2 Structured Questions – IL vs. EA

In the following diagrams and tables, I compare the results gained from the IL Analysis with those gained from the Error Analysis for *cop inversion*, *aux inversion*, and *do-support* when interrogatives in these categories were produced in the structured tasks.

Cop inversion

The following *Diagram 4.28* generated from *Table 4.75 below* gives an overview of how frequently *cop inversion* was produced by each group with structured oral and written *wh*-questions, i.e. IL analysis, and how often it was correctly produced, i.e. Error Analysis.

Diagram 4.28: IL vs. EA – structured questions with cop inversion



All groups produced oral and written structured questions with *cop inversion* in all elicitations. The number of produced interrogatives was influenced by the trigger sentences and is similar for all groups in each of the elicitations, differing from the varying production rates of *cop inversion* in the unstructured tasks.

Table 4.75: IL vs. EA – structured questions with cop inversion

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA	IL	EA	IL	EA	IL	EA	IL	EA	IL	EA
oral	I	6.25	5.21	1.39	1.39	4.17	3.47	4.14	4.14	2.78	2.78	5	5
	II	2.78	2.78	2.08	1.39	2.08	2.08	1.39	1.39	2.78	2.78	3.13	3.13
	III	8.57	7.14	7.75	7.75	7.75	7.04	9.57	9.57	6.25	4.17	8.51	8.51
written	I	9.38	9.38	9.72	9.72	8.33	8.33	8.33	8.33	9.72	9.72	9.24	9.24
	II	9.72	9.72	5.56	5.56	9.72	9.72	10.19	10.19	9.72	9.72	6.25	6.25
	III	1.45	1.45	2.9	2.17	2.17	1.45	2.72	2.72	4.35	4.35	2.17	2.17
Ø: no questions produced in this category													

When *cop inversion* was produced in both structured tasks, the produced questions were generally tasklike or the difference between produced and tasklike is below 2 %.

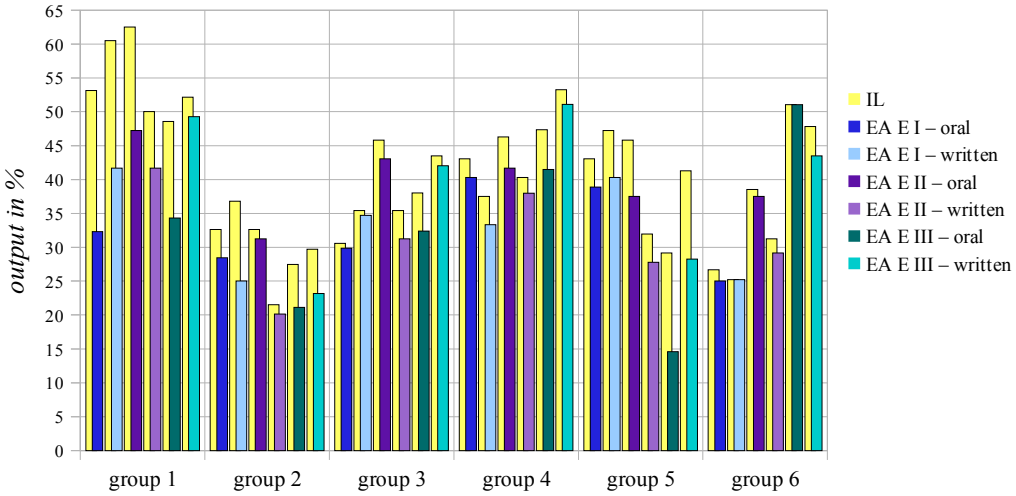
When *cop inversion* was produced in written questions, the groups performed slightly better than in oral structured questions.

Though errors occurred during the production of structured interrogatives with *cop inversion*, the difference between produced interrogatives with *cop inversion* and tasklike interrogatives with *cop inversion* is very small.

Aux inversion

The following *Diagram 4.29* generated from *Table 4.76 below* gives an overview of how frequently *aux inversion* was produced by each group with structured oral and written *wh*-questions, i.e. IL analysis, and how often it was correctly produced, i.e. Error Analysis.

Diagram 4.29: IL vs. EA – structured questions with aux inversion



Questions with *aux inversion* were produced by all groups to form both oral and written *wh*-questions in the structured tasks. The amount of produced interrogatives was again influenced by the trigger sentences and is higher for all groups in the structured tasks than it is in the unstructured tasks.

Table 4.76: IL vs. EA – structured questions with aux inversion

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA	IL	EA	IL	EA	IL	EA	IL	EA	IL	EA
oral	I	53.13	32.29	32.64	28.47	30.56	29.86	43.06	40.28	43.06	38.89	26.67	25
	II	62.5	47.22	32.64	31.25	45.83	43.06	46.3	41.67	45.83	37.5	38.54	37.5
	III	48.57	34.29	27.46	21.13	38.03	32.39	47.34	41.49	29.17	14.58	51.06	51.06
written	I	60.5	41.67	36.81	25	35.42	34.72	37.5	33.33	47.22	40.28	25.21	25.21
	II	50	41.67	21.53	20.14	35.42	31.25	40.28	37.96	31.94	27.78	31.25	29.17
	III	52.17	49.28	29.71	23.19	43.48	42.03	53.26	51.09	41.3	28.26	47.83	43.48
Ø: no questions produced in this category													

The difference between produced interrogatives with *aux inversion* in both oral and written tasks is more pronounced than it is for unstructured tasks. Only group 6 produced only targetlike interrogatives with *aux inversion* in oral and written questions in one elicitation each, and in one oral task the difference between produced and tasklike is below 2 %. For all the other groups the difference between produced interrogatives and tasklike interrogatives is much more pronounced in both contexts.

Do-support

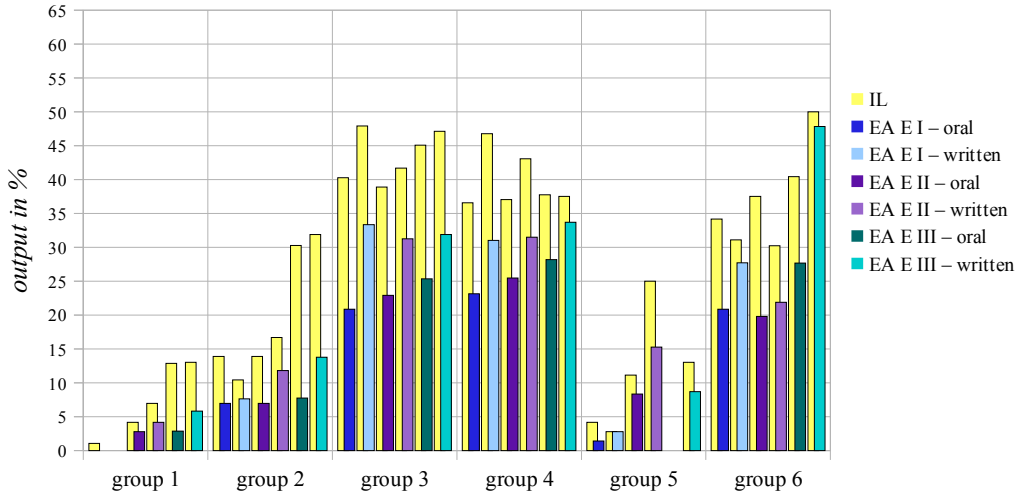
The following *Diagram 4.30* generated from *Table 4.77 below* gives an overview of how frequently *do-support* was produced by each group with structured oral and written *wh*-questions, i.e. IL analysis, and how often it was correctly produced, i.e. Error Analysis.

Structured oral and written questions with *do-support* were produced by all groups, though not in all elicitations. The number of produced interrogatives with *do-support* in the structured tasks is generally lower than it is in the unstructured tasks for all groups. The difference between produced interrogatives with *do-support* and tasklike interrogatives for both oral and written tasks is more pronounced than it is in the unstructured tasks.

Except for group 5 in elicitation I in written questions, none of the other groups managed to produce only tasklike interrogatives, and the difference between produced interrogatives and tasklike interrogatives is higher than 2 % in all other elicitations for all groups. The reason why group 5 only produced tasklike written interrogatives in elicitation I can be found in the number of

produced sentences: the structure was used very infrequently, i.e. if the participant was certain that it was a correct response.

Diagram 4.30: IL vs. EA – structured questions with do-support



A comparison of the differences between produced interrogatives and tasklike interrogatives with *aux inversion* (cf. *Table 4.76 above*) to the differences between produced interrogatives and tasklike interrogatives with *do-support* shows that for those groups which produced a relatively high amount of *do-support* questions, the difference between produced and tasklike questions is more pronounced than it is for questions with *aux inversion* in both contexts. Groups like group 1, who produced relatively few interrogatives with *do-support*, do not follow this trend. They produced very few questions with *do-support*, which are therefore more likely to be tasklike.

Table 4.77: IL vs. EA – structured questions with do-support

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA	IL	EA	IL	EA	IL	EA	IL	EA	IL	EA
oral	I	1.04	-	13.89	6.94	40.28	20.83	36.57	23.15	4.17	1.39	34.17	20.83
	II	4.17	2.78	13.89	6.94	38.89	22.92	37.04	25.46	11.11	8.33	37.5	19.79
	III	12.86	2.86	30.28	7.75	45.07	25.35	37.77	28.19	Ø	Ø	40.43	27.66
written	I	Ø	Ø	10.42	7.64	47.92	33.33	46.76	31.02	2.78	2.78	31.09	27.73
	II	6.94	4.17	16.67	11.81	41.67	31.25	43.06	31.48	25	15.28	30.21	21.88
	III	13.04	5.8	31.88	13.77	47.1	31.88	37.5	33.7	13.04	8.7	50	47.83
Ø: no questions produced in this category													

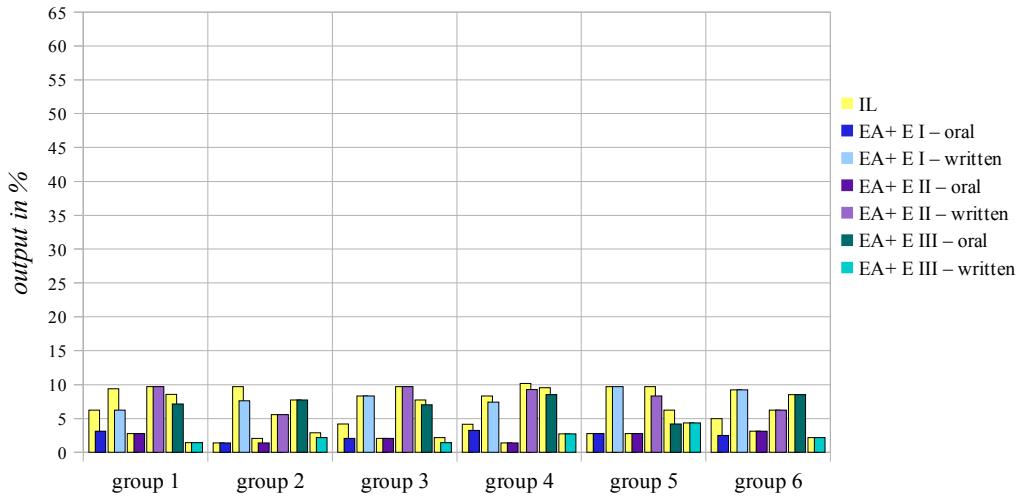
4.3.3 Structured Questions – IL vs. EA$^+$

After having described how many of the interrogatives produced in the unstructured and structured tasks with *cop inversion*, *aux inversion*, and *do-support* are tasklike, i.e. IL vs. EA (cf. *4.3.1* and *4.3.2 above*), I now compare how many of the interrogatives produced in the structured tasks are not only tasklike but also an appropriate response to the trigger presented, i.e. IL vs. EA$^+$.

Cop inversion

The following *Diagram 4.31* generated from *Table 4.78 below* gives an overview of how many of the structured interrogatives in the category *cop inversion* are successfully elicited.

Diagram 4.31: IL vs. EA$^+$ – structured questions with cop inversion



The difference between produced interrogatives and appropriately produced interrogatives with *cop inversion* is very small in both oral and written tasks. For group 4, there is either no difference between produced interrogatives and appropriately produced interrogatives with *cop inversion*, or the difference between produced interrogatives and appropriately produced interrogatives with

cop inversion is below 2 % in both contexts. For groups 3, 4 and 6, there is either no difference between produced interrogatives and appropriately produced interrogatives with *cop inversion* or the difference is below 2 % in two out of three elicitations in oral questions and in all three elicitations in written questions.

Table 4.78: IL vs. EA$^+$ – structured questions with cop inversion

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA$^+$	IL	EA$^+$	IL	EA$^+$	IL	EA$^+$	IL	EA$^+$	IL	EA$^+$
oral	I	6.25	3.13	1.39	1.39	4.17	2.08	4.14	3.24	2.78	2.78	5	2.5
	II	2.78	2.78	2.08	1.39	2.08	2.08	1.39	1.39	2.78	2.78	3.13	3.13
	III	8.57	7.14	7.75	7.75	7.75	7.04	9.57	8.51	6.25	4.17	8.51	8.51
written	I	9.38	6.25	9.72	7.64	8.33	8.33	8.33	7.41	9.72	9.72	9.24	9.24
	II	9.72	9.72	5.56	5.56	9.72	9.72	10.19	9.26	9.72	8.33	6.25	6.25
	III	1.45	1.45	2.9	2.17	2.17	1.45	2.72	2.72	4.35	4.35	2.17	2.17
Ø: no questions produced in this category													

For group 2, there is either no difference between produced interrogatives and appropriately produced interrogatives with *cop inversion* or the difference is below 2 % in all three elicitations in oral questions and in two out of three elicitations in written questions. For group 1, there is either no difference between produced interrogatives and appropriately produced interrogatives with *cop inversion* or the difference is below 2 % in two out of three elicitations in oral and written questions.

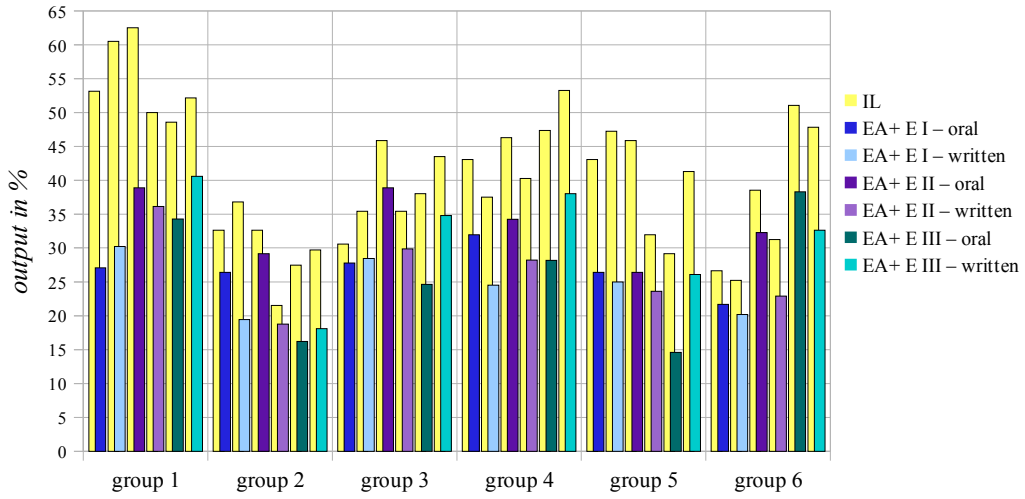
This shows that not only have all groups mastered *cop inversion* in almost all contexts, but also that when *cop inversion* is supposed to be elicited, it is correctly elicited.

Aux inversion

The following *Diagram 4.32* generated from *Table 4.79 below* gives an overview of how many of the structured interrogatives in the category *aux inversion* are successfully elicited.

The difference between produced interrogatives and appropriately produced interrogatives with *aux inversion* is more pronounced with *aux inversion* than with *cop inversion* in both contexts.

Diagram 4.32: IL vs. EA⁺ – structured questions with aux inversion



The difference between produced interrogatives and appropriately produced interrogatives with *aux inversion* is above 2 % for all groups in both contexts. The lowest difference between produced interrogatives and appropriately produced interrogatives with *aux inversion* is 2.78 % (group 2 in written structured questions in elicitation II and by group 3 in oral questions in elicitation I). The highest difference between produced interrogatives and appropriately produced interrogatives with *aux inversion* is 30.29 % (group 1 in written structured questions in elicitation I).

Table 4.79: IL vs. EA⁺ – structured questions with aux inversion

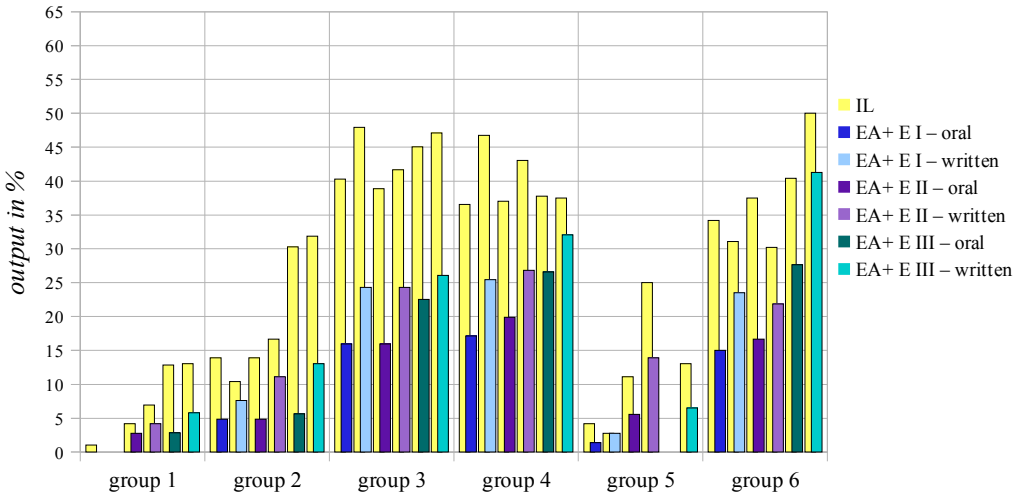
	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA⁺	IL	EA⁺	IL	EA⁺	IL	EA⁺	IL	EA⁺	IL	EA⁺
oral	I	53.13	27.08	32.64	26.39	30.56	27.78	43.06	31.94	43.06	26.39	26.67	21.67
	II	62.5	38.89	32.64	29.17	45.83	38.89	46.3	34.26	45.83	26.39	38.54	32.29
	III	48.57	34.29	27.46	16.20	38.03	24.65	47.34	28.19	29.17	14.58	51.06	38.3
written	I	60.5	30.21	36.81	19.44	35.42	28.47	37.5	24.54	47.22	25	25.21	20.17
	II	50	36.11	21.53	18.75	35.42	29.86	40.28	28.24	31.94	23.61	31.25	22.92
	III	52.17	40.58	29.71	18.12	43.48	34.78	53.26	38.04	41.3	26.09	47.83	32.61
Ø: no questions produced in this category													

These results show that even when the produced interrogatives are tasklike, they are not necessarily a correct response to a given sentence, showing that although the rules for the formation of interrogatives with *aux inversion* have been partly acquired (cf. *4.3.2 above*), the participants can not necessarily apply these rules when demanded by context.

Do-support

The following *Diagram 4.33* generated from *Table 4.80 below* gives an overview of how many of the structured interrogatives in the category *do-support* are successfully elicited.

Diagram 4.33: IL vs. EA$^+$ – structured questions with do-support



The difference between produced interrogatives and appropriately produced interrogatives with *do-support* is less pronounced with *do-support* than it is for with *aux inversion*, although it is more pronounced than it is with *cop inversion* in both contexts.

Table 4.80: IL vs. EA$^+$ – structured questions with do-support

	E	group 1		group 2		group 3		group 4		group 5		group 6	
		IL	EA$^+$	IL	EA$^+$	IL	EA$^+$	IL	EA$^+$	IL	EA$^+$	IL	EA$^+$
oral	I	1.04	-	13.89	4.86	40.28	15.97	36.57	17.13	4.17	1.39	34.17	15
	II	4.17	2.78	13.89	4.86	38.89	15.97	37.04	19.91	11.11	5.56	37.5	16.67
	III	12.86	2.86	30.28	5.63	45.07	22.54	37.77	26.6	Ø	Ø	40.43	27.66
written	I	Ø	Ø	10.42	7.64	47.92	24.31	46.76	25.46	2.78	2.78	31.09	23.53
	II	6.94	4.17	16.67	11.11	41.67	24.31	43.06	26.85	25	13.89	30.21	21.88
	III	13.04	5.8	31.88	13.04	47.1	26.09	37.5	32.07	13.04	6.52	50	41.3
Ø: no questions produced in this category													

For group 1, the difference between produced interrogatives and appropriately produced interrogatives with *do-support* is below 2 % in oral questions in elicitation II. For group 5, there is no difference between produced interrogatives with *do-support* and appropriately produced interrogatives with

do-support in written structured questions in elicitation I. For all other groups, the difference between produced interrogatives and appropriately produced interrogatives with *do-support* is above 2 % in both contexts. The highest difference between produced and appropriately produced interrogatives with *do-support* is 24.65 % (group 2 in oral structured questions in elicitation III).

4.4 A Revised Model

In the following part, I refine Wode's model for the acquisition of simple English interrogatives in natural SLA into a revised model for the acquisition of simple interrogative structures in guided SLA that incorporates the results gained from the study, the role of typological markedness, and transfer of any previously acquired language.

Both, the participants' preference for producing certain structures and the acquisitional order can be rationalised in terms of typological markedness. For input to be processible, it has to be meaningful (Krashen 1981: 103). For learners of a given level only input of the next higher acquisitional stage is meaningful, i.e. input that is slightly more marked than the knowledge the learner has already acquired. Input of stages that are more difficult is not meaningful and can therefore not yet be processed completely by the language learner. The more marked a structure, the more meaningful input is required to acquire this structure. Less marked structures have to be acquired before more marked structures can be acquired, which explains why participants with less exposure to English are not yet able to produce *do-support* in all required contexts. The longer a participant has been learning English at school, the more meaningful input should have been received. Therefore, participants with more exposure to English should be able to access rules governing *do-support* in more contexts.

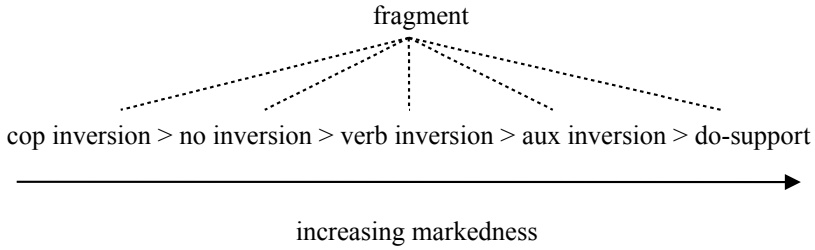
Fragments hold a special position in the acquisitional hierarchy. On the one hand, the usage of elliptical interrogatives is not taught in school, but on the

other hand, *fragments* were generally used to further communication (cf. *2.3.2 above* and *4.1.2 above*) in the more communicative unstructured tasks.

The unmarked case in the acquisitional hierarchy is a question with *cop inversion* while the most marked case is a question with *do-support*, requiring the insertion of the operator *do* before the verb and its inversion with the subject. Every stage in the acquisition of simple English interrogatives can be seen as being more marked than the preceding stage. The less marked a structure is, the earlier it is acquired by a language learner.

I therefore postulate the following model (cf. *Diagram 4.34 below*) for the acquisition of simple interrogative structures in guided SLA in which the role of *fragments* is included: the unmarked case is a question with *cop inversion* while the most marked case is a question with *do-support*, requiring the insertion of the operator *do* and its inversion. Every stage in between can be seen as being more marked than the preceding one. The less marked a structure, the earlier it is acquired by a language learner.

Diagram 4.34: acquisitional hierarchy for interrogatives in guided SLA



Wode (1978a) postulated that *cop inversion* and *do-support* respectively are acquired in two different stages in natural SLA. *Wh*-questions with *cop inversion* are stage II questions, whereas *yes/no* questions with *cop inversion* are stage IV questions. A similar distinction is made for the acquisition of *do-support*. *Wh*-questions with *do-support* are stage V questions, whereas *yes/no* questions with *do-support* are stage VI questions. In contrast to Wode, I propose that *yes/no* and *wh*-questions with *cop inversion* or *do-support* are each acquired in one stage in guided SLA. My data show that all groups perform only slightly better in *wh*-questions with either *cop inversion* or *do-support* (cf. *Table 4.47 above*). In guided SLA, *yes/no* and *wh*-questions are simultaneously introduced

for both *cop inversion* and *do-support*, although developmentally, *cop inversion* is acquired earlier than *do-support*. The slight difference in error rates can be explained by the frequency of occurrence of the question types and therefore the practice a learner has with the formulation of a question type. In conversation, *yes/no* questions are less frequently produced than *wh*-questions, because one generally seeks specific information and does not play twenty questions.

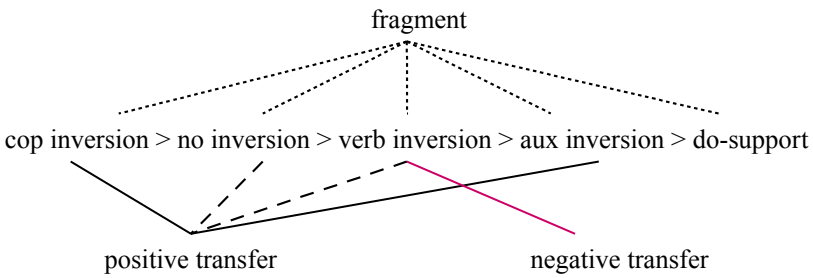
Even though *cop inversion* and *do-support* are introduced simultaneously in guided SLA, only *cop inversion* is acquired early. The acquisition and non-imitative usage of the more marked *do-support* is only acquired after several years of learning.

Generally, all participants preferred to utter a less marked structure rather than a more marked variant if they were in a situation where their attention was more focused on conveying important or difficult ideas than on obeying grammatical requirements.

Transfer, either from the L1 or any other previously learned L2, can influence the acquisitional order shown in *Diagram 4.34 above*. Transfer can manifest itself as avoidance or delayed rule restructuring (Odlin 1989), or can function as a communication strategy in that gaps in the IL are (un)consciously filled with previously learned rules (Newmark & Reibel 1968: 159).

Diagram 4.35 below shows where the acquisition of interrogatives belonging to one of the categories can be influenced by positive and negative transfer from the L1.

Diagram 4.35: influences of transfer on the acquisitional hierarchy (L1: German)



All participants show evidence of L1 transfer. Transfer of rules from the participants' L1 (German) for the formation of simple interrogative structures can lead to the following:

- COP INVERSION/AUX INVERSION: rules for the formation of targetlike English questions can be transferred for both categories with both *yes/no* and *wh*-questions, i.e. positive transfer.
- NO INVERSION: rules for the formation of *non-inverted yes/no* questions can be transferred from the participants' L1; although it is a possible means of question formation in both languages, it does not occur very frequently and its usage is not encouraged in guided SLA. German and English do not offer the possibility of forming *non-inverted wh*-questions. Transfer of this structure from the L1 is not possible. *Non-inverted wh*-questions are nevertheless attested in the corpus, therefore showing that *non-inversion* is a necessary developmental stage in the acquisition of both *yes/no* and *wh*-questions; however, as stated above, for *yes/no* questions, the rules for the usage of *non-inverted* interrogatives can be transferred from the L1 to some extent.
- VERB INVERSION: rules for the formation of targetlike English questions can only be transferred for subject *wh*-questions, e.g. *Who likes pizza?* If rules for verb inversion are transferred into the IL in any other context, the resulting questions are non-targetlike. *Verb inversion* as such is a developmental stage in the acquisition of English object questions coinciding with rules for German question formation, which in most cases leads to negative transfer. For native speakers of German, the acquisitional stage *verb inversion* holds developmental properties and both positive and negative transfer.
- DO-SUPPORT: the only category where transfer from the L1 is impossible because, where English interrogatives require the insertion of an operator to formulate targetlike questions, German employs *verb inversion*. Due to this difference, transfer can, on the one hand, not accelerate the acquisition of *do-support*, but, on the other hand, the acquisition of *do-support* is not inhibited by transfer.

As long as knowledge is projected from any grammar other than the IL grammar of the language in which communication is attempted, L2 learners apply transfer as a communication strategy. As soon as explicit knowledge about the language in which communication is attempted is applied, learned or acquired rules are used.

If more input is available for the learner, the underlying system of the IL changes towards a more targetlike norm.

The following *Diagram 4.36 below* shows the interrelations between each of the categories, based on the types (*Table 4.81 below*) that I used to categorise the data (cf. *4.1.2.1 above*).

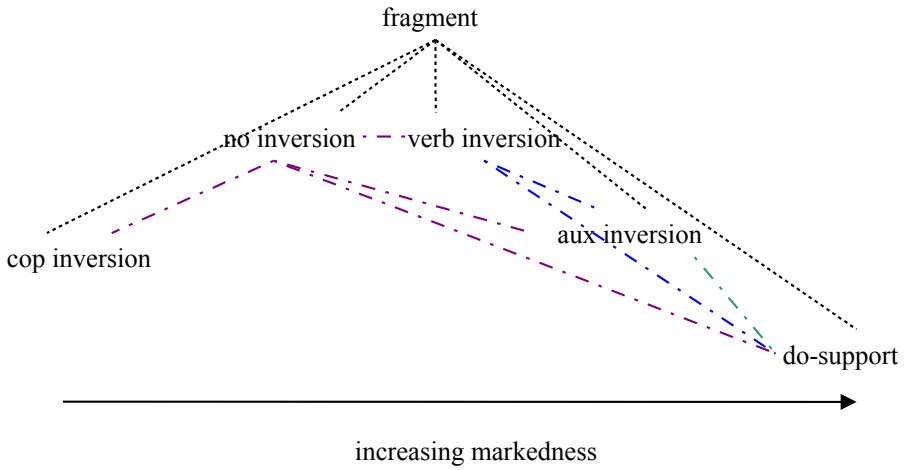
As mentioned above, *fragments* hold a special position in the acquisitional hierarchy, at least in the unstructured and therefore more communicative tasks, where they were generally used to further communication (cf. *4.1.2 above*). Elliptical versions of each of the remaining five categories can be found in the category *fragment*.

Table 4.81: produced types per category

fragment	cop inversion	no inversion	verb inversion	aux inversion	do-support
S (X) wh (X) X V (X) wh S (X) aux S (X) do S (X) S aux (X)	cop S (X) wh cop S (X) wh cop (X) cop S cop (X) wh cop Sc cop (X) wh cop Sc S (X) wh cop S cop (X)	wh S V (X) S V (X) wh S aux V (X) S cop (X) S aux V (X) wh S cop (X) wh O S V (X) S do V (X) S aux V wh (X) S V wh (X) S aux aux V (X) S cop Sc wh (X) S V (X) wh O V wh do S V (X) wh O aux S V (X)	wh V S (X) V S (X) wh V (X) V O (X) wh V S aux (X) wh V aux S (X)	wh aux S V (X) aux S V (X) wh aux V (X) wh aux V S (X) wh aux aux V S (X) wh aux S aux V (X) aux S O V (X) wh aux aux V (X) aux S aux V (X) wh aux S O V (X) wh aux S (X)	wh do S V (X) do S V (X) wh do S aux V (X) wh do V S (X) wh do V (X) wh do S cop (X) do S aux V (X) do V S (X) wh do S cop (X) wh do S O V (X) do S do V (X)
types sorted according to frequency					

Cop inversion shares two interrelations with the other categories in the acquisitional hierarchy, i.e. *fragments* and *no inversion*. This can be rationalised in terms of the markedness value: *cop inversion* is the least marked category; no other structure needs to be mastered before the acquisition of this category, whereas *non-inverted* usage of *cop inversion* is, by coincidence, the realization of a declarative with a copula verb.

Diagram 4.36: interrelations in the acquisitional hierarchy



No inversion shares interrelations with almost all the other categories of the acquisitional hierarchy. This again can be accounted for in terms of its markedness value. For those categories higher up on the acquisitional hierarchy, *no inversion* is a means of mastering these more marked categories, whereas for those categories lower down the acquisitional hierarchy, i.e. *cop inversion*, it is not a developmental stage, but the realization of a declarative with a copula verb.

The interrelations that *verb inversion* shares can again be explained by its markedness value: it is a developmental stage necessary in the acquisition of those stages higher on the acquisitional hierarchy. The relation between *verb inversion* and *no inversion* can be explained in two ways. On the one hand, *non-inverted yes/no* questions with rising intonation with all verb types are a possible means of question formation and, on the other hand, *verb inversion* is the next developmental step in the acquisitional hierarchy.

Aux inversion shares relations with all categories but *cop inversion*. Those relations that *aux inversion* shares with the lesser marked *no inversion* and *verb inversion* can be explained by the acquisitional hierarchy. *No inversion* and *verb inversion* are necessary steps in the acquisition of *aux inversion*. When looking at two of the types that were produced in the category *aux inversion*, i.e. *wh aux S V (X)* and *aux S V (X)*, some interesting insights into the relation between *aux inversion* and *do-support* are provided. Some of the subtypes

belonging to the two types were realised as interrogatives like the following, where clearly the inflectional morpheme on the main verb was not produced:

Has Bruno see Mel? (Emma-EII-TI.a-18)
What were Fergus and Arlo do by "dog ate my homework" alibis for one biscuit? (Lucy-EIII-TIII-23)

With other interrogatives, that were classified as belonging to the above mentioned subtypes the explanation is not as straightforward. Examples like the following can be explained in two ways: either the learner has forgotten to produce the inflectional morpheme of the main verb, which is a possible explanation for the examples chosen from the unstructured tasks, or, in the structured tasks, the omission of the inflectional morpheme on the main verb can also be a sign that the error is not the omitted morpheme, but that the operator that was chosen is the source of the error.

Is Fergus and Alonzo … look after Mel? (Mary-EII-TI.a-6)
Is Fergus know Arlo? (Vicky-EI-TI.a-6)
What is Mel open? (Ane-EII-TII-2)
What is Mel try to ignore? (Becky-EII-TII-18)
What are passers-by always assume? (Sam-EII-TIII-17)

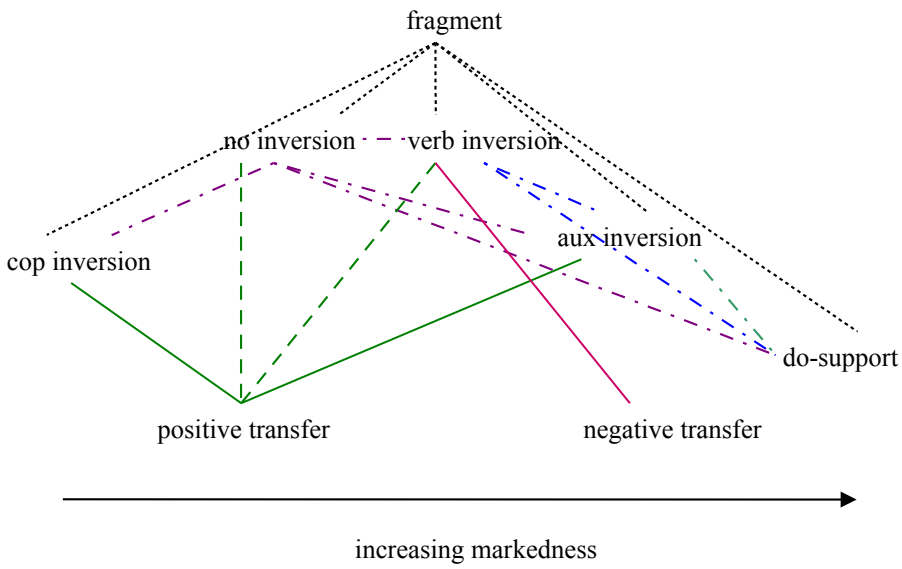
While acquiring *do-support*, the learner does not only have to master inversion, but also the insertion of an operator. At the beginning of this acquisitional process, the chosen operator is not necessarily *do*, it can also be any other auxiliary. In some of the examples above, this is the case: the learner has mastered the insertion of an operator, though not the correct one. The insertion of *do* instead of a randomly chosen *aux* needs to be mastered. Therefore, what sometimes looks like an interrogative with *aux inversion* with omitted inflectional morphemes on the main verb is in some cases a step in the acquisition of *do-support*.

The relations that *do-support* shares with the other categories, all of which are lower down the acquisitional hierarchy, are all purely developmental. All previous stages are necessary steps in the mastering of *do-support*. First, *no inversion* with both *yes/no* and *wh*-questions is employed, then the main verb is inverted with the subject. When the learner has realised that inversion is

necessary, specifically, inversion of an inserted operator, the wrong operator is sometimes chosen before, as a final step, the correct operator *do* is inserted and then inverted. After this the learner needs to master that the operator *do* and not the main verb is encoded for both tense and number.

The following Diagram 4.37 *below* is a summary of the results discussed above.

Diagram 4.37: revised model



The following *Table 4.82 below* is a revised version of Wode's (1978a) developmental stages (cf. *Table 2.3 above*). It provides a general overview of the major substages of each developmental stage for the acquisition of simple interrogatives in guided SLA, omitting minor substages or the postulation of any order of emergence of the attested types described in *Table 4.81 above*.

Table 4.82: revised developmental stages for questions

***fragment* in *yes/no* and *wh*-questions**	
- elliptical versions of all other categories are employed to further communication	*Why the igloo damaged?* (Paul-EI-TI.b-25) *And ask for Mel?* (Vicky-EII-I.a-24) *He really happy?* (Ane-EI-TI.a-52)
- correct usage of ellipsis	*Same story?* (Alec-EIII-TIa-27) *To kill him?* (Meg-EIII-TI.a-55)
- concord is obeyed	*And did he?* (Alex-EIII-TI.a-8) *Has Fergus?* (Karin-EII-TI.a-27)

***cop inversion* in *yes/no* and *wh*-questions – Stage I**

- interrogatives with any cop, sometimes with double verbal elements
  - *Are they are on the North Pole?* (Hazel-EI-TI.a-8)
  - *For what is Maggie is annoyed by?* (Mary-EIII-TII-13)
- correct word order
  - *Why … why are Fergus so happy?* (Emma-EII-TI.b-30)
- concord is obeyed
  - *What wasn't the homework?* (Dawn-EIII-TIII-14)
  - *Who is that?* (Ane-EII-TI.b-10)

***no inversion* in *yes/no* and *wh*-questions with all verb types – Stage II**

- non-inverted interrogatives with partly incorrect word order and incomplete inflectional morphology, but rising intonation
  - *Why he get lost?* (Paul-EII-TI.b-14)
  - *For what she was looking?* (Cathy-EIII-TIII-10)
  - *And it's talk to the right turkey?* (Emma-EIII-TI.a-25)
  - *It's only for animals?* (Becky-EI-TI.a-7)
  - *Where burial all three stand after each?*
  - *But this dog do works in?* (Erin-EI-TI.a-23)
- concord is obeyed
  - *Why he takes a bone?* (Fay-EI-TI.b-13)
  - *And Bruno carries this cat?* (Alec-EII-TI.a-21)

***verb inversion* in *yes/no* and *wh*-questions – Stage III**

- inversion of verb instead of aux
  - *How much … how many passed they have their house already?* (Nell-EI-TII-23)
- inversion of main verbs
  - *What say he?* (Paul-EI-TI.b-19)
  - *Find Fergus a friend?* (Paul-EII-TI.a-7)
  - *What says he?* (Cathy-EIII-TI.b-21)
- concord is obeyed
  - *Have they a quarrel?* (Dawn-EIII-TI.a-8)
  - *What did Fergus and Mel?* (Matt-EI-TII-4)

***aux inversion* in *yes/no* and *wh*-questions – Stage IV**

- aux-subject inversion, partly with
  a. incorrect word order
  b. double aux
  c. incomplete/incorrect inflectional morphology
  - *What is Fergus her telling?* (Nell-EIII-TIII-14)
  - *What are Fergus and Mel are doing?* (Zoe-EI-TII-4)
  - *Where is listen to Mel when he is reading what is written on the piece of paper?* (Mary-EI-TIII-18)
  - *What is pops out of the hole?* (Becky-EI-TIII-14)
- concord is obeyed
  - *Has Bruno see Mel?* (Emma-EII-TI.a-18)
  - *Is Fergus know Arlo?* (Vicky-EI-TI.a-6)
- all verbal morphemes are produced
  - *What could be bought in that store?* (Nick-EII-TIII-2)
  - *Is the man calling someone?* (Ane-EI-TI.a-3)
  - *What was Maggie looking for?* (Larry-EIII-TIII-10)

***do-support* with main verbs in *yes/no* and *wh*-questions – Stage V**

- insertion of two and inversion of one operator
  - *What does the library should have by his meaning?* (Lucy-EIII-TII-16)
  - *Does the bird is uninterested?* (Cathy-EIII-TI.a-6)
  - *Does he have invite them?* (Ian-EIII-TI.a-33)
  - *Does the man did said in this picture that dogs can't open boxes because they're stand on four feets normally?* (Erin-EI-TI.a-49)
- insertion and inversion of operator
  - *Is Fergus know Arlo?* (Vicky-EI-TI.a-6)
  - *What are passers-by always assume?* (Sam-EII-TIII-17)
- insertion of *do* and inversion of VP
  - *And does believe the police officer in him?* (Cathy-EII-TI.a-27)
  - *Doesn't know Mel what to do?* (Sam-EII-TI.a-7)
  - *What does the instructions don't tell you?* (Ivy-EI-TII-10)
- insertion and inversion of *do* as operator
  - *Where do Maggie plans to go to?* (Dawn-EIII-TII-5)
  - *Do he has a good idea?* (Ivy-EIII-TI.a-7)

- tense and number are encoded on inverted operator *do*	*Does they search together?* (Cathy-EII-TI.a-11) *And they ... does they discuss?* (Joyce-EII-TI.a-11) *What does Fergus found?* (Kevin-EIII-TII-22) *Did they stand on a field?* (Matt-EIII-TI.a-3)
- concord is obeyed	*What does Fergus hate?* (Nick-EII-TII-10) *And why did they do that?* (Kevin-EIII-TI.b-36)

Learners move along the substages of each developmental stage of the above described developmental sequence as long as the acquisitional process continues. It is nevertheless possible that even while having moved to the next higher stage, not all rules of the previous substage/stage are acquired completely, leading to gaps in the developmental hierarchy, so that errors in a less marked stage are still produced (cf. *2.2.5 above*).

5. Statistics

After having described the data in *4.1* and *4.2 above,* pointing out production differences, I take at look at whether these differences are statistically significant.

5.1 t-tests

I use one-tailed matched *t*-tests to compare the means of interrogatives judged as tasklike that were produced during the whole study for each question type and task type individually. With the *t*-tests, I aim to show whether a significant difference exists between the amount of tasklike unstructured *yes/no* and *wh*-questions and whether a significant difference exists between the amount of tasklike structured oral and written questions in interrogatives with *cop inversion*, *aux inversion* and *do-support*.

5.1.1 SEA

In the following part, I consider interrogatives judged as tasklike by the SEA. I show whether, in the unstructured tasks, the amount of tasklike *yes/no* questions significantly differs from the amount of tasklike *wh*-questions; and, whether in the written tasks, the amount of tasklike oral *wh*-questions significantly differs from the amount of tasklike written *wh*-questions. Since only questions with *cop inversion*, *aux inversion* or *do-support* are potentially tasklike (cp. *4.2 above*), only these are considered.

I therefore posit the following hypotheses:

- $H_{1\text{-}t1}$: The question type, i.e. *yes/no* vs. *wh*-questions, significantly influences the rate of the interrogatives that were judged as tasklike by

the SEA in the unstructured tasks. More correct interrogatives are produced with *wh*-questions.

- $H_{0\text{-}t1}$: The question type, i.e. *yes/no* vs. *wh*-questions, does not significantly influence the rate of the interrogatives that were judged as tasklike.

and

- $H_{1\text{-}t2}$: The medium, i.e. oral vs. written, significantly influences the rate of the interrogatives that were judged as tasklike by the SEA. More correct interrogatives are produced in the written tasks.
- $H_{0\text{-}t2}$: The medium does not significantly influence the rate of the interrogatives that were judged as tasklike.

Table 4.44 above gives the proportional rates of interrogatives judged as tasklike by the SEA.

The results in *Table 5.1 below* show that although there is a difference in the rates of interrogatives judged as tasklike by the SEA, none of these differences are statistically significant (Hatch & Farhady 1982: 108-127; 272).

Table 5.1: results matched t-test – SEA

unstructured questions	**structured questions**
$t_{unstr.\ cop}$ (17) = 1.5, p <.2 $t_{unstr.\ aux}$ (17) = -1.15 $t_{unstr.\ do}$ (11) = 1.82, p <.1	$t_{str.\ cop}$ (17) = 1.52, p <.2 $t_{str.\ aux}$ (17) = 1.71, p <.2 $t_{str.\ do}$ (15) = 1.91, p <.1

In the unstructured tasks, more tasklike *yes/no* than *wh*-questions were produced with *aux inversion*, whereas for *cop inversion* and *do-support* more tasklike interrogatives were produced with *wh*-questions. The results allow a rejection of $H_{0\text{-}t1}$ for interrogatives that are formed with *cop inversion* and *do-support*, while for *aux inversion* $H_{0\text{-}t1}$ cannot be rejected, though none of the results are highly statistically significant.

In the structured tasks, more correct written interrogatives were produced in all three categories. Although the results allow a rejection of $H_{0\text{-}t2}$ for all three categories, the results are not highly statistically significant.

5.1.2 SEA$^+$

In the following analysis, I compare the means of interrogatives judged as tasklike by the SEA$^+$ that were produced in all structured tasks for each of the three categories.

I therefore posit the following hypotheses:

- $H_{1\text{-}t3}$: The medium, i.e. oral vs. written, significantly influences the rate of the interrogatives that were judged as tasklike by the SEA$^+$. More correct interrogatives are produced in the written tasks.
- $H_{0\text{-}t3}$: The medium does not significantly influence the rate of the interrogatives that were judged as tasklike by the SEA$^+$.

Table 4.45 above gives the proportional rates of interrogatives judged as tasklike by the SEA$^+$.

Table 5.2: results matched t-test – SEA$^+$

structured questions
$t_{str.\ cop}$ (17) = 1.66, p <.2 $t_{str.\ aux}$ (17) = -0.21 $t_{str.\ do}$ (17) = 1.67, p <.2

The results of the matched *t*-tests (*Table 5.2*) show that if the factor 'appropriateness' or 'successfully elicited' is included in the analysis, the $H_{0\text{-}t3}$ can only be rejected for written questions produced with *cop inversion* and *do-support*, but not for interrogatives produced with *aux inversion*. Although the $H_{0\text{-}t3}$ can be rejected for *cop inversion* and *do-support*, the results are not highly statistically significant.

5.1.3 EA

In the following part, I consider interrogatives judged as tasklike by the EA. I show whether, in the unstructured tasks, the amount of tasklike *yes/no* questions

significantly differs from the amount of tasklike *wh*-questions; and, whether in the written tasks, the amount of tasklike oral *wh*-questions significantly differs from the amount of tasklike written *wh*-questions. Since only questions with *cop inversion*, *aux inversion* or *do-support* are potentially tasklike (cp. *4.2 above*), only these are considered.

I therefore posit the following hypotheses:

- $H_{1\text{-}t4}$: The question type, i.e. *yes/no* vs. *wh*-questions, significantly influences the rate of the interrogatives that were judged as tasklike by the EA in the unstructured tasks. More correct interrogatives are produced with *wh*-questions.
- $H_{0\text{-}t4}$: The question type, i.e. *yes/no* vs. *wh*-questions, does not significantly influence the rate of the interrogatives that were judged as tasklike by the EA in the unstructured tasks.

and

- $H_{1\text{-}t5}$: The medium, i.e. oral vs. written, significantly influences the rate of the interrogatives that were judged as tasklike by the EA. More correct interrogatives are produced in the written tasks.
- $H_{0\text{-}t5}$: The medium does not significantly influence the rate of the interrogatives that were judged as tasklike by the EA.

Table 4.47 above gives the proportional rates of interrogatives that were judged as tasklike by the EA.

The results in *Table 5.3 below* show that although there is a difference in the rates of interrogatives judged as tasklike, none of these differences are statistically significant for unstructured questions. Only for one category in structured questions, i.e. *do-support*, a significant result is verifiable (Hatch & Farhady 1982: 108-127; 272).

In the unstructured tasks, more interrogatives judged as tasklike by the EA were produced with *cop inversion* with *yes/no* than *wh*-questions, whereas for *aux inversion* and *do-support* more tasklike interrogatives were produced with *wh*-questions. The results again allow a rejection of $H_{0\text{-}t4}$ only for interrogatives

formed with *cop inversion*. For both *aux inversion* and *do-support* the $H_{0\text{-}t4}$ cannot be rejected. None of the results are statistically significant.

Table 5.3: results matched t-test – EA

unstructured questions	**structured questions**
$t_{unstr.\ cop}$ (17) = -0.53	$t_{str.\ cop}$ (17) = 1.03
$t_{unstr.\ aux}$ (17) = 1.72, p <.2	$t_{str.\ aux}$ (17) = 1
$t_{unstr.\ do}$ (11) = 0.55	**$t_{str.\ do}$ (15) = 3.86, p <.01**

In the structured tasks, more tasklike written interrogatives were produced in all three categories. Though the results allow a rejection of $H_{0\text{-}t5}$ for all three categories, the results are not statistically significant for interrogatives produced with *cop inversion* or *aux inversion*. For structured questions with *do-support*, this difference is significant, $t_{str.\ do}$ (15) = 3.86, p <.01.

5.1.4 EA$^+$

In the following *t*-test, I compare the means of the structured interrogatives that were judged tasklike by the EA$^+$.

I therefore posit the following hypotheses:

- $H_{1\text{-}t6}$: The medium, i.e. oral vs. written, significantly influences the rate of the interrogatives that were judged as tasklike by the EA$^+$. More correct interrogatives are produced in the written tasks.
- $H_{0\text{-}t6}$: The medium does not significantly influence the rate of the interrogatives that were judged as tasklike by the EA$^+$.

Table 4.48 above gives the proportional rates of interrogatives that were judged as tasklike by the EA$^+$.

The results *Table 5.4 below* show that, if appropriateness is included in the analysis, more tasklike written interrogatives were produced with *cop inversion* and *do-support*; for these two categories the $H_{0\text{-}t6}$ can be rejected. The result is statistically significant only for interrogatives produced with *do-support*, $t_{str.\ do}$ (15) = 4.69, p <.001.

Table 5.4: results matched t-test – EA$^+$

structured questions
$t_{str.\ cop}$ (17) = 1.31, p <.2
$t_{str.\ aux}$ (17) = -0.16
$t_{str.\ do}$ (15) = 4.64, p <.001

When *aux inversion* was produced more correct interrogatives were produced in the oral tasks, therefore the $H_{0\text{-}t6}$ cannot be rejected.

5.1.5 EA – Unstructured vs. Structured *wh*-questions

In the following analysis, I consider interrogatives judged as tasklike by the EA. I show whether a significant different exists between the amount of tasklike unstructured and structured *wh*-questions. I only compare *wh*-questions because in *5.1.3 above* I have shown that no significant difference in correctness between *yes/no* and *wh*-questions exists. Again, I only consider questions with *cop inversion*, *aux inversion* or *do-support*.

I posit the following hypotheses:

- $H_{1\text{-}t7}$: The task type, i.e. oral unstructured vs. oral structured, significantly influences the rate of the interrogatives that were judged as tasklike by the EA. More tasklike interrogatives are produced in the unstructured tasks.
- $H_{0\text{-}t7}$: The task type, i.e. oral unstructured vs. oral structured, does not significantly influence the rate of the interrogatives that were judged as tasklike by the EA.

and

- $H_{1\text{-}t8}$: The task type, i.e. oral unstructured vs. written structured, significantly influences the rate of the interrogatives that were judged as tasklike by the EA. More correct interrogatives are produced in the unstructured tasks.

- $H_{0\text{-}t8}$: The task type, i.e. oral unstructured vs. written structured, does not significantly influence the rate of the interrogatives that were judged as tasklike by the EA.

Table 4.47 above gives the proportional rates of interrogatives that were judged as tasklike by the EA.

The results in *Table 5.5 below* show that although there are differences in the rates of tasklike interrogatives that can be related to the task type, i.e. unstructured vs. structured, none of these differences are highly statistically significant for both unstructured *wh*-questions vs. structured oral *wh*-questions and unstructured *wh*-questions vs. structured written questions (Hatch & Farhady 1982: 108-127; 272).

Table 5.5: results matched t-test – EA unstructured vs. structured wh-Qs

unstr. wh- vs. oral str. wh-questions	**unstr. wh- vs. written str. wh-questions**
$t_{\text{unstr. vs. oral str. cop}}$ (17) = 1.83, p <.01 $t_{\text{unstr. vs. oral str. aux}}$ (17) = -0.9 $t_{\text{unstr. vs. oral str. do}}$ (11) = 0.12	$t_{\text{unstr. vs. written str. cop}}$ (17) = 0.7 $t_{\text{unstr. vs. written str aux}}$ (17) = -1.28 $t_{\text{unstr. vs. written str do}}$ (12) = -1.91, p <.1

In the unstructured tasks, more oral unstructured *wh-questions* were judged as tasklike by the EA than oral structured *wh*-questions with *cop inversion* and *do-support*, whereas for *aux inversion* more interrogatives were judged as tasklike by the EA in oral structured *wh*-questions. The results again allow only a rejection of $H_{0\text{-}t7}$ for interrogatives that are formed with *cop inversion*. For both *aux inversion* and *do-support* $H_{0\text{-}t7}$ cannot be rejected.

A comparison of oral unstructured *wh*-question and written structured *wh*-questions shows that again more tasklike unstructured *wh*-questions than written structured *wh*-questions were produced with *cop inversion*, whereas for *aux inversion* and *do-support* interrogatives judged as correct by the EA were produced in written structured *wh*-questions. The results allow a rejection of $H_{0\text{-}t8}$ only for interrogatives that are formed with *cop inversion*. For both *aux inversion* and *do-support* the $H_{0\text{-}t7}$ cannot be rejected.

5.1.6 Correctly Elicited and Tasklike Interrogatives

In the following *t*-test, I compare the means of the structured interrogatives that were judged as correctly elicited and tasklike for each category. The difference between the following analysis and the analysis in *5.1.4 above* is that the following analysis includes only those interrogatives that were correctly triggered, i.e. judged as tasklike by the EA^+, whereas the analysis in *5.1.4* considers all interrogatives that were produced in one of the following three categories: *cop inversion*, *aux inversion*, and *do-support*.

I therefore posit the following hypotheses:

- $H_{1\text{-}t9}$: The medium, i.e. oral vs. written, significantly influences the rate of correctly elicited and tasklike interrogatives. More correctly elicited and tasklike interrogatives are produced in the written tasks.
- $H_{0\text{-}t9}$: The medium does not significantly influence the rate of correctly elicited and tasklike interrogatives.

Table 4.53 above gives the proportional rates of interrogatives judged as tasklike by the EA^+.

The results in *Table 5.6 below* show that more written interrogatives than oral interrogatives were produced that are both successfully elicited and tasklike in all three categories.

Table 5.6: results matched t-test – correctly elicited and tasklike

structured questions
$t_{str.\ cop}$ (17) = 0.58
$t_{str.\ aux}$ (17) = 0.92
$t_{str.\ do}$ (15) = 9.4, p<.001

Therefore, $H_{0\text{-}t9}$ can be rejected, although this difference is only statistically significant when *do-support* was supposed to be elicited, $t_{str.\ do}$ (15) = 9.4, p <.001.

5.2 Correlations

I use Pearson's Correlation Analysis (Hatch & Farhady 1982: 192-231; 277) to test if significant correlations exist between time, i.e. years of training in English, and a number of other variables discussed below.

5.2.1 SEA

In the following Pearson's Correlation Analysis, I relate the time each group has been taught English to the number of interrogatives judged as tasklike by the SEA for unstructured *yes/no* and *wh*-questions and oral and written structured interrogatives with *cop inversion*, *aux inversion*, and *do-support*.

I therefore posit the following hypotheses:

- $H_{1\text{-}r1}$: The rate of the interrogatives that were judged as tasklike by the SEA does not significantly correlate with the time that each group has been taught English for each category respectively in both unstructured and structured tasks.
- $H_{0\text{-}r1}$: The rate of the interrogatives that were judged as tasklike by the SEA significantly correlates with the time that English has been taught for each question type.

In *Table 3.1 above* the time each participant has received English teaching is given, from which the mean rates of English training for each group can be calculated, and *Table 4.44 above* gives the proportional rates of interrogatives judged as tasklike by the SEA.

The results in *Table 5.7 below* show that $H_{0\text{-}r1}$ can be rejected for all unstructured questions with the exception of unstructured *wh*-questions with *aux inversion*, $r_{wh\ aux}$ df(16) = 0.54, p<.05, (Hatch & Farhady 1982: 192-231; 277). For all the other unstructured question types no correlation between interrogatives judged as correct by the SEA and the time English has been taught can be shown

to exist for interrogatives that were formed with *cop inversion*, *aux inversion* or *do-support* in unstructured *yes/no* questions and for *cop inversion*, and *do-support* in unstructured *wh*-questions.

Table 5.7: results Pearson's Correlation Analysis – unstructured SEA

yes/no questions	**wh-questions**
$r_{y/n\ cop}$ df(16) = 0.24	$r_{wh\ cop}$ df(16) = no correlation computable
$r_{y/n\ aux}$ df(16) = 0	$r_{wh\ aux}$ df(16) = 0.54, p<.05
$r_{y/n}$ df(14) = no correlation computable	$r_{wh\ do}$ df(12) = no correlation computable

The results in *Table 5.7* and *Table 5.8 below* show that $H_{0\text{-}r1}$ can be rejected for all structured questions (Hatch & Farhady 1982: 192-231; 277).

Table 5.8: results Pearson's Correlation Analysis – structured SEA

oral questions	**written questions**
$r_{or.\ cop}$ df(16) = 0.18	$r_{wr.\ cop}$ df(16) = 0.01
$r_{or.\ aux}$ df(16) = 0.28	$r_{wr.\ aux}$ df(16) = 0.21
$r_{or.\ do}$ df(15) = no correlation computable	$r_{wr.\ do}$ df(15) = no correlation computable

No correlation between structural correctness and the time English has been taught can be shown to exist for interrogatives that were formed with *cop inversion*, *aux inversion* or *do-support* in both oral and written structured tasks.

5.2.2 SEA$^+$

In the following Pearson's Correlation Analysis, I relate the time each group has been taught English to the number interrogatives judged as tasklike by the SEA$^+$ for oral and written structured interrogatives with *cop inversion*, *aux inversion*, and *do-support*.

I therefore posit the following hypotheses:

- $H_{1\text{-}t2}$: The rate of the interrogatives that were judged as tasklike in the SEA$^+$ does not significantly correlate with the time that each group has been taught English for each question type respectively.

- $H_{0\text{-}t2}$: The rate of the interrogatives that were judged as tasklike in the SEA^{+} significantly correlates with the time that English has been taught for each question type.

In *Table 3.1 above* the time each participant has received English teaching is given, from which the mean rates of English training for each group can be calculated, and *Table 4.45 above* gives the proportional rates of interrogatives judged as tasklike by the SEA^{+}.

Table 5.9: results Pearson's Correlation Analysis – structured SEA^{+}

oral questions	**written questions**
$r_{or.\ cop}$ df(16) = 0.17	$r_{wr.\ cop}$ df(16) = 0.32
$r_{or.\ aux}$ df(16) = 0.02	$r_{wr.\ aux}$ df(16) = 0.12
$r_{or.\ do}$ df(15) = no correlation computable	**$r_{wr.\ do}$ df(15) = -0.94, p<.01**

The results in *Table 5.9 above* show that $H_{0\text{-}t2}$ can be rejected for all oral structured questions and for written structured questions with *cop inversion* and *aux inversion* (Hatch & Farhady 1982: 192-231; 277); however, for written structured interrogatives with *do-support* $H_{0\text{-}t2}$ cannot be rejected, $r_{wr.\ do}$ df(15) = -0.94, p<.01.

5.2.3 EA

In the following Pearson's Correlation Analysis, I relate the time each group has been taught English to the number of interrogatives that were judged as tasklike by the EA.

I therefore posit the following hypotheses:

- $H_{1\text{-}r3}$: The rate of the interrogatives that were judged as tasklike by the EA does not significantly correlate with the time that each group has been taught English for each question type respectively in both unstructured and structured tasks.

- $H_{0\text{-}r3}$: The rate of the interrogatives that were judged as tasklike by the EA significantly correlates with the time that English has been taught for each question type.

In *Table 3.1 above* the time each participant has received English teaching is given, from which the mean rates of English training for each group can be calculated, and *Table 4.47 above* gives the proportional rates of interrogatives judged as tasklike by the EA.

The results in *Table 5.10 below* show that $H_{0\text{-}r3}$ can be rejected for unstructured *yes/no* and *wh*-questions with *aux inversion*, and *do-support*, (Hatch & Farhady 1982: 192-231; 277). For *yes/no* and *wh*-questions formed with *cop inversion* $H_{0\text{-}r3}$ cannot be rejected, $r_{y/n\ cop}$ df(16) = 0.44, p<.1 and $r_{wh\ cop}$ df(16) = 0.47, p<.05. Therefore, at least for unstructured interrogatives with *cop inversion*, a correlation exists between the rate of questions judged as tasklike by the EA and the time that each group has been taught English.

Table 5.10: results Pearson's Correlation Analysis – unstructured EA

yes/no questions	**wh questions**
$r_{y/n\ cop}$ df(16) = 0.44, p<.1	**$r_{wh\ cop}$ df(16) = 0.47, p<.05**
$r_{y/n\ aux}$ df(16) = 0.36	$r_{wh\ aux}$ df(16) = 0.24
$r_{y/n\ do}$ df(14) = no correlation computable	$r_{wh\ do}$ df(12) = no correlation computable

The results in Table 5.11 *below* show that $H_{0\text{-}r3}$ can be rejected for both oral and written structured questions with *cop inversion*, *aux inversion*, and *do-support*, (Hatch & Farhady 1982: 192-231; 277).

Table 5.11: results Pearson's Correlation Analysis – structured EA

oral questions	**written questions**
$r_{or.\ cop}$ df(16) = 0.21	$r_{wr.\ cop}$ df(16) = 0.1
$r_{or.\ aux}$ df(16) = 0.33	$r_{wr.\ aux}$ df(16) = 0.34
$r_{or.\ do}$ df(15) = 0	$r_{wr.\ do}$ df(15) = 0.37

Consequently, no correlation exists between the rate of questions judged as tasklike by the EA and the time each group has been taught English.

5.2.4 EA$^+$

In the following Pearson's Correlation Analysis, I relate the time each group has been taught English to the number interrogatives that were judged as tasklike by the EA$^+$.

I therefore posit the following hypotheses:

- $H_{1\text{-}t4}$: The rate of the interrogatives that were judged as tasklike in the EA$^+$ does not significantly correlate with the time that each group has been taught English for each question type respectively.
- $H_{0\text{-}t4}$: The rate of the interrogatives that were judged as tasklike in the EA$^+$ significantly correlates with the time that English has been taught for each question type.

In *Table 3.1 above* the time of English teaching each participant has received is given; from this the mean rates of English training for each group can be calculated. *Table 4.48 above* gives the proportional rates of interrogatives judged as tasklike by the EA$^+$

Table 5.12: results Pearson's Correlation Analysis – structured EA$^+$

oral questions	**written questions**
$r_{or.\ cop}$ df(16) = 0.17	$r_{wr.\ cop}$ df(16) = 0.38
$r_{or.\ aux}$ df(16) = 0.03	$r_{wr.\ aux}$ df(16) = 0.12
$r_{or.\ do}$ df(15) = 0.02	$r_{wr.\ do}$ df(15) = 0.23

The results in *Table 5.12 above* show that $H_{0\text{-}r4}$ can be rejected for both oral and written structured questions with *cop inversion*, *aux inversion*, and *do-support*, (Hatch & Farhady 1982: 192-231; 277). As a result, no correlation exists between the rate of questions judged as tasklike by the EA$^+$ and the time that each group has been taught English.

5.2.5 Subtype-token Relations

In the following Pearson's Correlation Analyses, I relate the time each group has been taught English to a variety a subtype-token relations.

5.2.5.1 Subtype-token Relation

In the following Pearson's Correlation Analysis, I relate the time each group has been taught English to the ratio 'produced subtypes/produced tokens' in *cop inversion*, *aux inversion*, and *do-support* respectively for unstructured *yes/no* and *wh*-questions and oral and written structured.

I therefore posit the following hypotheses:

- $H_{1\text{-}t5}$: The ratio 'produced subtypes/produced tokens' in a category does not significantly correlate with the time that each group has been taught English for each question type respectively.
- $H_{0\text{-}t5}$: The ratio 'produced subtypes/produced tokens' in a category significantly correlates with the time that each group has been taught English for each question type respectively.

In *Table 3.1 above* the time each participant has received English teaching is given; from this table the mean rates of English training for each group can be calculated. *Table 5.13 below* shows the proportional rates.

Table 5.13: subtype-token relation

	E	cop inversion				aux inversion				do-support			
		unstructured		structured		unstructured		structured		unstructured		structured	
		y/n	wh	or.	wr.	y/n	wh	or.	wr.	y/n	wh	or.	wr.
group 1	I	0.07	0.11	0.33	0.33	0.55	0.44	0.16	0.18	Ø	1	1	Ø
	II	0.11	0.33	0.5	0.14	0.16	0.75	0.27	0.14	0.4	Ø	1	0.4
	III	0.1	0.27	0.5	1	0.38	0.39	0.18	0.14	0.44	Ø	0.22	0.56
group 2	I	0.09	0.33	0.5	0.14	0.63	0.86	0.19	0.17	0.57	0.67	0.6	0.27
	II	0.09	0.29	0.67	0.13	0.43	0.38	0.17	0.19	0.25	0.19	0.5	0.33
	III	0.05	0.17	0.18	0.5	0.5	0.57	0.28	0.22	0.3	0.37	0.16	0.16
group 3	I	0.19	0.22	0.5	0.08	0.75	1	0.11	0.1	0.23	0.29	0.26	0.17
	II	0.08	0.09	0.33	0.07	0.2	0.29	0.14	0.16	0.2	0.23	0.2	0.17
	III	0.05	0.25	0.27	1	0.3	0.13	0.13	0.08	0.24	0.45	0.17	0.18

continued overleaf

	E	cop inversion				aux inversion				do-support			
		unstructured		structured		unstructured		structured		unstructured		structured	
		y/n	wh	or.	wr.	y/n	wh	or.	wr.	y/n	wh	or.	wr.
group 4	I	0.11	0.08	0.33	0.11	0.31	0.1	0.09	0.11	0.45	0.21	0.2	0.12
	II	0.06	0.17	0.33	0.09	0.13	0.06	0.12	0.1	0.21	0.19	0.16	0.15
	III	0.04	0.13	0.17	0.4	0.12	0.14	0.12	0.06	0.27	0.17	0.1	0.12
group 5	I	0.18	0.29	0.5	0.29	1	0.4	0.29	0.24	1	Ø	1	0.5
	II	0.25	0.14	0.5	0.29	0.57	0.25	0.3	0.3	Ø	0.5	0.38	0.33
	III	0.15	0.67	0.67	0.5	0.83	1	0.43	0.32	1	Ø	Ø	0.67
group 6	I	0.08	0.18	0.33	0.18	0.7	0.43	0.22	0.1	0.45	0.31	0.32	0.19
	II	0.1	0.09	0.33	0.17	0.23	0.17	0.16	0.2	1	0.38	0.28	0.17
	III	0.17	0.5	0.5	1	0.22	0.5	0.17	0.18	0.33	0.33	0.11	0.17
Ø: no questions produced in this category													

The results in *Table 5.14 below* show that $H_{0\text{-}r5}$ can be rejected for both *yes/no* and *wh*-questions in the unstructured tasks with *cop inversion*, *aux inversion*, and *do-support*, (Hatch & Farhady 1982: 192-231; 277). Consequently, no correlation exists for any of the unstructured questions between the ratio of 'produced subtypes/produced tokens' in a category and the time that each group has been taught English.

Table 5.14: subtype-token – general unstructured questions

yes/no questions	**wh questions**
$r_{y/n\ cop}$ df(16) = 0.32	$r_{wh\ cop}$ df(16) = 0.16
$r_{y/n\ aux}$ df(16) = 0.04	$r_{wh\ aux}$ df(16) = -0.26
$r_{y/n\ do}$ df(14) = -0.19	$r_{wh\ do}$ df(12) = no correlation computable

The results in *Table 5.15 below* show that $H_{0\text{-}r5}$ can be rejected for both oral structured questions with *cop inversion* and *aux inversion* and for written structured questions with *cop inversion*, *aux inversion* and *do-support*, (Hatch & Farhady 1982: 192-231; 277). For oral structured questions with *do-support* $H_{0\text{-}r5}$ cannot be rejected, $r_{or.\ do}$ df(15) = -0.93, p<.01.

Table 5.15: subtype-token – general structured questions

oral questions	**written questions**
$r_{or.\ cop}$ df(16) = -0.06	$r_{wr.\ cop}$ df(16) = 0.11
$r_{or.\ aux}$ df(16) = 0.16	$r_{wr.\ aux}$ df(16) = 0.19
$r_{or.\ do}$ df(15) = -0.93, p<.01	$r_{wr.\ do}$ df(15) = -0.3

At least for oral structured interrogatives with *do-support*, a correlation exists between the ratio of 'produced subtypes/produced tokens' in a category and the time that each group has been taught English.

5.2.5.2 Subtype-token Relation in Expected Category

In the following Pearson's Correlation Analysis, I relate the time each group has been taught English to the oral and written structured interrogatives that were judged as tasklike by the EA^{+}.

I posit the following hypotheses:

- $H_{1\text{-}t6}$: The ratio 'produced subtypes/produced tokens per expected category' does not significantly correlate with the time that each group has been taught English for each question type respectively.
- $H_{0\text{-}t6}$: The ratio 'produced subtypes/produced tokens per expected category' significantly correlates with the time that each group has been taught English for each question type respectively.

In *Table 3.1 above* the time each participant has received English teaching is given; the mean rates of English training for each group can be calculated from this table. *Table 5.16 below* gives the proportional rates of structurally correct interrogatives.

Table 5.16: subtype-token relation in expected category

	E	expected: cop inversion				expected: aux inversion				expected: do-support			
		unstructured		structured		unstructured		structured		unstructured		structured	
		y/n	wh	or.	wr.	y/n	wh	or.	wr.	y/n	wh	or.	wr.
group 1	I	-	-	0.5	0.33	-	-	0.33	0.25	-	-	0.35	0.27
	II	-	-	0.67	0.33	-	-	0.3	0.19	-	-	0.42	0.25
	III	-	-	0.5	1	-	-	0.25	0.13	-	-	0.19	0.33
group 2	I	-	-	0.33	0.33	-	-	0.25	0.24	-	-	0.38	0.26
	II	-	-	0.83	0.33	-	-	0.24	0.22	-	-	0.31	0.21
	III	-	-	0.25	0.67	-	-	0.4	0.27	-	-	0.15	0.25
group 3	I	-	-	0.33	0.17	-	-	0.27	0.19	-	-	0.35	0.25
	II	-	-	0.67	0.28	-	-	0.21	0.22	-	-	0.25	0.19
	III	-	-	0.33	0.83	-	-	0.29	0.18	-	-	0.13	0.21
group 4	I	-	-	0.44	0.41	-	-	0.2	0.19	-	-	0.23	0.19
	II	-	-	0.67	0.26	-	-	0.2	0.19	-	-	0.19	0.14
	III	-	-	0.13	0.38	-	-	0.24	0.1	-	-	0.08	0.16
group 5	I	-	-	0.33	0.44	-	-	0.43	0.3	-	-	0.53	0.28
	II	-	-	0.67	0.44	-	-	0.42	0.48	-	-	0.31	0.33
	III	-	-	0.75	0.5	-	-	0.5	0.4	-	-	0.17	0.54
group 6	I	-	-	0.6	0.33	-	-	0.42	0.27	-	-	0.4	0.22
	II	-	-	0.5	0.33	-	-	0.36	0.31	-	-	0.33	0.25
	III	-	-	0.5	1	-	-	0.21	0.3	-	-	0.13	0.21
Ø: no questions produced in this category													

The results in *Table 5.17 below* show that $H_{0\text{-}r6}$ can be rejected for oral structured interrogatives with *cop inversion* and *aux inversion* and for written

structured interrogatives with *cop inversion*, (Hatch & Farhady 1982: 192-231; 277). For oral structured questions with *do-support* and for written structured questions with *aux inversion* and *do-support* $H_{0\text{-}r6}$ cannot be rejected, $r_{or.\ do}$ df(15) = -0.87, p<.01; $r_{wr.\ aux}$ df(16) = 0.47, p<.05 and $r_{wr.\ do}$ df(15) = -0.74 p<.01.

Table 5.17: subtype-token relation in expected category

oral questions	**written questions**
$r_{or.\ cop}$ df(16) = 0.03	$r_{wr.\ cop}$ df(16) = 0.11
$r_{or.\ aux}$ df(16) = 0.29	$r_{wr.\ aux}$ df(16) = 0.47, p<.05
$r_{or.\ do}$ df(15) = -0.87, p<.01	$r_{wr.\ do}$ df(15) = -0.74 p<.01

Therefore, at least for oral structured interrogatives with *do-support* and written structured questions with *aux inversion* and *do-support* a correlation exists between the ratio of 'produced subtypes/produced tokens per expected category' and the time that each group has been taught English.

5.2.6 Correctly Elicited Subtypes in Expected Category

In the following Pearson's Correlation Analysis, I relate the time each group has been taught English to the ratio 'produced subtypes/correctly elicited in expected category' of oral and written structured interrogatives that were judged as tasklike by the EA^{+}.

I therefore posit the following hypotheses:

- $H_{1\text{-}t7}$: The ratio 'produced subtypes/correctly elicited in expected category' does not significantly correlate with the time that each group has been taught English for each question type respectively.
- $H_{0\text{-}t7}$: The ratio 'produced subtypes/correctly elicited in expected category' significantly correlates with the time that each group has been taught English for each question type respectively.

From *Table 3.1 above* the mean rates of English training for each group can be calculated. *Table 5.18 below* gives the proportional rates.

Table 5.18: correctly elicited in expected category

	E	expected: cop inversion				expected: aux inversion				expected: do-support			
		unstructured		structured		unstructured		structured		unstructured		structured	
		y/n	wh	or.	wr.	y/n	wh	or.	wr.	y/n	wh	or.	wr.
group 1	I	-	-	0.25	0.25	-	-	0.46	0.56	-	-	0.06	0
	II	-	-	0.5	0.33	-	-	0.8	1	-	-	0.2	0.22
	III	-	-	1	0.33	-	-	0.57	0.75	-	-	0.29	0.42
group 2	I	-	-	0.25	0.17	-	-	0.47	0.46	-	-	0.41	0.21
	II	-	-	0.4	0.17	-	-	0.38	0.5	-	-	0.36	0.4
	III	-	-	0.67	0.5	-	-	0.48	0.5	-	-	0.27	0.33
group 3	I	-	-	0.5	0.33	-	-	0.31	0.3	-	-	0.48	0.5
	II	-	-	0.25	0.2	-	-	0.5	0.42	-	-	0.44	0.43
	III	-	-	0.75	0.6	-	-	0.35	0.27	-	-	0.56	0.73
group 4	I	-	-	0.25	0.18	-	-	0.28	0.33	-	-	0.52	0.43
	II	-	-	0.17	0.29	-	-	0.4	0.47	-	-	0.4	0.6
	III	-	-	1	0.67	-	-	0.56	0.63	-	-	0.38	0.53
group 5	I	-	-	0.5	0.5	-	-	0.38	0.63	-	-	0.16	0.1
	II	-	-	0.5	0.25	-	-	0.57	0.46	-	-	0.27	0.42
	III	-	-	0.67	1	-	-	0.6	0.63	-	-	0	0.23
group 6	I	-	-	0.17	0.4	-	-	0.29	0.25	-	-	0.5	0.31
	II	-	-	0.5	0.25	-	-	0.38	0.45	-	-	0.5	0.42
	III	-	-	1	0.5	-	-	1	0.5	-	-	0.67	0.6
Ø: no questions produced in this category													

The results in *Table 5.19 below* show that $H_{0\text{-}r7}$ can be rejected for oral structured questions for all categories and for written structured questions with *aux inversion* and *do-support*, (Hatch & Farhady 1982: 192-231; 277). For written structured questions with *cop inversion* $H_{0\text{-}r7}$ cannot be rejected, $r_{wr.\ cop}$ df(16) = 0.41, p<.1.

Table 5.19: correctly elicited subtypes – expected category

oral questions	**written questions**
$r_{or.\ cop}$ df(16) = 0.18	$r_{wr.\ cop}$ df(16) = 0.41, p<.1
$r_{or.\ aux}$ df(16) = 0.08	$r_{wr.\ aux}$ df(16) = -0.35
$r_{or.\ do}$ (15) = 0.04	$r_{wr.\ do}$ df(15) = 0.05

Therefore, at least for written structured questions with *cop inversion*, a correlation exists between the ratio of 'produced subtypes/correctly elicited in expected category' in a category and the time that each group has been taught English.

6. Discussion

In the following chapter, I discuss the extent to which the results obtained in the study can give insights into the acquisition of simple interrogative structures in guided SLA.

When looking at the data, a number of errors persistently occur in all 6 categories, i.e. *fragment, cop inversion, no inversion, verb inversion, aux inversion* and *do-support*. Among these are incorrect word order, incomplete verbal and nominal morphology, additional auxiliaries and, although infrequently produced, negation with unanalysed negators.

Of the six categories that I postulated, *cop inversion* is the category where the fewest production problems occurred. If errors occurred, they were rare, indicating that all participants acquired interrogatives with *cop inversion* with both *yes/no* and *wh*-questions. Production problems that occur in this category are not attributable to incomplete rules and should therefore be termed as mistakes rather than as errors.

Of the remaining five categories two categories are not usually employed to produce simple English questions, i.e. *no inversion* and *verb inversion.* With the exception of *non-inverted yes/no* questions, e.g. *Fergus ran away?* (Dawn-EII-TI.a-2); and subject questions with *verb inversion*, e.g. *Who stole the handle?* (Larry-EIII-TI.a-51), questions produced in these categories generally do not lead to targetlike interrogative structures. Areas that generally cause problems in these categories are incorrect word order and nominal and verbal morphology.

Errors in word order that occur in interrogatives with *aux inversion* are for example inversion of whole verb phrase, e.g. *What's shouting the skull?* (Fay- EI-TIII-15); insertion of an object between subject and verb, e.g. *What is Maggie Fergus telling?* (Tessa-EIII-TII-3); repetition or insertion of an additional auxiliary e.g. *What are Fergus and Mel are doing?* (Ruth-EI-TII-4); incongruence between auxiliary and subject, e.g. *Are he sleeping?* (Lucy-EIII-TI.a-22); or omission of inflectional morphemes on main verb, e.g. *Where are they stand?*

(Alice-EI-TIII-17). In some cases, however, the omission of inflectional morphology represents a step in the acquisition of *do-support* where non-production of the inflectional morpheme was intentional (cf. *4.4 above*).

Common errors that occur in questions with *do-support* are for example incorrect word order, e.g. *What does hope Maggie?* (Cathy-EIII-TII-7); additional auxiliaries, e.g. *Do the turkeys have cut the tree?* (Ane-EIII-TI.a-4); incongruence of operator and verbal morphology, e.g. *Where did they sitting?* (Lucy-EII.TIII-18); double tense/number encoding on both *do* and main verb, e.g. *What does Maggie tells Fergus?* (Ian-EIII-TII-3); tense marked on main verb instead on operator, e.g. *What does Mel and Fergus found out?* (Fay-EII-TIII-23); interchangeable usage of *do/does/did*, e.g. *What does Maggie explained?* (Lucy-EIII-TIII-20); or violations of the rule of concord, e.g. *How does Arlo and Mel look?* (Lary-EI-TIII-8).

The last category *fragments* holds a unique position of its own; this category includes elliptical versions of all other categories. Errors produced in the other categories are also produced in *fragments*, though in *fragments* these errors are far less pronounced. Errors that occur with *fragments* include concord, e.g. *And ask for Mel?* (Vicky-EII-TIa-24); or incorrect word order, e.g. *What ... what that for a shop?* (Gary-EI-TI.b-2).

Negation, though rarely produced in the corpus, is nevertheless an interesting case. When a negated interrogative was produced, often a contracted auxiliary and negator such as *can't* or *don't* were additionally inserted into the question instead of attaching the negator to the first auxiliary, e.g. *What does Fergus can't see?* (Cathy-EII-TII-4). This problem should be analysed as '*unanalysed negator*' instead of '*aux+neg/do+neg*'. Additional violations of the rule of concord often occur.

After having looked at recurring problems in question formation, I looked at how task differences influence the occurrence of the above discussed error types. According to Tarone & Parish (1988: 22), the tasks used to gather data influences the participants' IL, and can thus lead to varying accuracy in a learner's performance. This was confirmed my study.

When looking at medium differences the results show that the medium 'written' does influence the rate of correctly produced interrogatives. More correct interrogatives are produced in the written tasks in all three categories; however, only for interrogatives with *do-support* the difference is significant (cf. *5.1.1* and *5.1.3 above*).

The question type in the unstructured tasks, i.e. *yes/no* vs. *wh*-questions, does not significantly influence the rate of correctly produced interrogatives (cf. *5.1.1* and *5.1.3 above*). The production differences that are apparent are not tied to the question type, but rather to whether the question formed employed *cop inversion, aux inversion* or *do-support*.

When comparing the rate of correctly produced *wh*-questions in the unstructured tasks to those that were produced in both oral and written structured tasks, a rather interesting picture evolves (cf. *5.1.5 above*). The participants performed better in the unstructured tasks when *wh*-questions with *cop inversion* were produced. However, with *aux inversion* and *do-support* they performed better in the structured tasks when required to formulate an appropriate question to a given statement. When producing interrogatives for a given set of pictures, i.e. unstructured tasks I.a and I.b, the performance was not as good as it was in the structured tasks, i.e. tasks II and III. More non-targetlike forms with *aux inversion* and *do-support* were produced in the unstructured tasks. The production of fewer tasklike structured *wh*-questions with *cop inversion* can be linked to the trigger sentences, which were very often complex sentences.

Mel and Fergus have just found out that the new furniture set is <u>far too expensive.</u>
Elicitation II – task III-23

Even though the expected interrogative is not a complex question, the complexity of some of the trigger sentences led to incorrect responses, e.g. *What did they've just found out?* (Zoe-EII-TIII-23), while with unstructured *wh*-questions with *cop inversion* each participant could choose freely what information each interrogative sought to answer.

The differences in performance with *aux inversion* and *do-support* depended on how much attention a participant paid to form in a certain task. When the language learner is more focused on the message than on the form,

backsliding to earlier IL forms can occur (Huebner 1983: 45). The more attention was paid to form, e.g. in written tasks, the fewer errors were made. Attention to form is more important if the communicative function of a task is less important, e.g. in grammar exercises. If participants need to communicate in an L2, they have to simplify their grammatical requirements, especially if not sufficiently automated knowledge is used, in order not to produce disconnected output (Meisel, Clahsen & Pienemann 1981: 115). This explains different error rates in the unstructured and structured tasks. In the unstructured tasks, the communicative function of the task was higher. The participants used their IL to achieve the task, i.e. to communicate their thoughts. In the structured tasks, the participants used their IL to achieve the task, i.e. changing declaratives into interrogatives and not to communicate their thoughts. Differing error rates in the structured tasks can be attributed to different processing time. In the written tasks, the participants had more time to monitor their output than they had in the oral tasks. In the unstructured elicitations, the communicative needs were ranked higher than the need to comply with the grammatical requirements of the TL.

The data of my participants show that all participants deemed the need to communicate higher than to be accurate. When communicating, they streamlined their grammar and made it simpler by leaving out things which were not essential for communication, e.g. 3rd person singular *–s* or subject-verb concord. In the structured elicitations, the need to communicate was weaker, so accuracy increased.

Other factors which influence variation in IL are, according to Littlewood (1981: 151), the communicative function of a feature, the linguistic environment of a feature, and social/situational factors such as formality of situation and the ability to attend to form. Looking at these factors, I would judge the communicative function that correct word order has to be much lower than change of intonation or use of interrogative pronouns. The latter communicative functions, use of an interrogative and change of intonation, which were used by all participants, are sufficient to communicate the intended message or to obtain information to complete the task of guessing the underlying story.

I now look at their performance in question formation, basing this on my own English teaching experience. When a learner starts learning English as a L2 in a guided language learning context, this is often done via drills. The learners are drilled to formulate questions following a set pattern and this results in formulaic expressions; the explanation of underlying rules is not part of the curriculum. As long as new structures correspond to the pattern taught, questions are correctly formulated with the occasional mistake occurring. When a situation differs from the learned context, for example the tasks I asked them to complete or in when the learners are in a situation when their ILs are needed as a lingua franca in a non-classroom setting, much of what they have learned so far is streamlined in order to communicate.

Learners with more than one year of English training are theoretically able to ask short questions with *do-support* because by then they have been instructed how to do this. All participants had been learning English for more than one year when the study started. Group 1, with the shortest exposure to English, theoretically know when and how to use *do-support*, but they do so very rarely; however, when they do it, it is usually correct.

Looking at the output of the participants who have been learning English for less than two years, one notices that in both unstructured tasks they predominantly ask questions with the following patterns: *Is he* verb+*ing?, Is this X?* or *Who/what is ...?* All of these are instances of formulaic questions which are learned very early at school. Variation exists only in the choice of verbs, the underlying structure remains the same. In contrast to this, the more advanced participants hardly use any of these formulaic expressions. They use their IL grammar to construct more complex questions to communicate.

The longer learners have been learning English, the less constrained is their communication by formulas. The longer learners have learned English, the more likely they are to try to use a form corresponding to the TL, risking more errors/mistakes. This hypothesis can be tested by looking at the output of the participants who have been learning English for less than two years, i.e. group 1. The output of the younger participants is constrained by the restricted knowledge they have about the TL. At the beginning, most of their knowledge is connected to

unanalysed elements, resulting in their predominant usage of formulaic expressions or repeated structures which can be equated with learned knowledge. As soon as a participant has internalised a rule, use of formulaic expressions in this special context will decrease. The participant starts using the IL creatively. At the beginning, this creativity leads to more errors/mistakes because the internalised rule does not lead to targetlike output in all used contexts. With increased communicative possibilities and therefore being less hindered by the usage of formulaic expressions, the more advanced participants are likely to leave the safe path, risking more errors/mistakes.

Comparing the output of the participants, one notices that hardly any variation can be found in how interrogatives are formulated. Whether this lack of variation can be attributed to the learning situation, i.e. guided SLA, is unclear.

Even though the participants are drilled from the very beginning to use *do-support* in appropriate contexts, none of the participants has fully acquired the TL rule for correct usage of *do-support*.

All participants communicated in their English IL. In order to do so, all unconsciously ranked communicative needs higher than correct grammatical usage. Sometimes the grammar is streamlined in order to communicate, or fixed formulaic sequences were used until the participant is able to analyse these formulas into smaller segments as soon as the IL grammar has developed far enough (Aguado 2002: 36).

To summarise, it can be said that all participants did very well in the task of question formation. The ILs of all participants have developed far enough to enable them to formulate targetlike interrogatives with *cop inversion, aux inversion*, and *do-support*. Even though the structures of these prototypical interrogatives have been acquired by all participants, problems like concord, negation, production of all verbal morphemes, and incorrect number/tense encoding still occur with all question types, but especially with *aux inversion* and *do-support*, and constitute the majority of the errors in the corpus.

7. Conclusion

This study shows that the acquisition of interrogative happens in two stages: after the correct word order is acquired other properties such as concord or correct tense and number encoding, especially with *do-support*, are acquired.

Another general problem that learners have with the acquisition of simple interrogatives is also shown: although all learners have mastered the interrogative structure they often have difficulties in formulating interrogatives that fit the trigger sentences, i.e. are appropriate in the given context. Although this relates primarily to acquiring the English tense system, it nevertheless impacts on the learners' acquisition of interrogative structures. In guided SLA; interrogatives are not taught as a single topic. They are rather taught in connection with the tense that is taught. The tenses that are taught first are simple present and simple past (*Table 7.1 below*). Connected to these tenses the first interrogative structures with *cop inversion* and *do-support* are introduced.

Table 7.1: tenses introduced first in guided SLA

tense	declarative	interrogative
simple present	*She lives in London.*	*Where does she live?* ← do-support
	Peter is a teacher.	*Who is a teacher?* ← cop inversion
simple past	*She lived in London.*	*Where did she live?* ← do-support
	Peter was a teacher.	*Who was a teacher?* ← cop inversion

Tenses which are formed with auxiliaries like present progressive or past progressive are introduced later (*Table 7.2 below*). In connection to these tenses, interrogatives that are formed through *aux inversion* are introduced.

Table 7.2: tenses introduced later in guided SLA

tense	declarative	interrogative
present progressive	*Mary is eating an apple.*	*What is Mary eating?* ← aux inversion
past progressive	*Paul was reading a book when the phone rang.*	*What was Paul reading when the phone rang?* ← aux inversion

Because of this sequence, the most marked structure *do-support* is introduced before *aux inversion*, a less marked structure.

Especially structures which are not part of the NL give rise to intra-lingual errors, for example, German and Swedish learners of L2 English have to deal with the same problems in the acquisition of *do-support* because in both languages an operator is not required to form questions (Maier 2004).

Participants produce developmental errors as long as their ILs have not yet coped with a new structure and hypotheses are still being tested of how a structure has to be used in a certain context.

All participants are likely to rank communicative needs higher than grammatical correctness, and in doing so, are enabled to test hypotheses about the structure of the TL, especially when they get direct feedback about their utterances.

A comparison of the acquisitional orders of simple English interrogatives in natural and guided SLA by German test persons shows that the order in which simple English interrogatives are acquired in a guided learning context basically corresponds to the order of natural SLA postulated by Wode (1978a). The main difference between the two models is that I do not subdivide the acquisition of interrogatives with *cop* and *do* into two separate stages, but postulate that both *yes/no* and *wh*-questions with *copula* and *do-support* are acquired in one separate stage respectively.

Fragments, the elliptical versions of all stages, were only produced in the more communicative unstructured tasks. *Fragments* are not produced in the more formal structured tasks because these structures are not taught in guided SLA. In classroom settings, usually emphasis is first laid on the acquisition of structures and only later on communication. In natural SLA, *fragments*, Wode's (1978a) stage I questions, are attested, although no positive evidence is given there either. In natural SLA, *fragments* have two purposes: as a transitional stage during the acquisition of questions, and, later in the acquisitional process, to further communication. Even though non evidence is given for elliptical questions in guided SLA, *fragments* fulfil the same functions in communication as they do in natural SLA, however, in non-communicative task *fragments* are not attested.

All participants used *non-inverted* questions throughout the study. For the less advanced participants occurrence of *non-inversion* indicates a transitional stage before inversion not only with copula but also with main verbs and auxiliaries is acquired.

Errors made in interrogatives where *verb inversion* is used are errors attributable to non-availability of a rule governing *aux inversion* or *do-support*.

All participants produced interrogatives with *do-support* in both unstructured and structured tasks in all elicitations in at least one context, *yes/no* vs. *wh*-questions or oral vs. written questions. Production of interrogatives with *do-support* and non-imitative use of *do-support* requires a certain amount of input in English and has not yet been mastered in all contexts by any of the groups. Non-imitative and creative usage of *do-support* would imply the ability to reliably use *do-support* where it is demanded by context, including correct number and tense encoding on the operator *do*.

A comparison of the data gained from participants through the elicitations shows that development towards a more targetlike norm can be evidenced, the ILs of all participants/groups became more stable.

Looking at performance differences that are attributable to the task, shows that in the unstructured tasks the question type, i.e. *yes/no* vs. *wh*-question, does not significantly influence the error rate in the three categories examined. However, differences that can be related to the medium in the structured tasks, i.e. oral vs. written, could be attested. A trend to more targetlike performance can be shown if more processing time is available. The participants made fewer errors in the written tasks. This difference in performance can be explained by the communicative need being higher in oral production, where the participants had to communicate their own thoughts. Had they tried to attend to grammatical correctness and communicative need at the same time, their output would have become disconnected and the goal of communicating fluently would have failed; therefore, grammatical requirements were reduced to a necessary minimum.

Transfer plays a role for all participants during the acquisition of English interrogatives. When NL and TL structures are the same, all participants can benefit from positive transfer as long as positive transfer does not lead to

overproduction or delayed rule restructuring. Negative transfer leads to errors. It occurs when structures of the NL or any other previously acquired language are imposed. These differences result in errors.

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9. Appendixes

9.1 Key to Superscripts and Abbreviations

[0]: tense/aspect shift

[1]: rule of concord is not obeyed

[2]: syntax differs from declarative or interrogative syntax

[3]: unanalysed negator

[4]: verbal morphology

[0]: does not apply to all sentences in this subtype

◆: frequency in corpus in unstructured yes/no Qs > 1 %

■: frequency in corpus in unstructured wh Qs > 1 %

●: frequency in corpus in oral structured Qs > 1 %

▲: frequency in corpus in written structured Qs > 1 %

Cat: category

F: fragment

C: cop inversion

N: no inversion

V: verb inversion

A: aux inversion

D: do-support

9.2 Tables and Diagrams

9.2.1 Diagrams Category-based IL Analysis

9.2.1.1 Unstructured Questions

Diagram 4.38: IL Analysis - unstructured questions – fragment

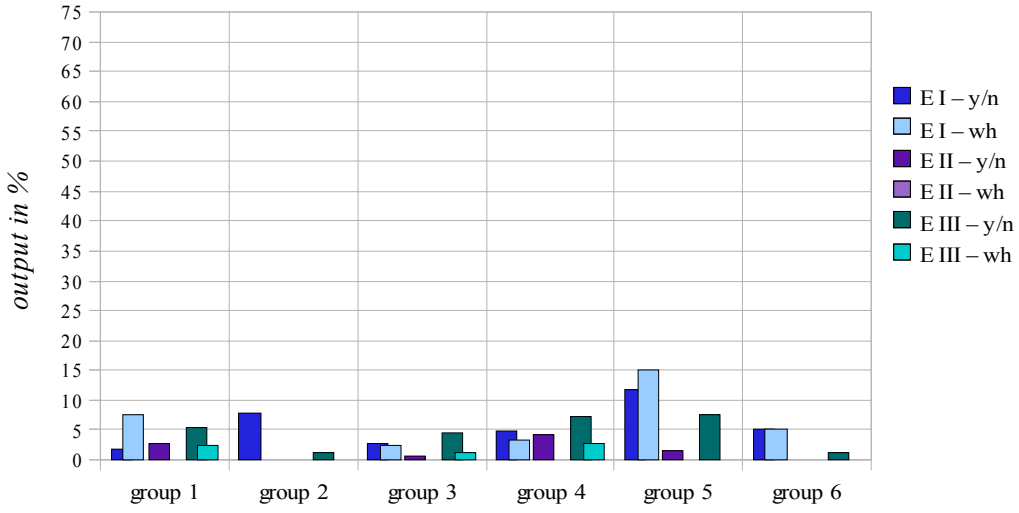


Diagram 4.39: IL Analysis - unstructured questions – cop inversion

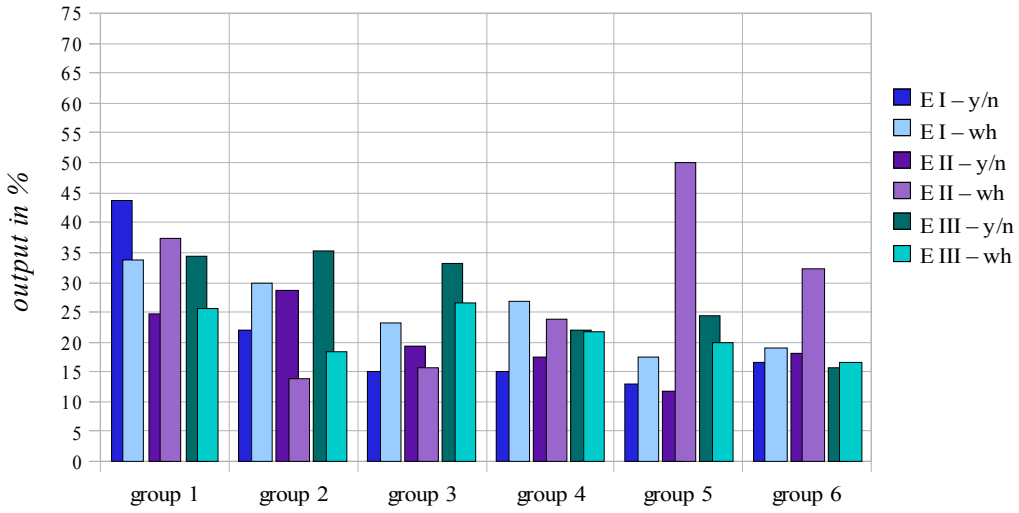


Diagram 4.40: IL Analysis - unstructured questions – no inversion

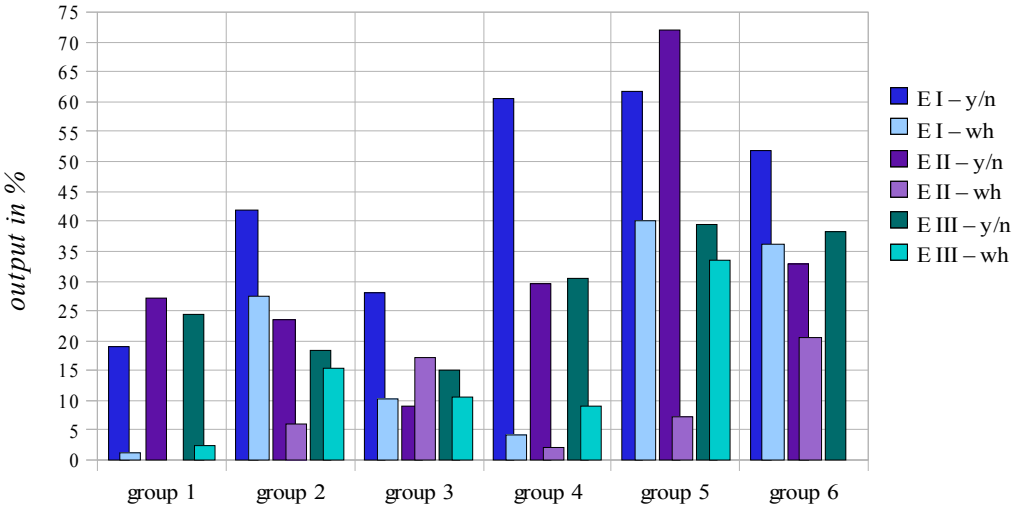


Diagram 4.41: IL Analysis - unstructured questions – verb inversion

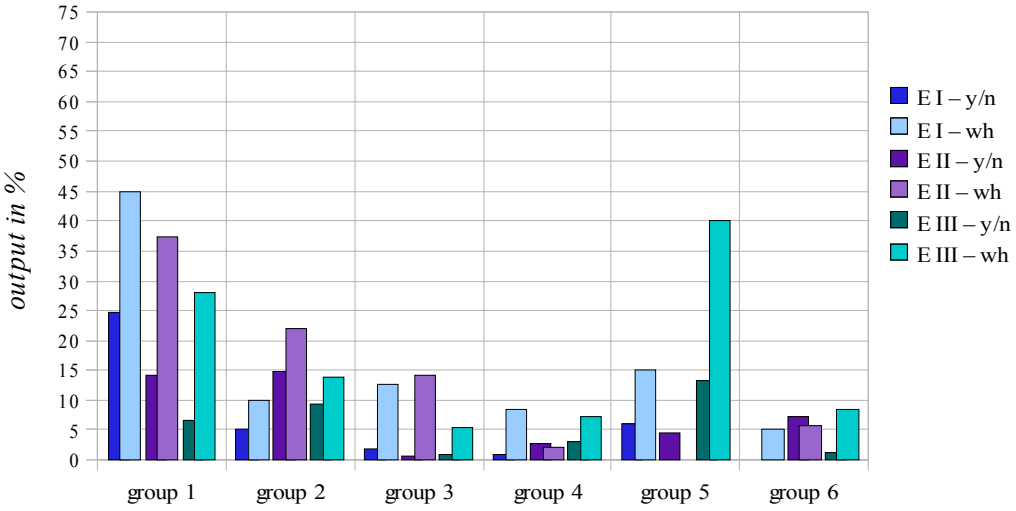


Diagram 4.42: IL Analysis - unstructured questions – aux inversion

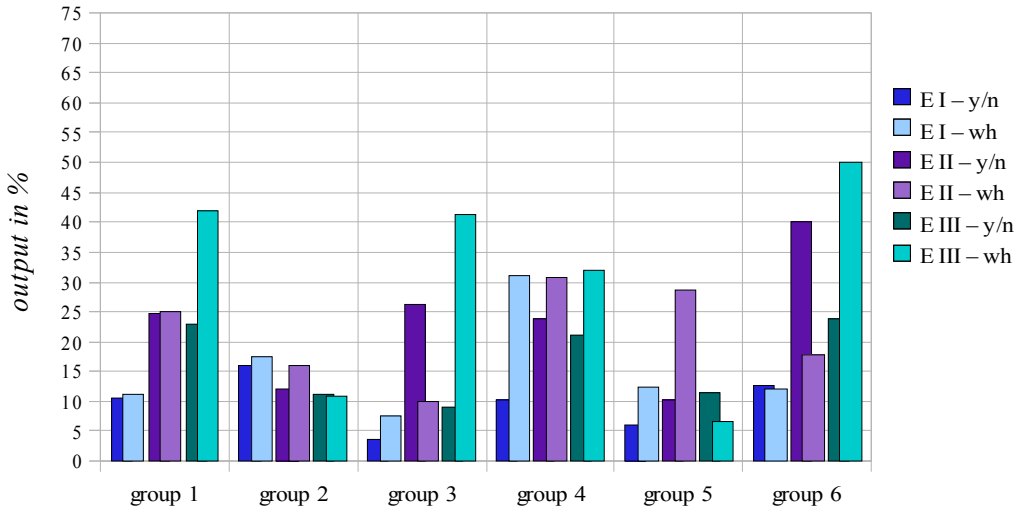
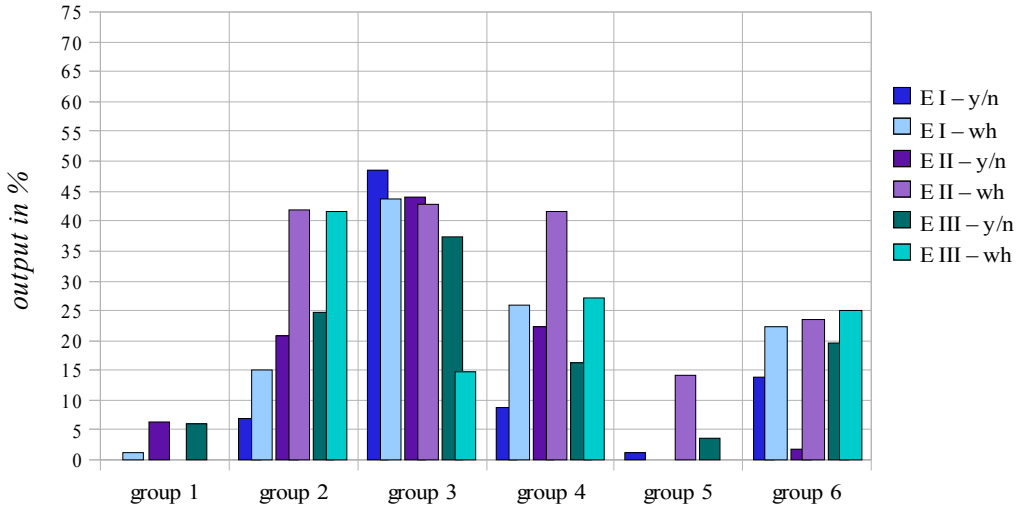


Diagram 4.43: IL Analysis - unstructured questions – do-support



9.2.1.2 Structured Questions

Diagram 4.44: IL Analysis - structured questions – wh + cop inversion

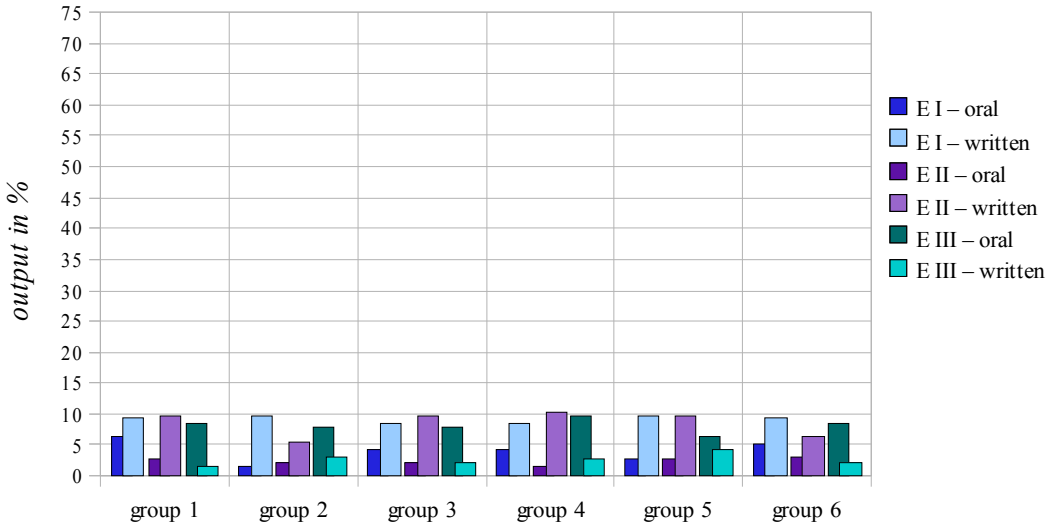


Diagram 4.45: IL Analysis - structured questions – no inversion

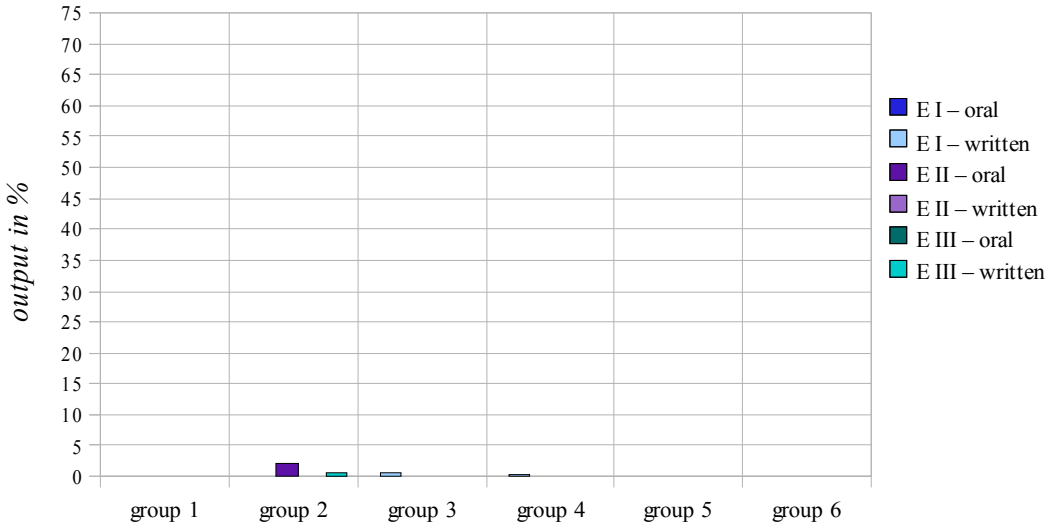


Diagram 4.46: IL Analysis - structured questions – wh + no inversion

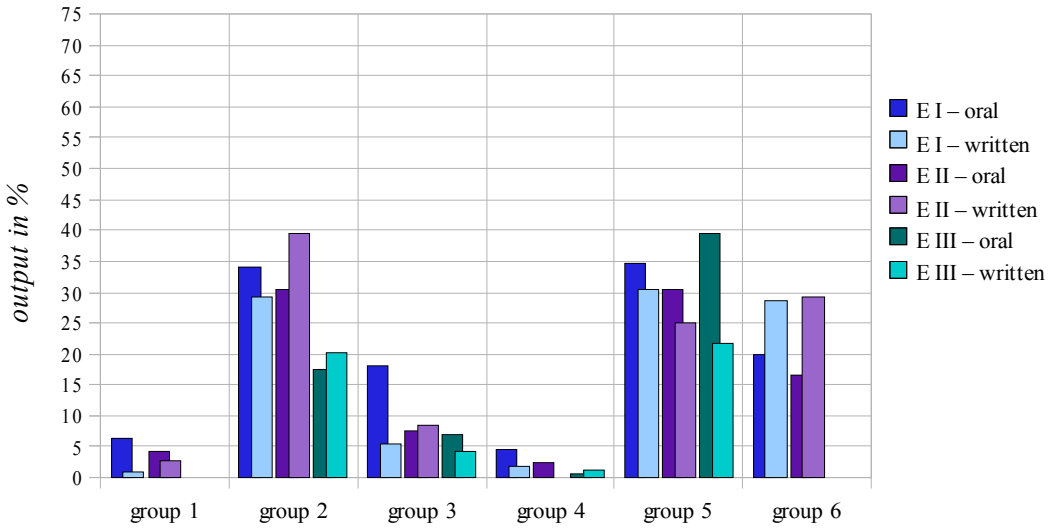


Diagram 4.47: IL Analysis - structured questions – wh + verb inversion

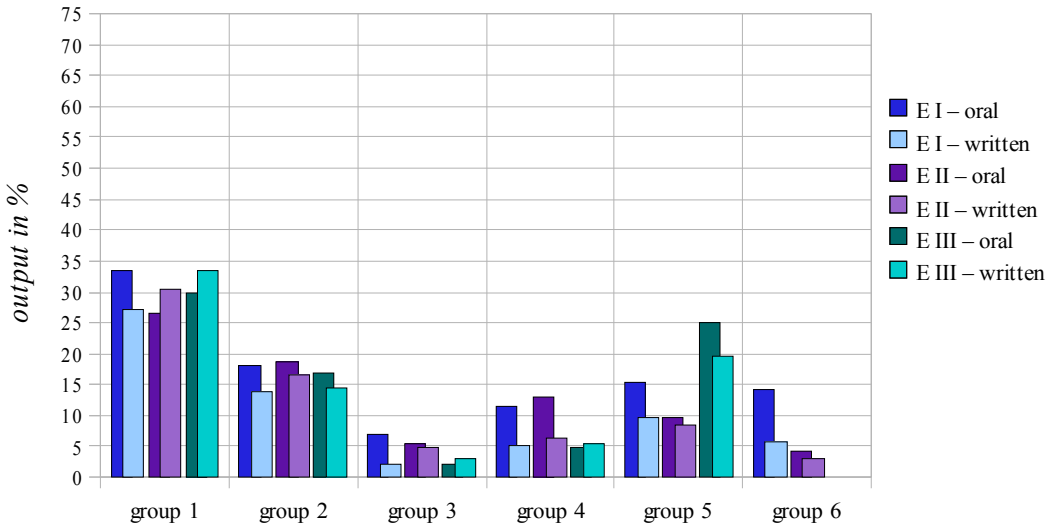


Diagram 4.48: IL Analysis - structured questions – wh + aux inversion

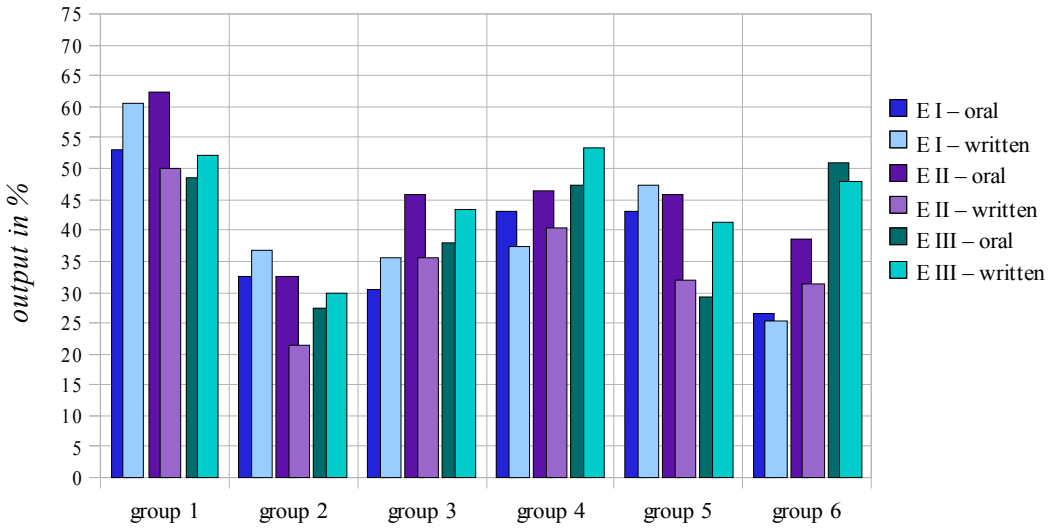
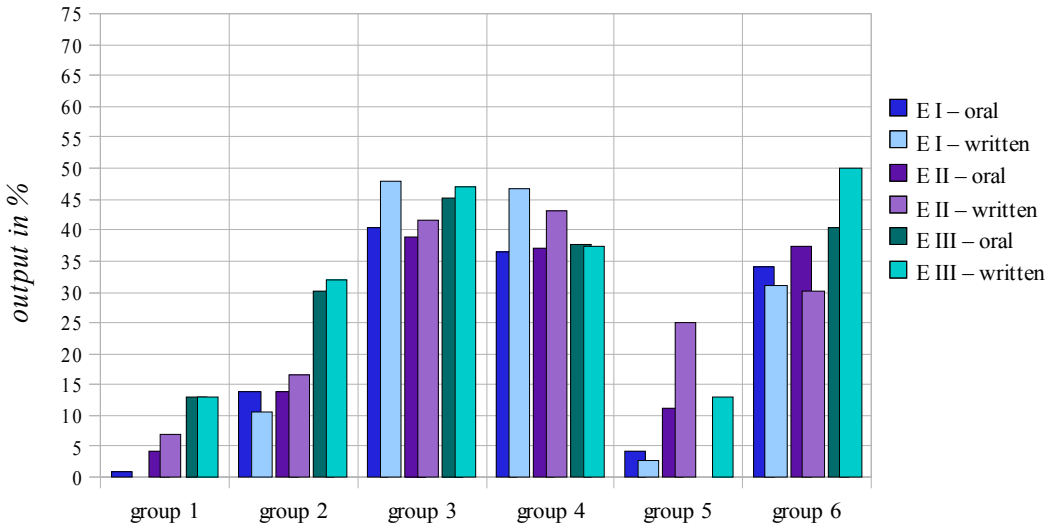


Diagram 4.49: IL Analysis - structured questions – wh + do-support



9.2.2 Types in Different Tasks

Table 9.1: aux inversion in yes/no and wh-questions

type	task	E	group 1		group 2		group 3		group 4		group 5		group 6	
			abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh aux S V (X)	I.b	1	5	6.25	5	12.5	3	7.69	27	29.03	3	7.5	7	12.07
		2	3	18.75	5	10	6	8.7	30	29.7	4	28.57	6	17.65
		3	16	37.21	6	9.23	30	40	33	30	1	6.67	5	41.67
	II	1	40	41.67	26	18.06	28	19.44	67	31.02	23	31.94	20	16.67
		2	40	55.56	39	27.08	55	38.19	80	37.04	27	37.5	31	32.29
		3	31	44.29	34	23.94	49	34.51	78	41.49	8	16.67	22	46.81
	III	1	51	53.13	41	28.47	45	31.25	62	28.7	27	37.5	24	20.17
		2	36	50	29	20.14	50	34.72	86	39.81	21	29.17	29	30.21
		3	35	50.72	38	27.54	60	43.48	97	52.72	15	32.61	22	47.83
aux S V (X)	I.a	1	10	9.52	14	14	4	3.74	13	10.24	5	5.95	9	11.39
		2	19	24.68	14	12.17	33	24.44	44	23.28	7	10.29	22	40
		3	33	22.3	20	11.17	10	8.93	42	20.59	6	11.32	18	23.68
wh aux V (X)	I.b	1	3	3.75	1	2.5	1	1.33	2	2.15	2	5	-	-
		2	-	-	3	6	-	-	1	0.99	-	-	-	-
		3	2	4.65	-	-	-	-	-	-	-	-	1	8.33
	II	1	10	10.42	19	13.19	15	10.42	25	11.57	7	9.72	11	9.17
		2	4	5.56	8	5.56	10	6.94	17	7.87	5	6.94	6	6.25
		3	-	-	1	0.7	-	-	1	0.53	-	-	-	-
	III	1	6	6.25	7	4.86	6	4.17	15	6.94	4	5.56	6	5.04
		2	-	-	1	0.69	1	0.69	-	-	1	1.39	-	-
		3	-	-	2	1.45	-	-	1	0.54	2	4.35	-	-
wh aux V S (X)	I.b	1	1	1.25	1	2.5	-	-	-	-	-	-	-	-
		2	1	6.25	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	1	0.91	-	-	-	-
	II	1	1	1.04	2	1.39	-	-	1	0.46	1	1.39	-	-
		2	1	1.39	-	-	-	-	2	0.93	-	-	-	-
		3	-	-	1	0.7	1	0.7	-	-	4	8.33	-	-
	III	1	3	3.13	5	3.47	-	-	3	1.39	3	4.17	-	-
		2	-	-	1	0.69	-	-	1	0.46	1	1.39	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
wh aux aux V S (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	2	2.86	2	1.41	3	2.11	7	3.72	2	4.17	2	4.26
wh aux S aux V (X)	I.b	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	1	1.45	-	-	-	-	-	-
		3	-	-	-	-	-	-	1	0.91	-	-	-	-
	II	1	-	-	-	-	1	0.69	-	-	-	-	1	0.83
		2	-	-	-	-	1	0.69	1	0.46	1	1.39	-	-
		3	1	1.43	-	-	1	0.7	2	1.06	-	-	-	-
	III	1	-	-	-	-	-	-	1	0.46	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	1	2.17	-	-
aux S O V (X)	I.a	1	1	0.95	2	2	-	-	-	-	-	-	1	1.27
		2	-	-	-	-	-	-	1	0.53	-	-	-	-
		3	1	0.68	-	-	-	-	-	-	-	-	-	-
wh aux aux V (X)	I.b	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	1	1.54	-	-	-	-	-	-	-	-
	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	1	0.7	-	-	-	-	-	-	-	-
	III	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	1	1.04
		3	-	-	-	-	-	-	-	-	1	2.17	-	-

continued overleaf

type	task	E	group 1		group 2		group 3		group 4		group 5		group 6	
			abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
aux S aux V (X)	I.a	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	2	1.48	-	-	-	-	-	-
		3	-	-	-	-	-	-	1	0.49	-	-	-	-
wh aux S O V (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	1	0.53	-	-	-	-
	III	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	1	1.45	-	-	-	-	-	-	-	-	-	-
wh aux S (X)	III	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	1	0.72	-	-	-	-	-	-	-	-

Table 9.2: do-support in yes/no and wh-questions

type	task	E	group 1		group 2		group 3		group 4		group 5		group 6	
			abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh do S V (X)	I.b	1	-	-	6	15	17	43.59	24	25.81	-	-	13	22.41
		2	-	-	20	40	29	42.03	42	41.58	2	14.29	8	23.53
		3	-	-	27	41.54	11	14.67	30	27.27	-	-	3	25
	II	1	1	1.04	20	13.89	51	35.42	76	35.19	2	2.78	39	32.5
		2	3	4.17	18	12.5	52	36.11	78	36.11	8	11.11	35	36.46
		3	9	12.86	39	27.46	59	41.55	66	35.11	-	-	19	40.43
	III	1	-	-	15	10.42	65	45.14	96	44.44	2	2.78	36	30.25
		2	5	6.94	23	15.97	54	37.5	83	38.43	18	25	29	30.21
		3	9	13.04	44	31.88	65	47.1	69	37.5	5	10.87	23	50
do S V (X)	I.a	1	-	-	7	7	51	47.66	11	8.66	1	1.19	11	13.92
		2	5	6.49	24	20.87	55	40.74	41	21.69	-	-	1	1.82
		3	9	6.08	43	24.02	41	36.61	32	15.69	2	3.77	15	19.74
wh do S aux V (X)	II	1	-	-	-	-	4	2.78	2	0.93	-	-	-	-
		2	-	-	1	0.69	3	2.08	1	0.46	-	-	1	1.04
		3	-	-	4	2.82	4	2.82	5	2.66	-	-	-	-
	III	1	-	-	-	-	1	0.69	-	-	-	-	-	-
		2	-	-	-	-	6	4.17	7	3.24	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
wh do V S (X)	I.b	1	1	1.25	-	-	-	-	-	-	-	-	-	-
		2	-	-	1	2	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
	II	1	-	-	-	-	1	0.69	1	0.46	1	1.39	1	0.83
		2	-	-	1	0.69	1	0.69	-	-	-	-	-	-
		3	-	-	-	-	1	0.7	-	-	-	-	-	-
	III	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	3	1.39	-	-	-	-
		3	-	-	-	-	-	-	-	-	1	2.17	-	-
wh do V (X)	II	1	-	-	-	-	2	1.39	-	-	-	-	1	0.83
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
	III	1	-	-	-	-	3	2.08	5	2.31	-	-	1	0.84
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
do S cop (X)	I.a	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	2	1.48	-	-	-	-	-	-
		3	-	-	-	-	1	0.89	-	-	-	-	-	-
do S aux V (X)	I.a	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	1	0.74	-	-	-	-	-	-
		3	-	-	1	0.56	-	-	1	0.49	-	-	-	-
do V S (X)	I.a	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	1	0.74	1	0.53	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
wh do S cop (X)	I.b	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	1	1.45	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
	II	1	-	-	-	-	-	-	1	0.46	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
wh do S O V (X)	III	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	1	0.69	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
do S do V (X)	I.a	1	-	-	-	-	1	0.93	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-

Table 9.3: no inversion in yes/no and wh-questions

type	task	E	group 1		group 2		group 3		group 4		group 5		group 6	
			abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh S V (X)	I.b	1	1	1.25	8	20	2	5.13	1	1.08	12	30	9	15.52
		2	-	-	2	4	4	5.8	2	1.98	1	7.14	2	5.88
		3	1	2.33	4	6.15	4	5.33	5	4.55	2	13.33	-	-
	II	1	5	5.21	32	22.22	11	7.64	4	1.85	15	20.83	14	11.67
		2	2	2.78	29	20.14	7	4.86	4	1.85	14	19.44	9	9.38
		3	-	-	14	9.86	2	1.41	-	-	13	27.08	-	-
	III	1	-	-	25	17.36	3	2.08	2	0.93	14	19.44	19	15.97
		2	2	2.78	24	16.67	7	4.86	-	-	14	19.44	14	14.58
		3	-	-	16	11.59	1	0.72	1	0.54	7	15.22	-	-
S V (X)	I.a	1	9	8.57	26	26	19	17.76	50	39.37	28	33.33	25	31.65
		2	12	15.58	19	16.52	5	3.7	24	12.7	21	30.88	14	25.45
		3	8	5.41	10	5.59	6	5.36	20	9.8	9	16.98	10	13.16
wh S aux V (X)	I.b	1	-	-	-	-	2	5.13	2	2.15	4	10	10	17.24
		2	-	-	-	-	7	10.14	-	-	-	-	3	8.82
		3	-	-	-	-	1	1.33	5	4.55	-	-	-	-
	II	1	-	-	11	7.64	8	5.56	3	1.39	6	8.33	5	4.17
		2	1	1.39	15	10.42	3	2.08	1	0.46	8	11.11	6	6.25
		3	-	-	10	7.04	7	4.93	1	0.53	5	10.42	-	-
	III	1	-	-	15	10.42	5	3.47	1	0.46	8	11.11	14	11.76
		2	-	-	26	18.06	4	2.78	-	-	4	5.56	11	11.46
		3	-	-	11	7.97	5	3.62	1	0.54	3	6.52	-	-
S cop (X)	I.a	1	6	5.71	9	9	7	6.54	17	13.39	11	13.1	11	13.92
		2	4	5.19	6	5.22	4	2.96	19	10.05	9	13.24	1	1.82
		3	19	12.84	18	10.06	6	5.36	23	11.27	11	20.75	9	11.84
S aux V (X)	I.a	1	5	4.76	7	7	3	2.8	9	7.09	13	15.48	5	6.33
		2	5	6.49	1	0.87	3	2.22	13	6.88	19	27.94	3	5.45
		3	8	5.41	5	2.79	5	4.46	19	9.31	1	1.89	9	11.84
wh S cop (X)	I.b	1	-	-	3	7.5	-	-	1	1.08	-	-	2	3.45
		2	-	-	1	2	-	-	-	-	-	-	2	5.88
		3	-	-	6	9.23	3	4	-	-	3	20	-	-
	II	1	1	1.04	6	4.17	7	4.86	3	1.39	4	5.56	3	2.5
		2	-	-	-	-	1	0.69	-	-	-	-	1	1.04
		3	-	-	1	0.7	1	0.7	-	-	1	2.08	-	-
	III	1	-	-	2	1.39	-	-	1	0.46	-	-	1	0.84
		2	-	-	6	4.17	1	0.69	-	-	-	-	3	3.13
		3	-	-	1	0.72	-	-	-	-	-	-	-	-
wh O S V (X)	II	1	-	-	-	-	-	-	-	-	-	-	1	0.83
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
	III	1	1	1.04	-	-	-	-	-	-	-	-	-	-
		2	-	-	1	0.69	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
S do V (X)	I.a	1	-	-	-	-	1	0.93	1	0.79	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	1	1.32
S aux V wh (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	1	0.69	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
	III	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	1	0.72	-	-	-	-	-	-	-	-
S V wh (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	1	0.69	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
	III	1	-	-	-	-	1	0.69	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
S aux aux V (X)	I.a	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	1	0.87	-	-	-	-	-	-	-	-
		3	1	0.68	-	-	-	-	-	-	-	-	-	-
S cop Sc wh (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	1	0.69	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-

continued overleaf

type	task	E	group 1		group 2		group 3		group 4		group 5		group 6	
			abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
S V (X) wh	I.b	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	1	0.74	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
O V wh do S V (X)	III	1	-	-	-	-	-	-	1	0.46	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
wh O aux S V (X)	II	1	-	-	-	-	-	-	-	-	-	-	1	0.83
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-

Table 9.4: cop inversion in yes/no and wh-questions

type	task	E	group 1		group 2		group 3		group 4		group 5		group 6	
			abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
cop S (X)	I.a	1	46	43.81	22	22	15	14.02	19	14.96	11	13.1	13	16.46
		2	19	24.68	33	28.7	26	19.26	33	17.46	8	11.76	10	18.18
		3	50	33.78	62	34.64	37	33.04	45	22.06	13	24.53	12	15.79
wh cop S (X)	I.b	1	26	32.5	10	25	9	23.08	25	26.88	6	15	9	15.52
		2	6	37.5	6	12	11	15.94	23	22.77	7	50	11	32.35
		3	11	25.58	12	18.46	19	25.33	24	21.82	3	20	2	16.67
	II	1	6	6.25	2	1.39	6	4.17	9	4.17	2	2.78	6	5
		2	2	2.78	2	1.39	3	2.08	3	1.39	2	2.78	3	3.13
		3	3	4.29	5	3.52	5	3.52	10	5.32	-	-	2	4.26
	III	1	8	8.33	12	8.33	12	8.33	15	6.94	6	8.33	11	9.24
		2	7	9.72	8	5.56	14	9.72	19	8.8	6	8.33	6	6.25
		3	1	1.45	4	2.9	3	2.17	5	2.72	2	4.35	1	2.17
wh cop (X)	I.b	1	1	1.25	2	5	-	-	1	0.99	1	2.5	2	3.45
		2	-	-	1	2	-	-	-	-	-	-	-	-
		3	-	-	-	-	1	1.33	-	-	-	-	-	-
	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	2	2.86	6	4.23	5	3.52	8	4.26	2	4.17	2	4.26
	III	1	1	1.04	2	1.39	-	-	3	1.39	1	1.39	-	-
		2	-	-	-	-	-	-	3	1.39	1	1.39	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
cop S cop (X)	I.a	1	-	-	-	-	1	0.93	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	1	0.68	1	0.56	-	-	-	-	-	-	-	-
wh cop Sc cop (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	1	1.43	-	-	1	0.7	-	-	-	-	-	-
wh cop Sc S (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	1	0.69	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
wh cop S cop (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	1	2.08	-	-

Table 9.5: verb inversion in yes/no and wh-questions

type	task	E	group 1		group 2		group 3		group 4		group 5		group 6	
			abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
wh V S (X)	I.b	1	34	42.5	1	2.5	5	12.82	6	6.45	6	15	3	5.17
		2	6	37.5	11	22	10	14.49	2	1.98	-	-	2	5.88
		3	10	23.26	8	12.31	4	5.33	5	4.55	5	33.33	1	8.33
	II	1	27	28.13	25	17.36	9	6.25	22	10.19	9	12.5	14	11.67
		2	18	25	26	18.06	8	5.56	26	12.04	7	9.72	3	3.13
		3	21	30	24	16.9	3	2.11	9	4.79	12	25	-	-
	III	1	26	27.08	20	13.89	3	2.08	11	5.09	7	9.72	7	5.88
		2	22	30.56	24	16.67	6	4.17	14	6.48	6	8.33	3	3.13
		3	23	33.33	20	14.49	4	2.9	10	5.43	9	19.57	-	-
V S (X)	I.a	1	26	24.76	5	5	2	1.87	1	0.79	5	5.95	-	-
		2	11	14.29	17	14.78	1	0.74	5	2.65	3	4.41	4	7.27
		3	10	6.76	17	9.5	1	0.89	5	2.45	6	11.32	1	1.32
wh V (X)	I.b	1	2	2.5	3	7.5	-	-	2	2.15	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	2	4.65	1	1.54	-	-	3	2.73	1	6.67	-	-
	II	1	4	4.17	1	0.69	1	0.69	3	1.39	2	2.78	3	2.5
		2	1	1.39	1	0.69	-	-	1	0.46	-	-	1	1.04
		3	-	-	-	-	-	-	-	-	-	-	-	-
	III	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	1	0.69	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
V O (X)	I.a	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	1	0.49	1	1.89	-	-
wh V S aux (X)	II	1	1	1.04	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
wh V aux S (X)	II	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	1	0.46	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-

Table 9.6: fragment in yes/no and wh-questions

type	task	E	group 1		group 2		group 3		group 4		group 5		group 6	
			abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
S (X)	**I.a**	1	1	0.95	5	5	3	2.8	6	4.72	7	8.33	3	3.8
		2	1	1.3	-	-	1	0.74	4	2.12	-	-	-	-
		3	3	2.03	2	1.12	2	1.79	11	5.39	3	5.66	1	1.32
wh (X)	**I.b**	1	4	5	-	-	-	-	2	2.15	5	12.5	2	3.45
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	1	2.33	-	-	1	1.33	3	2.73	-	-	-	-
X	**I.a**	1	-	-	2	2	-	-	-	-	3	3.57	1	1.27
		2	-	-	-	-	-	-	4	2.12	-	-	-	-
		3	1	0.68	-	-	1	0.89	1	0.49	1	1.89	-	-
V (X)	**I.a**	1	1	0.95	-	-	-	-	-	-	-	-	-	-
		2	1	1.3	-	-	-	-	-	-	-	-	-	-
		3	4	2.7	-	-	2	1.79	2	0.98	-	-	-	-
wh S (X)	**I.b**	1	2	2.5	-	-	1	2.56	1	1.08	1	2.5	1	1.72
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
aux S (X)	**I.a**	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	1	1.47	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-
do S (X)	**I.a**	1	-	-	-	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	1	0.49	-	-	-	-
S aux (X)	**I.a**	1	-	-	1	1	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-	-	-	-
		3	-	-	-	-	-	-	-	-	-	-	-	-

9.2.3 Type-Subtype Relation – all Categories

Table 9.7: type-subtype relation – aux inversion

type	abs.	%	subtype	abs.	%	example
wh aux S V (X)	1661	22.77	wh aux-n S-sg V-t (X) [(4)]	1146	15.71	*What is Mel asking Fergus?* (Brian-EI-TII-9)
			wh aux S-pl V-t (X) [(4)]	265	3.63	*What are Arlo and Mel telling Fergus?* (Vicky-EI-TIII-5)
			wh aux-n S-sg V-n (X) [4]	52	0.71	*How is Fergus looks?* (Vicky-EII-TII-23)
			wh mod S-sg V (X)	51	0.7	*What can one buy there?* (Alec-EII-TIII-2)
			wh aux-n S-sg V (X) [4]	40	0.55	*What is Maggie concentrate on?* (Tessa-EIII-TII-17)
			wh aux S-pl V (X) [4]	34	0.47	*What are Fergus and Arlo do?* (Ian-EIII-TIII-23)
			wh mod S-pl V (X)	22	0.3	*Where can they find the living room set?* (Tessa-EII-TIII-5)
			wh mod neg S-sg V (X)	18	0.25	*What can't Fergus see?* (Ivy-EII-TII-4)
			wh aux-nt S-sg V-t (X)	9	0.12	*What was Maggie looking for?* (Larry-EIII-TIII-10)
			wh mod neg S-pl V (X)	5	0.07	*What won't they put up?* (Grace-EII-TII-14)
			wh mod S-sg V-t (X) [4]	4	0.05	*Who will Maggie going?* (Joyce-EIII-TII-6)
			wh aux S-pl do+neg V (X) [3 4]	2	0.03	*What are the instructions don't tell you?* (Karin-EI-TII-10)
			wh aux-n S-sg Vinf (X) [4]	2	0.03	*What is Fergus to know?* (Alice-EI-TIII-13)
			wh aux-t S-pl V-t (X)	2	0.03	*Why had he screamed?* (Lucy-E!-TI.b-24)
			wh aux S-pl do+neg V-t (X) [3]	1	0.01	*What are they don't ... allowed about?* (Vicky-EII-TII-14)
			wh aux S-sg V-n (X) [1 4]	1	0.01	*Where are Fergus waits for Maggie?* (Emma-EIII-TII-1)
			wh aux S-sg V-t (X) [1]	1	0.01	*How have the homework been?* (Erin-EIII-TIII-14)
			wh aux-nt S-pl V-t (X)	1	0.01	*What were Arlo and Mel telled Fergus?* (Lucy-EIII-TIII-23)
			wh aux-t S-pl V (X) [4]	1	0.01	*What were Arlo and Fergus do?* (Karin-EI-TII-3)
			wh aux-t S-pl V-tt (X) [4]	1	0.01	*What negative argument had Mel and Fergus founded out about the new furniture?* (Sam-EII-TIII-23)
			wh aux-t S-sg V-t (X)	1	0.01	*What had Fergus eaten?* (Sally-EIII-TIII-17)
			wh mod neg S-sg mod+neg Vinf (X) [3]	1	0.01	*What can't Fergus can't to see?* (Nell-EII-TII-4)
			wh mod S-sg Vinf (X) [4]	1	0.01	*Who will ... who will Mel to convince?* (Mary-EII-TII-3)
aux S V (X)	323	4.43	aux-n S-sg V-t (X)	157	2.15	*Is the man calling someone?* (Ane-EI-TI.a-3)
			aux S-pl V-t (X)	56	0.77	*Are they searching for a new doghouse?* (Zoe-EI-TI.a-24)
			mod S-sg V (X)	35	0.48	*Will he find him in this house?* (Gary-EI-TI.a-6)
			aux-n S-sg V (X) [4]	33	0.45	*Is he want that?* (Alice-EI-TI.a-2)
			aux-n S-sg Vinf (X) [4]	7	0.1	*Is he to want ... a mirror?* (Lucy-EI-TI.a-10)
			aux S-pl V (X) [4]	6	0.08	*And are they go to these?* (Nick-EI-TI.a-25)
			mod S-pl V (X)	4	0.05	*Shall the chickens help him?* (Dawn-EIII-TI.a-6)
			mod S-sg Vinf (X) [4]	4	0.05	*Must the cat ... to pass the dog?* (Nell-EIII-TI.a-50)
			aux S-sg V (X) [1]	3	0.04	*Have this man put away the handle?* (Kevin-EIII-TI.a-4)
			aux S-sg V-t (X) [1]	3	0.04	*Have he lost his dog?* (Paul-EII-TI.a-1)
			aux-n S-pl V (X) [1 4]	3	0.04	*Is Fergus and Alonzo ... look after Mel?* (Mary-EII-TI.a-6)
			aux-n S-sg V-tt (X) [4]	2	0.03	*Has Fergus founded Mel?* (Sam-EII-TI.a-18)
			aux-nt S-sg V-t (X)	2	0.03	*Was the dog running away?* (Ivy-EII-TI.a-4)
			aux-t S-sg V-t (X)	2	0.03	*Had he ... had he saved the turkeys now?* (Lucy-EIII-TI.a-20)
			aux S-pl do+neg V (X) [3]	1	0.01	*No, are the turkeys ... don't ... to be disturbed by the axt [German → axe]?* (Nell-EIII-TI.a-14)
			aux-n neg S-sg V-t (X)	1	0.01	*Has the turkey really not see ... has the ... has the ... hasn't the turkey seen the handle really?* (Emma-EIII-TI.a-19)
			aux-n S-sg V-t V (X)	1	0.01	*And is he gonna kill the turkeys now?* (Vicky-EIII-TI.a-50)
			aux-t S-sg Vinf (X) [4]	1	0.01	*Had the man with the axt [German → axe] the ... to cut down the tree?* (Nell-EIII-TI.a-10)
			mod neg S-sg V (X)	1	0.01	*Can ... can't he wear the Krawatte [German → tie]?* (Lucy-EI-TI.a-8)
			mod S-sg V-t (X) [4]	1	0.01	*Will the dog hiring in the supermarket?*(Paul-EI-TI.a-3)

continued overleaf

type	abs.	%	subtype	abs.	%	example
wh aux V (X)	207	2.84	wh aux-n V-t (X) [2]	138	1.89	*Who is having lots of fun?* (Alec-EI-TII-6)
			wh aux V-t (X)	39	0.53	*What are blown away?* (Joyce-EII-TII-24)
			wh mod V (X) [2]	19	0.26	*How much dogs can go inside?* (Emma-EI-TI.b-97)
			wh aux-n V (X) [4]	4	0.05	*What's happen here?* (Fay-EI-TI.b-29)
			wh aux-nt V-t (X) [4]	3	0.04	*Who was telling the joke?* (Ruth-EIII-TI.b-2)
			wh aux-n V-n (X) [4]	2	0.03	*Who is comforts by Mel?* (Becky-EI-TIII-20)
			wh aux-t V-t (X)	1	0.01	*Who had got the handle?* (Hazel-EIII-TI.b-13)
			wh mod neg V (X)	1	0.01	*What is Mel ... what can't ... what won't be allowed to put up?* (Becky-EII-TII-14)
wh aux V S (X)	35	0.48	wh aux-n V-t S-sg (X) [2]	19	0.26	*Who is asking Mel for directions?* (Sam-EII-TIII-13)
			wh aux V-t S-pl (X) [2] [4]	7	0.1	*What are telling Arlo and Fergus Mel?* (Lucy-EI-TIII-5)
			wh aux-n V-n S-sg (X) [2] [4]	4	0.05	*What is pops out of the hole?* (Becky-EI-TIII-14)
			wh mod V S-sg (X) [2]	3	0.04	*What would do this police officer?* (Emma-EII-TI.b-28)
			wh aux-n V S-sg (X) [2]	1	0.01	*Where is listen to Mel when he is reading what is written on the piece of paper.* (Mary-EI-TIII-18)
			wh mod V-t S-sg (X) [2]	1	0.01	*Why will ... shown ... Fergus his friend his house?* (Kevin-EI-TI.b-19)
wh aux aux V S (X)	18	0.25	wh mod aux-be V-t S-sg (X) [2]	18	0.25	*What could be put in the reference section?* (Grace-EIII-TII-17)
wh aux S aux V (X)	13	0.18	wh aux S-pl aux V-t (X) [2]	8	0.11	*What are Fergus and Mel are doing?* (Zoe-EI-TII-4)
			wh aux-n S-sg aux-n V-t (X) [2]	3	0.04	*What's Maggie is looking for?* (Fay-EIII-TIII-10)
			wh mod S-sg mod V (X) [2]	2	0.03	*How long ... how long ... can ... can it ... how long can it might take before she can go home?* (Emma-EIII-TII-8)
aux S O V (X)	6	0.08	aux-n S-sg O V (X) [2] [4]	1	0.01	*Is the chef like ... is the chef the dog like?* (Alice-EI-TI.a-4)
			aux-n S-sg O V-t (X) [2]	1	0.01	*Is Fergus this other dog asking whether ... whether he has saw ... he has seen Mel?* (Alec-EII-TI.a-14)
			mod S-pl O VGer (X) [2]	1	0.01	*Can dogs there shop ... shop ... shoppen and ... and to get ... and to get clothes?* (Lucy-EI-TI.a-1)
			mod S-sg O V (X) [2]	1	0.01	*Will the man the dog hire because the dog can test the food?* (Kevin-EI-TI.a-16)
			mod S-sg O V-t (X) [2] [4]	1	0.01	*Will the man the dog hiring?* (Paul-EI-TI.a-11)
			mod S-sg O Vinf (X) [2] [4]	1	0.01	*And can the man axt [German → axe] ... to pull out?* (Nell-EIII-TI.a-12)
wh aux aux V (X)	4	0.05	wh aux-nt aux-t V-t (X) [4]	1	0.01	*Who was being asking whether he has seen Maggie's homework?* (Mary-EIII-TIII-2)
			wh mod aux V (X)	1	0.01	*What could be bought in that store?* (Nick-EII-TIII-2)
			wh mod aux V-t (X)	1	0.01	*But who should have stolen the handle?* (Dawn-EIII-I.b-30)
			wh mod aux-be V-t (X)	1	0.01	*What is he suggestion ... what does he suggest ... where should the snack bar ... what should be put in the reference section?* (Dawn-EIII-TII-17)
aux S aux V (X)	3	0.04	aux S-pl aux V-t (X) [2]	2	0.03	*Are they are calling the man's name?* (Hazel-EII-TI.a-15)
			mod S-sg mod V (X) [2]	1	0.01	*Will the officer can help him?* (Gary-EII-TI.a-23)
wh aux S O V (X)	2	0.03	wh aux-n S-sg O V-t (X) [2]	2	0.03	*What is Fergus her telling?* (Nell-EIII-TIII-14)
wh aux S (X)	1	0.01	wh aux-n S-sg (X) [2]	1	0.01	*Who is Maggie [asking] wethe [whether] he has eaten her math homework assignment?* (Ian-EIII-TIII-21)

Table 9.8: type-subtype relation – do-support

type	abs.	%	subtype	abs.	%	example
wh do S V (X)	1448	19.85	wh do-n S-sg V (X)	649	8.9	*What does Fergus hate?* (Nick-EII-TII-10)
			wh do S-pl V (X)	232	3.18	*When do they have to finish?* (Vicky-EII-TII-11)
			wh do-n S-sg V-n (X) [4]	197	2.7	*Why does he wants it?* (Sally-EI-TI.b-7)
			wh do-n S-pl V (X) [1]	76	1.04	*What does Arlo and Mel tell Fergus?* (Zoe-EI-TIII-5)
			wh do-t S-pl V (X)	68	0.93	*And why did they do that?* (Kevin-EIII-TI.b-36)
			wh do-t S-sg V (X)	56	0.77	*And what did the other say?* (Ian-EII-TI.b-21)
			wh do-n S-sg V-t (X) [4]	43	0.59	*What does Fergus found?* (Kevin-EIII-TII-22)
			wh do S-pl V-t (X) [4]	21	0.29	*When Mel ... what ... what do Mel and Fergus grabbed but they did not stop?* (Joyce-EI-TII-12)
			wh do-t S-sg V-n (X) [4]	21	0.29	*And what did the turkey says?* (Grace-EIII-TI.b-42)
			wh do-t S-pl V-t (X) [4]	17	0.23	*What did they already sold?* (Zoe-EIII-TIII-24)
			wh do S-sg V (X) [1]	14	0.19	*What do everybody use?* (Tessa-EIII-TIII-15)
			wh do-n S-pl V-t (X) [1 4]	12	0.16	*What does Mel and Fergus found out?* (Fay-EII-TIII-23)
			wh do-t S-sg V-t (X) [4]	8	0.11	*What did the turkey said?* (Grace-EIII-TI.b-36)
			wh do-n S-sg mod+neg V (X) [3]	5	0.07	*What does Fergus can't see?* (Hazel-EII-TII-4)
			wh do S-sg V-n (X) [4]	4	0.05	*Where do Maggie plans to go to?* (Dawn-EIII-TII-5)
			wh do-n S-pl V-n (X) [1 4]	4	0.05	*What does Fergus and Mel wants to rake together?* (Ivy-EII-TII-1)
			wh do-n S-pl do+neg V (X) [1 3]	3	0.04	*What does the instructions don't tell you?* (Ivy-EI-TII-10)
			wh do neg S-pl V (X)	2	0.03	*Why don't they need to worry?* (Sally-EI-TIII-9)
			wh do neg S-sg V (X) [1]	2	0.03	*Why don't he walk ... or search ... go on searching ... go on searching?* (Zoe-EII-TI.b-21)
			wh do S-sg V-t (X) [4]	2	0.03	*What do the skull shouting?* (Paul-EI-TIII-15)
			wh do-n neg S-pl V (X) [1]	2	0.03	*What doesn't the ... the instructions tell you?* (Larry-EI-TII-10)
			wh do-n neg S-sg V (X)	2	0.03	*Why doesn't he understand Fergus?* (Larry-EII-TI.b-48)
			wh do-n+neg S-pl neg V (X) [1 3]	2	0.03	*What doesn't the instructions not tell to you?* (Alec-EI-TII-10)
			wh do S-pl mod+neg V (X) [3]	1	0.01	*To what ..... about what do they won't be allowed to put up?* (Sally-EII-TII-14)
			wh do S-pl V-n (X) [1 4]	1	0.01	*What do Mel and Fergus celebrates if they only hay been separated for a few minutes?* (Nick-EII-TIII-15)
			wh do-n S-pl mod+neg V (X) [3]	1	0.01	*After what is Mel afraid that ... what does they won't be allowed to put up and ...?* (Ian-EII-TII-14)
			wh do-n S-sg do-t+neg V (X) [3]	1	0.01	*What does the instruction only tell you ... what does the instruction didn't tell ... tell you?* (Becky-EI-TII-10)
			wh do-t neg S-pl V (X)	1	0.01	*What didn't the instructions tell them?* (Eric-EI-TII-10)
			wh do-t S-pl V-n (X) [4]	1	0.01	*What did a dog knows?* (Matt-EI-TIII-4)
do S V (X)	349	4.78	do-n S-sg V (X)	170	2.33	*Does he shout after Mel?* (Larry-EII-TI.a-6)
			do-n S-sg V-n (X) [4]	31	0.42	*And does he wants to buy?* (Ivy-EI-TI.a-20)
			do-t S-sg V (X)	31	0.42	*Did he see the dog?* (Grace-EII-TI.a-6)
			do S-pl V (X)	30	0.41	*Do they know the pig?* (Erin-EIII-TI.a-13)
			do-n S-pl V (X) [1]	18	0.25	*Does they search together?* (Cathy-EII-TI.a-11)
			do-n S-sg V-t (X) [4]	17	0.23	*Does Mel lost Fergus?* (Kevin-EII-TI.a-1)
			do S-sg V (X) [(1)]	11	0.15	*Do the dog want a bone?* (Meg-EI-TI.a-4)
			do-t S-pl V (X)	11	0.15	*Did they stand on a field?* (Matt-EIII-TI.a-3)
			do-t S-sg V-t (X) [4]	9	0.12	*Did he lost his dog?* (Grace-EII-TI.a-2)
			do S-pl V-t (X) [4]	4	0.05	*Do they brought the stick back?* (Ruth-EIII-TI.a-34)
			do-n S-sg do+neg V (X) [3]	4	0.05	*Does the dog don't understand Fergus?* (Hazel-EII-TI.a-18)
			do-n neg S-sg V (X)	3	0.04	*Doesn't he know what to do?* (Hazel-EII-TI.a-25)
			do S-sg V-n (X) [4]	2	0.03	*Do he has a good idea?* (Ivy-EIII-TI.a-7)
			do-t S-pl V-t (X) [4]	2	0.03	*Did they bought something?* (Gary-EI-TI.a-12)
			do-t S-sg V-n (X) [4]	2	0.03	*Did he offers him something?* (Nick-EI-TI.a-22)
			do S-pl do+neg V (X) [3]	1	0.01	*In this picture, do they don't understand each other because ... because nobody is saying something?* (Ruth-EI-TI.a-9)
			do S-sg V-t (X) [4]	1	0.01	*Do you phoning because you had a problem ... you have a problem?* (Cathy-EI-TI.a-3)
			do neg S-sg V (X) [1]	1	0.01	*Don't he decide what he try over there?* (Grace-EI-TI.a-15)
			do-n S-sg do+neg V-n (X) [3]	1	0.01	*But the man don't ... but does the man don't wants a dog for this job?* (Erin-EI-TI.a-14)

continued overleaf

type	abs.	%	subtype	abs.	%	example
wh do S aux V (X)	39	0.53	wh do S-pl aux V-t (X) [2]	13	0.18	*How does … how do Mel and Fergus are looking at each other?* (Becky-EII-TII-17)
			wh do-n S-sg aux-n V-t (X) [2]	9	0.12	*What does Fergus is wearing and carrying?* (Sally-EI-TII-18)
			wh do-n S-sg mod V (X) [2]	7	0.1	*What does the library should have by his meaning?* (Lucy-EIII-TII-16)
			wh do-t S-pl aux V-t (X) [2]	3	0.04	*How did the other people are looking at Fergus?* (Matt-EIII-TII-23)
			wh do-n S-pl aux V-t (X) [1 2]	3	0.04	*What does Fergus and Mel are doing?* (Larry-EI-TII-4)
			wh do S-pl mod V (X) [2]	1	0.01	*Where do they can find the living room?* (Cathy-EII-TIII-5)
			wh do-n S-sg mod V-n (X) [2]	1	0.01	*What does it might takes?* (Hazel-EIII-TII-8)
			wh do-n+neg S-sg mod V (X) [2 3]	1	0.01	*Where does not he can find the living room set?* (Larry-EII-TIII-5)
			wh do-t S-sg aux V-t (X) [2]	1	0.01	*Why did Mel have spent enough time?* (Matt-EII-TIII-10)
wh do V S (X)	13	0.18	wh do-n V S-sg (X) [2]	4	0.05	*What does hope Maggie?* (Cathy-EIII-TII-7)
			wh do-n V S-pl (X) [1 2]	3	0.04	*What does want Mel and Fergus rake together today?* (Larry-EII-TII-1)
			wh do-n neg V S-sg (X) [2]	2	0.03	*What doesn't believe the teacher?* (Mary-EIII-TIII-22)
			wh do neg V S-sg (X) [1 2]	1	0.01	*And why don't buy the man the dog-door?* (Emma-EI-TI.a-72)
			wh do V S-pl (X) [2]	1	0.01	*What do find Mel and Fergus hard?* (Brian-EII-TIII-6)
			wh do-n neg V S-pl (X) [1 2]	1	0.01	*What is in the instruction … missing … what tell … what doesn't tell the instructions?* (Mary-EI-TII-10)
			wh do-t neg V S-sg (X) [2]	1	0.01	*What didn't tell you the instructions?* (Cathy-EI-TII-10)
wh do V (X)	12	0.16	wh do-n V (X)	8	0.11	*What does suddenly pop out of the hole?* (Alec-EI-TIII-14)
			wh do-n V-n (X) [4]	3	0.04	*What does suddenly pops out of the hole?* (Sally-EI-TIII-14)
			wh do V (X) [2]	1	0.01	*Why do go to bed directly?* (Ruth-EI-TII-24)
do S cop (X)	3	0.04	do-n S-sg cop-n (X) [2]	3	0.04	*Does the bird is uninterested?* (Cathy-EIII-TI.a-6)
do S aux V (X)	3	0.04	do S-pl aux V (X) [2]	1	0.01	*Do the turkeys have cut the tree?* (Ane-EIII-TI.a-4)
			do-n S-sg aux V (X) [2]	1	0.01	*Does he have invite them?* (Ian-EIII-TI.a-33)
			do-n S-sg aux-n V (X) [2 4]	1	0.01	*Does anybody else … somebody other has hang up this picture of him?* (Hazel-EII-TI.a-6)
do V S (X)	2	0.03	do-n V S-sg (X) [2]	1	0.01	*And does believe the police officer in him?* (Cathy-EII-TI.a-27)
			do-n neg V S-sg (X) [2]	1	0.01	*Doesn't know Mel what to do?* (Sam-EII-TI.a-7)
wh do S cop (X)	2	0.03	wh do-n S-pl cop (X) [2]	1	0.01	*Why … why does Fergus is … why does Fergus is still there … when the police officer doesn't take him … take him seriously?* (Cathy-EII-TI.b-29)
			wh do-n S-sg cop-n (X) [1 2]	1	0.01	*What does they are afraid about?* (Larry-EI-TII-15)
wh do S O V (X)	1	0.01	wh do-n S-sg O V-n (X) [2 4]	1	0.01	*What does the shop-assistant everybody asks?* (Ian-EII-TIII-3)
do S do V (X)	1	0.01	do-n S-sg do-t V-t (X) [2 4]	1	0.01	*Does the man did said in this picture that dogs can't open boxes because they're stand on four feets normally?* (Erin-EI-TI.a-49)

Table 9.9: type-subtype relation – no inversion

type	abs.	%	subtype	abs.	%	example
wh S V (X)	384	5.26	wh S-sg V-n (X) [2]	156	2.14	*Why he takes a bone?* (Fay-EI-TI.b-13)
			wh S-pl V (X) [2]	127	1.74	*What all passers-by think?* (Brian-EI-TII-3)
			wh S-sg V (X) [1 2]	36	0.49	*Why he get lost?* (Paul-EII-TI.b-14)
			wh S-sg V-t (X) [2 (4)]	31	0.42	*But why he screamed?* (Joyce-EI-TI.b-9)
			wh S-pl V-t (X) [2 (4)]	19	0.26	*What Mel and Fergus grabbed?* (Paul-EI-TII-12)
			wh S-pl do neg V (X) [2]	5	0.07	*Why they don't need worry?* (Grace-EI-TIII-9)
			wh S-sg do neg V (X) [1 2]	2	0.03	*Why the box don't stand there?* (Lucy-EI-TI.b-32)
			wh S-sg do-n neg V (X) [2]	2	0.03	*And why he … he don't … he doesn't get through it … or?* (Fay-EI-TI.b-24)
			wh S-pl do-t neg V (X) [2]	1	0.01	*What did the instructions only tell you how to … what didn't the instructions … what the instructions didn't say?* (Matt-EI-TII-10)
			wh S-pl V-n (X) [1 2]	1	0.01	*On what Mel and Fergus sits always buy looking at their latest purchase?* (Nick-EII-TIII-24)
			wh S-pl Ving (X) [2 4]	1	0.01	*How Mel and Fergus looking at each other?* (Lucy-EII-TII-17)
			wh S-sg do-t neg V (X) [2]	1	0.01	*What Fergus didn't know?* (Mary-EII-TII-4)
			wh S-sg VGer (X) [2]	1	0.01	*Why he betteln?* (Lucy-EI-I.b-15)
			wh S-sg V-nt (X) [2 4]	1	0.01	*What Fergus gaves Mel whenever he places a bone in the hole?* (Paul-EI-TIII-16)
S V (X)	315	4.32	S-sg V-n (X)	134	1.84	*And Bruno carries this cat?* (Alec-EII-TI.a-21)
			S-sg V (X) [1 (4)]	72	0.99	*And he meet a big dog?* (Dawn-EII-TI.a-11)
			S-sg V-t (X) [(4)]	31	0.42	*Then he had a new axe?* (Ivy-EIII-TI.a-28)
			S-pl V (X)	30	0.41	*So they find each other?* (Ivy-EII-TI.a-28)
			S-sg do neg V (X) [(1)]	18	0.25	*And she don't believe in him?* (Nick-EII-TI.a-17)
			S-sg do-n neg V (X)	11	0.15	*And he doesn't know what to do?* (Vicky-EIII-TI.a-30)
			S-pl V-t (X)	7	0.1	*And finally they found each other?* (Ruth-EII-TI.a-18)
			S-pl do neg V (X)	4	0.05	*They don't have a car?* (Sally-EIII-TI.a-18)
			S-sg do neg V-n (X) [4]	2	0.03	*And he don't likes the doghouse?* (Becky-EI-TI.a-26)
			S-sg V-n neg (X) [2]	2	0.03	*He hasn't money?* (Lucy-EI-TI.a-16)
			S-sg Vinf (X) [4]	2	0.03	*And … to hang … and he to hang up a photo from his dog?* (Nell-EII-TI.a-3)
			S-pl do-n neg V (X)	1	0.01	*Now they doesn't do anything?* (Ane-EI-TI.a-16)
			S-sg do-t neg V (X)	1	0.01	*But he didn't do anything against it?* (Tessa-EI-TI.a-13)
wh S aux V (X)	232	3.18	wh S-sg aux-n V-t (X) [2]	136	1.86	*How Mel is shaking Fergus?* (Emma-EII-TII-13)
			wh S-pl aux V-t (X) [2]	67	0.92	*What they are talking about?* (Larry-EIII-TI.b-44)
			wh S-pl mod V (X) [2]	8	0.11	*What they can buy a lot of in this store?* (Lucy-EII-TIII-2)
			wh S-sg mod V (X) [2]	6	0.08	*What the library should have?* (Grace-EIII-TII-16)
			wh S-pl aux V (X) [2 4]	3	0.04	*What they are manage to rake in one day?* (Grace-EII-TII-15)
			wh S-sg aux-n V-n (X) [2 4]	3	0.04	*Who Mel is tries to ignore?* (Kevin-EII-TII-18)
			wh S-sg aux-nt V-t (X) [2]	3	0.04	*For what she was looking?* (Cathy-EIII-TIII-10)
			wh S-sg mod neg V (X) [2]	3	0.04	*What Fergus can't see?* (Fay-EII-TII-4)
			wh S-pl aux mod+neg V (X) [2 3]	1	0.01	*What they won't be allowed to put up?* (Hazel-EII-TII-14)
			wh S-sg aux-n VGer (X) [2]	1	0.01	*What he's bitten [German → to ask]?* (Fay-EI-TI.b-28)
			wh S-sg mod V-n (X) [2 4]	1	0.01	*What it might takes before she can go home?* (Matt-EIII-TII-8)
S cop (X)	190	2.6	S-sg cop-n (X)	138	1.89	*It's only for animals?* (Becky-EI-TI.a-7)
			S-pl cop (X)	33	0.45	*They are alive?* (Dawn-EIII-TI.a-13)
			S-sg cop-n neg (X)	11	0.15	*So he isn't right for the job?* (Ruth-EI-TI.a-12)
			S-sg cop-nt (X)	2	0.03	*It was someone else?* (Alec-EII-TI.a-3)
			S-pl cop-inf (X) [4]	1	0.01	*The turkeys … the turkeys to be … cool?* (Nell-EIII-TI.a-15)
			S-pl cop-t (X)	1	0.01	*They were nuclear because they don't want that people eat them?* (Dawn-EIII-TI.a-18)
			S-pl cop-t neg (X)	1	0.01	*There they weren't radioactive?* (Erin-EIII-TI.a-20)
			S-sg cop (X) [1]	1	0.01	*The … the farmer are angrily, aren't he?* (Emma-EIII-TI.b-45)
			S-sg cop-inf (X) [4]	1	0.01	*And the … he's verärgert … to be angry that the turkeys had schickt [German → sent] him away?* (Fay-EIII-TI.a-28)
			S-sg cop-nt neg (X)	1	0.01	*But it … it was not … to slaughter?* (Nell-EIII-TI.a-33)

continued overleaf

type	abs.	%	subtype	abs.	%	example
S aux V (X)	133	1.82	S-sg aux-n V-t (X)	69	0.95	*And Mel is searching for Fergus?* (Ivy-EII-TI.a-8)
			S-pl aux V-t (X)	26	0.36	*So they are joking about the farmer?* (Ruth-EIII-TI.a-15)
			S-sg mod V (X)	16	0.22	*And this dog will buy this house?* (Nell-EI-TI.a-29)
			S-sg mod neg V (X)	7	0.1	*Because he can't find Mel?* (Vicky-EII-TI.a-22)
			S-pl mod neg V (X)	4	0.05	*And the turkeys wouldn't like to give him the handle?* (Nell-EIII-TI.a-22)
			S-pl mod V (X)	4	0.05	*Because they can live?* (Joyce-EIII-TI.a-19)
			S-pl aux neg V-t (X)	1	0.01	*And the both turkeys have not told him that they have got the handle?* (Sam-EIII-TI.a-44)
			S-pl aux V (X) [4]	1	0.01	*And now they have find each other?* (Meg-EII-TI.a-52)
			S-pl aux-t V-t (X)	1	0.01	*So they were kidding the farmer?* (Sam-EIII-TI.a-42)
			S-sg aux V (X) [1 4]	1	0.01	*The man have sell the ... the turkeys before he killed them?* (Kevin-EIII-TI.a-19)
			S-sg aux-n neg V-t (X)	1	0.01	*The big dog hasn't seen Mel?* (Dawn-EII-TI.a-13)
			S-sg aux-n V (X) [4]	1	0.01	*And it's talk to the right turkey?* (Emma-EIII-TI.a-25)
			S-sg aux-n Vinf (X) [4]	1	0.01	*Mel is ... to hang up all the posters on posts?* (Gary-EII-TI.a-3)
wh S cop (X)	65	0.89	wh S-pl cop (X) [2]	35	0.48	*Why they are igloo?* (Grace-EI-TI.b-23)
			wh S-sg cop-n (X) [2]	28	0.38	*Why Fergus is sad?* (Becky-EI-TIII-19)
			wh S-sg cop-n neg (X) [2]	1	0.01	*Why ... why the man is not surprised any more that that a dog want wants a job?* (Brian-EI-TI.b-17)
			wh S-sg cop-nt neg (X) [2]	1	0.01	*What this homework wasn't?* (Grace-EIII-TIII-14)
wh O S V (X)	3	0.04	wh O S-pl V (X) [2]	2	0.03	*Where burial all three stand after each?* (Nell-EI-TIII-17)
			wh O S-sg V (X) [1 2]	1	0.01	*What suggestion Mel grab a stop sign in?* (Nick-EI-TII-11)
S do V (X)	3	0.04	S-sg do V-n (X) [4]	1	0.01	*But this dog do works in?* (Erin-EI-TI.a-23)
			S-sg do-n V (X)	1	0.01	*But now he does believe?* (Ruth-EIII-TI.a-43)
			S-sg do-t V (X)	1	0.01	*But ... but the shop owner did shout at him?* (Alec-EI-TI.a-8)
S aux V wh (X)	2	0.03	S-sg aux-n V-t wh (X) [2]	2	0.03	*Maggie has never mentioned for what she was looking for?* (Dawn-EIII-TIII-10)
S V wh (X)	2	0.03	S-pl V wh (X) [2]	1	0.01	*Mel keeps telling Fergus when they have to ... they have to finish this when?* (Dawn-EII-TII-11)
			S-sg V-n wh (X) [2]	1	0.01	*Mel comforts who each time after he has buried a bone?* (Zoe-EI-TIII-20)
S aux aux V (X)	2	0.03	S-pl mod neg aux V-t (X)	1	0.01	*So they couldn't be killed from the farmer?* (Vicky-EIII-TI.a-47)
			S-sg mod aux V (X) [4]	1	0.01	*And now the policewoman should ... shall be care of Fergus?* (Ian-EII-TI.a-42)
S cop Sc wh (X)	1	0.01	S-sg cop-n Sc wh (X) [2]	1	0.01	*What ... what can't ... Mel is afraid that they won't be allowed to push up what?* (Joyce-EII-TII-14)
S V (X) wh	1	0.01	S-sg V-n (X) wh	1	0.01	*And now Fergus don't smile ... doesn't smile he look ... he looks nervous, why?* (Cathy-EII-TI.a-33)
O V wh do S V (X)	1	0.01	O Vinf wh do-n S-sg V (X) [2]	1	0.01	*The perfect spot to bury what does Fergus look for?* (Alec-EI-TIII-2)
wh O aux S V (X)	1	0.01	wh O aux Spl V-t (X) [2]	1	0.01	*Towards what Fergus is ... towards what ... towards what Mel are they skating?* (Nick-EI-TII-14)

Table 9.10: type-subtype relation – cop inversion

type	abs.	%	subtype	abs.	%	example
cop S (X)	474	6.5	cop-n S-sg (X)	379	5.19	*Is this a good idea?* (Alec-III-TI.a-10)
			cop S-pl (X)	88	1.21	*Are they in Dog World?* (Cathy-EI-TI.a-20)
			cop-nt S-sg (X)	4	0.05	*Does Mel ... was Mel ... was Mel at the detective centre?* (Meg- EII-TI.a-50)
			cop S-sg (X) [1]	2	0.03	*Are the turkey insulted?* (Emma-EIII-TI.a-55)
			cop-n S-pl (X) [1]	1	0.01	*Are the turkeys at a ... are the turkeys?* (Becky-EIII-TI.a-15)
wh cop S (X)	431	5.91	wh cop-n S-sg (X)	348	4.77	*Who is that?* (Ane-EII-TI.b-10)
			wh cop S-pl (X)	54	0.74	*Why are they afraid?* (Dawn-EI-TII-15)
			wh cop-nt S-sg (X)	13	0.18	*What was the name of this dog?* (Brian-EII-TI.b-8)
			wh cop-nt neg S-sg (X)	9	0.12	*What wasn't the homework?* (Dawn-EIII-TIII-14)
			wh cop neg S-pl (X)	2	0.03	*Why aren't they afraid they could be killed?* (Zoe-EIII-TI.b-29)
			wh cop S-sg (X) [1]	2	0.03	*Why ... why are Fergus so happy?* (Emma-EII-TI.b-30)
			wh cop neg S-sg (X) [1]	1	0.01	*What aren't this homework by Fergus meaning?* (Lucy-EIII-TIII-14)
			wh cop-nt+neg cop S-sg (X) [3]	1	0.01	*How wasn't be that homework?* (Hazel-EIII-TIII-14)
			wh cop-t S-pl (X)	1	0.01	*How ... how ... how were they when they finally arrive home?* (Meg-EI-TII-24)
wh cop (X)	45	0.62	wh cop-n (X)	41	0.56	*But what is ... what is inside?* (Eric-EI-TI.b-21)
			wh cop (X)	4	0.05	*In the opinion of Fergus. what kind of things are in the world?* (Alec-EI-TIII-9)
cop S cop (X)	3	0.04	cop S-pl cop (X) [2]	2	0.03	*Are they are on the North Pole?* (Hazel-EI-TI.a-8)
			cop-n S-pl cop (X) [1 2]	1	0.01	*Is this ... is they're the turkeys from the man?* (Nell-EIII-TI.a-9)
wh cop Sc cop (X)	2	0.03	wh cop-n Sc cop-n (X) [2]	2	0.03	*What is, according to Fergus, is also unnecessary?* (Zoe-EIII-TII-20)
wh cop Sc S (X)	1	0.01	wh cop-n Sc S (X) [2]	1	0.01	*What ... Mel is afraid that they ..... What is afraid Mel that they won't be allowed to put ... to put up?* (Lucy-EII-TII-14)
wh cop S cop (X)	1	0.01	wh cop-n S-sg cop-n (X) [2]	1	0.01	*For what is Maggie is annoyed by?* (Mary-EIII-TII-13)

Table 9.11: type-subtype relation – verb inversion

type	abs.	%	subtype	abs.	%	example
wh V S (X)	597	8.18	wh V-n S-sg (X) [(2)]	300	4.11	*What says he?* (Cathy-EIII-TI.b-21)
			wh V S-sg (X) [1 2]	128	1.75	*What say he?* (Paul-EI-TI.b-19)
			wh V S-pl (X) [2]	116	1.59	*What do Fergus and Arlo?* (Nell-EIII-TIII-23)
			wh V-t S-sg (X) [(2 4)]	34	0.47	*What said Mel when they are inline-skating?* (Matt-EI-TII-8)
			wh V-t S-pl (X) [2 (4)]	10	0.14	*What did Fergus and Mel?* (Matt-EI-TII-4)
			wh V-n S-pl (X) [1 2]	8	0.11	*Where stands the three after each burial?* (Lucy-EI-TIII-17)
			wh VGer S-sg (X) [2]	1	0.01	*Will the man … what will the man with the axt [German → axe]?* (Nell-EIII-TI.b-66)
V S (X)	120	1.64	V S-sg (X) [(1) 2]	73	1	*Find Fergus a friend?* (Paul-EII-TI.a-7)
			V-n S-sg (X) [2]	27	0.37	*Has he a good chance?* (Vicky-EI-TI.a-4)
			V-t S-sg (X) [2]	7	0.1	*Found Fergus Mel?* (Kevin-EII-TI.a-7)
			V S-pl (X) [2]	6	0.08	*Have they a quarrel?* (Dawn-EIII-TI.a-8)
			V-t S-pl (X) [2]	4	0.05	*Screamed they 'Mel'?* (Lucy EII-TI.a-3)
			VGer S-sg (X) [2]	3	0.04	*Will [German → want] the man that?* (Kevin-EI-TI.a-5)
wh V (X)	33	0.45	wh V-n (X) [(2)]	14	0.19	*What means that?* (Grace-EI-TI.b-3)
			wh V (X) [(1) 2]	12	0.16	*Who have lots of fun?* (Larry-EI-TII-6)
			wh V-t (X) [(2 4)]	7	0.1	*Did they … what happened to the turkeys?* (Alec-EIII-TI.b-28)
V O (X)	2	0.03	V O-pl (X) [2]	1	0.01	*To told them to be right?* (Sam-EIII-TI.a-50)
			V-t O-pl (X) [2]	1	0.01	*Tell them a lie?* (Fay-EIII-TI.a-12)
wh V S aux (X)	1	0.01	wh V-t S-pl aux (X) [2]	1	0.01	*How much … how many passed they have their house already?* (Nell-EI-TII-23)
wh V aux S (X)	1	0.01	wh V aux-n S-sg (X) [2 4]	1	0.01	*Who suggest is Cuddles to … to rake some leaves every weekend?* (Sam-EII-TII-8)

Table 9.12: type-subtype relation – fragment

type	abs.	%	subtype	abs.	%	example
S (X)	53	0.73	S-sg (X) [2]	43	0.59	*Same story?* (Alec-EIII-TIa-27)
			S-pl (X)	9	0.12	*Two Ferguses?* (Larry-EI-TI.a-21)
			S-pl do neg (X)	1	0.01	*But they don't?* (Dawn-EIII-TI.a-7)
wh (X)	18	0.25	wh (X)	18	0.25	*Why not?* (Paul-EI-TI.b-6)
X	14	0.19	(X)	14	0.19	*And now?* (Cathy-EIII-TI.a-23)
V (X)	10	0.14	Vinf (X) [1 2]	9	0.12	*To kill him?* (Meg-EIII-TI.a-55)
			V (X) [1]	1	0.01	*And ask for Mel?* (Vicky-EII-I.a-24)
wh S (X)	6	0.08	wh S-sg (X) [2 4]	6	0.08	*Why the igloo damaged?* (Paul-EI-TI.b-25)
aux S (X)	1	0.01	aux-nt S-sg (X)	1	0.01	*Has Fergus ... [called the police]?* (Karin-EII-TI.a-27)
do S (X)	1	0.01	do-t S-sg (X)	1	0.01	*And did he?* (Alec-EIII-TI.a-8)
S aux (X)	1	0.01	S-sg mod (X)	1	0.01	*The dog would ...?* (Grace-EI-TI.a-5)

9.2.4 Subtypes – Superscripted

Table 9.13: superscripted subtypes – aux inversion

type	subtype	task	group					
			1	2	3	4	5	6
(wh) aux S V (X) ◆ ■ ● ▲	(wh) aux-n S-sg V-t (X) [2 4]	I.a	6.97	3.05	6.78	12.31	2.93	13.33
		I.b	5.04	7.1	10.93	22.7	10.14	10.58
		II	27.31	16.51	23.49	27.26	22.4	21.67
			0.42 [2]	-	0.23 [2]	0.32 [2]	0.52 [2]	-
			2.94 [4]	0.23 [4]	-	-	1.04 [4]	-
		III	29.96	16.67	27.23	26.62	24.21	18.01
			-	-	-	0.16 [2]	-	0.38 [2]
			0.42 [4]	0.23 [4]	-	-	-	-
	(wh) aux S-pl V-t (X) [4]	I.a	1.52	1.52	2.82	4.42	0.98	4.76
		I.b	4.32	0.65	9.29	6.58	-	3.85
		II	6.3	1.86	3.26	4.52	2.08	4.18
			0.42 [4]	-	-	0.16 [4]	-	-
		III	8.02	3.52	4.69	8.28	5.79	8.05
			-	0.23 [4]	-	-	0.53 [4]	-
	wh aux-n S-sg V-n (X) [4]	II	6.72 [4]	0.7 [4]	1.86 [4]	0.32 [4]	1.04 [4]	-
		III	3.38 [4]	2.11 [4]	0.47 [4]	-	1.05 [4]	-
	(wh) aux-n S-sg V (X) [4]	I.a	4.85 [4]	1.27 [4]	0.56 [4]	0.77 [4]	1.46 [4]	1.43 [4]
		I.b	5.04 [4]	-	-	-	-	-
		II	2.1 [4]	1.16 [4]	-	1.29 [4]	0.52 [4]	-
		III	2.53 [4]	0.47 [4]	0.47 [4]	0.65 [4]	-	-
	(wh) mod S-sg V (X)	I.a	2.12	2.8	2.54	0.77	0.49	1,43
		I.b	1.44	0.65	1.09	-	-	2.88
		II	-	0.93	0.93	0.97	1.04	0.76
		III	1.69	1.17	1.17	1.14	1.05	0.77
	(wh) aux S-pl V (X) [4]	I.a	0.61 [4]	0.25 [4]	-	0.19 [4]	0.49 [4]	0.48 [4]
		I.b	-	-	-	0.33 [4]	-	-
		II	1.68 [4]	0.47 [4]	-	0.65 [4]	-	0.38 [4]
		III	3.38 [4]	0.7 [4]	0.7 [4]	0.65 [4]	0.53 [4]	1.15 [4]
	(wh) mod S-pl V (X)	I.a	-	0.51	-	0.19	0.49	-
		II	0.42	-	-	0.16	0.52	-
		III	1.69	0.23	0.94	1.3	0.53	0.38
	(wh) mod neg S-sg V (X)	I.a	-	0.25	-	-	-	-
		II	0.84	0.93	0.93	0.81	0.52	0.76
	wh aux-nt S-sg V-t (X)	II	-	-	-	-	0.52	-
		III	0.42	-	0.23	0.81	-	0.38
	wh mod neg S-pl V (X)	II	-	0.23	0.23	0.32	-	-
		III	-	-	0.23	-	-	-
	(wh) mod S-sg V-t (X) [4]	I.a	-	-	-	-	-	0.48 [4]
		I.b	0.72 [4]	1.29 [4]	-	-	-	-
		II	-	0.23 [4]	-	-	-	-
	(wh) aux S-pl do+neg V (X) [3 (4)]	I.a	0.3 [3]	-	-	-	-	-
		I.b	-	-	-	-	1.45 [3 4]	-
		II	-	-	-	-	0.52 [3 4]	-
	(wh) aux-n S-sg Vinf (X) [4]	I.a	-	1.27 [4]	-	-	0.98 [4]	-
		I.b	0.72 [4]	-	-	-	-	-
		III	0.42 [4]	-	-	-	-	-
	wh aux-t S-pl V-t (X)	I.b	-	0.65	-	-	-	-
		II	-	-	-	-	0.52	-
	wh aux S-pl do+neg V-t (X) [3]	II	0.42 [3]	-	-	-	-	-
	wh aux S-sg V-n (X) [1 4]	II	0.42 [1 4]	-	-	-	-	-
	(wh) aux S-sg V-t (X) [1]	I.a	0.3 [1]	0.25 [1]	-	-	-	0.48 [1]
		III	-	-	0.23 [1]	-	-	-
	wh aux-nt S-pl V-t (X)	III	-	0.23	-	-	-	-
	wh aux-t S-pl V (X) [4]	III	-	0.23 [4]	-	-	-	-
	wh aux-t S-pl V-tt (X) [4]	III	-	-	-	0.16 [4]	-	-
	(wh) aux-t S-sg V-t (X)	I.a	-	0.51	-	-	-	-
		III	-	-	-	0.16	-	-

continued overleaf

type	subtype	task	group					
			1	2	3	4	5	6
(wh) aux S V (X) ◆ ■ ● ▲	wh mod neg S-sg mod+neg Vinf (X) [3]	II	0.42 [3]	-	-	-	-	-
	(wh) mod S-sg Vinf (X) [4]	I.a	0.91 [4]	-	-	-	-	0.48
		II	-	-	-	-	0.52 [4]	-
	aux S-sg V (X) [1]	I.a	-	0.25 [1]	0.56 [1]	-	-	-
	aux-n S-pl V (X) [1 4]	I.a	0.3 [1 4]	-	-	-	0.98 [1 4]	-
	aux-n S-sg V-tt (X) [4]	I.a	-	-	-	0.38 [4]	-	-
	aux-nt S-sg V-t (X)	I.a	-	0.25	-	-	-	0.48
	aux-n neg S-sg V-t (X)	I.a	0.3	-	-	-	-	-
	aux-n S-sg V-t V (X)	I.a	0.3	-	-	-	-	-
	aux-t S-sg Vinf (X) [4]	I.a	0.3 [4]	-	-	-	-	-
wh aux V (X) ■ ●	wh aux-n V-t (X) [(2)]	I.b	1.44	1.94	-	0.99	-	-
		II	3.36	3.26	3.49	4.03	4.69	4.18
			0.42 [2]	0.23 [2]	-	0.48 [2]	0.52 [2]	0.38 [2]
		III	2.53	2.35	1.41	2.44	2.63	2.3
			-	0.7 [2]	-	0.32 [2]	1.05 [2]	-
	wh aux V-t (X)	II	2.1	2.56	1.4	1.77	1.04	1.52
	wh mod V (X) [(2)]	I.b	1.44	-	-	-	-	-
		II	0.42	0.47	0.93	0.97	0.52	0.38
		III	-	-	0.23 [2]	-	0.53 [2]	-
	wh aux-n V (X) [4]	I.b	0.72 [4]	0.65 [4]	-	-	2.9 [4]	-
	wh aux-nt V-t (X) [(4)]	I.b	-	-	-	-	-	0.96
		II	-	0.23 [4]	-	-	-	0.38
	wh aux-n V-n (X) [4]	III	-	-	-	0.16	0.53	-
	wh aux-t V-t (X)	I.b	-	-	0.55	-	-	-
	wh mod neg V (X)	II	-	-	-	0.16	-	-
wh aux V S (X)	wh aux-n V-t S-sg (X) [(2)]	I.b	-	-	-	0.33 [2]	-	-
		II	0.42 [2]	0.47 [2]	-	0.48 [2]	2.08 [2]	-
		III	-	0.94 [2]	-	0.49 [2]	0.53 [2]	-
	wh aux V-t S-pl (X) [2 (4)]	II	0.42 [2]	0.23 [2 4]	-	-	0.52 [2]	-
		III	0.42 [2]	0.47 [2]	-	-	0.53 [2]	-
	wh aux-n V-n S-sg (X) [2 4]	III	0.84 [2 4]	-	-	0.16 [2 4]	0.53 [2 4]	-
	wh mod V S-sg (X) [2]	I.b	1.44 [2]	-	-	-	-	-
		II	-	-	0.23 [2]	-	-	-
	wh aux-n V S-sg (X) [2]	III	-	-	-	-	0.53 [2]	-
	wh mod V-t S-sg (X) [2]	I.b	-	0.65 [2]	-	-	-	-
wh aux aux V S (X)	wh mod aux-be V-t S-sg (X) [(2)]	II	0.84	0.47	0.7	1.13	1.04	0.76
			-	-	-	-	0.52 [2]	-
(wh) aux S aux V (X)	(wh) aux S-pl aux V-t (X) [2]	I.a	-	-	0.28 [2]	0.19 [2]	-	-
		I.b	-	-	-	0.33 [2]	-	-
		II	-	-	0.47 [2]	0.32 [2]	0.52 [2]	0.38 [2]
		III	-	-	-	0.16 [2]	-	-
	wh aux-n S-sg aux-n V-t (X) [2]	I.b	-	-	0.55 [2]	-	-	-
		II	-	-	-	0.16 [2]	-	-
		III	-	-	-	-	0.53 [2]	-
	wh mod S-sg mod V (X) [2]	II	0.42 [2]	-	0.23 [2]	-	-	-
	mod S-sg mod V (X) [2]	I.a	-	-	0.28 [2]	-	-	-
(wh) aux S O V (X)	wh aux-n S-sg O V-t (X) [2]	II	-	-	-	0.16 [2]	-	-
		III	0.42 [2]	-	-	-	-	-
	aux-n S-sg O V (X) [2 4]	I.a	0.3 [2 4]	-	-	-	-	-
	aux-n S-sg O V-t (X) [2]	I.a	-	-	-	0.19 [2]	-	-
	mod S-pl O VGer (X) [2]	I.a	-	0.25 [2]	-	-	-	-
	mod S-sg O V (X) [2]	I.a	-	0.25 [2]	-	-	-	-
	mod S-sg O V-t (X) [2 4]	I.a	-	-	-	-	-	0.48 [2 4]
	mod S-sg O Vinf (X) [2 4]	I.a	0.3 [2 4]	-	-	-	-	-
wh aux aux V (X)	wh aux-nt aux-t V-t (X) [4]	III	-	-	-	-	0.53 [4]	-
	wh mod aux V (X)	III	-	-	-	-	-	0.38
	wh mod aux V-t (X)	I.b	-	0.65	-	-	-	-
	wh mod aux-be V-t (X)	II	-	0.23	-	-	-	-
wh aux S (X)	wh aux-n S-sg (X) [2]	III	-	0.23 [2]	-	-	-	-

Table 9.14: superscripted subtypes – do-support

type	subtype	task	group					
			1	2	3	4	5	6
(wh) do S V (X) ◆ ■ ● ▲	(wh) do-n S-sg V (X)	I.a	1.52	8.38	20.06	9.04	0.98	5.71
		I.b	-	9.03	17.49	22.04	2.9	11.54
		II	1.26	4.88	16.51	19.35	2.08	14.83
		III	2.53	6.1	16.9	17.21	4.21	17.62
	(wh) do S-pl V (X)	I.a	0.61	0.51	2.54	2.12	0.49	2.38
		I.b	-	3.23	1.09	2.3	-	-
		II	0.42	1.16	2.33	3.87	1.56	4.56
		III	0.42	4.93	6.57	12.82	4.74	9.58
	(wh) do-n S-sg V-n (X) [4]	I.a	-	0.51 [4]	6.78 [4]	0.58 [4]	-	0.95 [4]
		I.b	-	4.52 [4]	1.09 [4]	1.64 [4]	-	3.85 [4]
		II	3.36 [4]	6.74 [4]	5.81 [4]	5.16 [4]	1.04 [4]	7.22 [4]
		III	1.27 [4]	3.05 [4]	3.99 [4]	3.25 [4]	1.58 [4]	3.07 [4]
	(wh) do-n S-pl V (X) [1]	I.a	-	1.52 [1]	2.26 [1]	0.77 [1]	-	-
		I.b	-	0.65 [1]	1.64 [1]	1.64 [1]	-	-
		II	-	0.7 [1]	2.09 [1]	1.94 [1]	-	1.14 [1]
		III	1.27 [1]	1.41 [1]	3.05 [1]	2.27 [1]	1.58 [1]	0.38 [1]
	(wh) do-t S-pl V (X)	I.a	1.21	0.51	0.56	-	-	1.43
		I.b	-	3.23	1.64	0.66	-	-
		II	-	0.7	0.93	1.45	-	1.52
		III	-	0.23	6.34	1.14	-	1.15
	(wh) do-t S-sg V (X)	I.a	0.91	3.81	2.26	0.96	-	-
		I.b	-	7.74	4.92	0.66	-	1.92
		II	-	0.47	3.02	0.65	-	0.38
		III	-	-	2.58	-	-	-
	(wh) do-n S-sg V-t (X) [4]	I.a	-	0.25 [4]	3.95 [4]	0.38 [4]	-	-
		I.b	-	0.65 [4]	-	0.33 [4]	-	4.81 [4]
		II	-	1.63 [4]	1.86 [4]	0.32 [4]	-	1.52 [4]
		III	-	2.11 [4]	0.94 [4]	0.16 [4]	-	0.38 [4]
	(wh) do S-pl V-t (X) [4]	I.a	-	0.25 [4]	-	0.38 [4]	-	0.48 [4]
		I.b	-	-	0.55 [4]	-	-	-
		II	-	0.23 [4]	0.47 [4]	0.65 [4]	-	-
		III	-	0.47 [4]	0.94 [4]	1.14 [4]	-	-
	(wh) do-t S-sg V-n (X) [(2)4]	I.a	-	0.25 [4]	-	-	-	0.48 [4]
		I.b	-	1.29 [4]	1.64 [4]	-	-	-
		II	0.42 [4]	-	3.02 [4]	-	-	0.38 [4]
		III	-	-	0.23 [2 4]	-	-	-
	(wh) do-t S-pl V-t (X) [4]	I.a	-	0.25 [4]	0.28 [4]	-	-	-
		I.b	-	0.65 [4]	-	-	-	-
		II	-	0.23 [4]	0.47 [4]	0.16 [4]	0.52 [4]	0.76 [4]
		III	0.42 [4]	0.23 [4]	0.94 [4]	0.32 [4]	-	0.38 [4]
	(wh) do S-sg V (X) [(1)]	I.a	-	0.25 [1]	0.85	1.35 [1]	-	-
			-	-	0.57 [1]	-	-	-
		I.b	-	-	-	1.32 [1]	-	0.96 [1]
		III	-	-	0.23 [1]	1.14 [1]	0.53 [1]	-
	wh do-n S-pl V-t (X) [1 4]	II	-	0.23 [1 4]	0.47 [1 4]	0.16 [1 4]	-	0.76 [1 4]
		III	-	0.7 [1 4]	0.23 [1 4]	0.16 [1 4]	0.53 [1 4]	-
	(wh) do-t S-sg V-t (X) [4]	I.a	-	1.52 [4]	0.56 [4]	0.19 [4]	-	-
		I.b	-	3.23 [4]	-	0.33 [4]	-	-
		II	-	-	-	0.32 [4]	-	-
	wh do-n S-sg mod+neg V (X) [3]	II	-	-	0.47 [3]	0.32 [3]	-	0.38 [3]
	(wh) do S-sg V-n (X) [4]	I.a	-	0.25 [4]	-	-	-	0.48 [4]
		I.b	-	-	-	0.33 [4]	-	-
		II	-	0.23 [4]	-	-	-	-
		III	-	-	-	0.32 [4]	-	-
	wh do-n S-pl V-n (X) [1 4]	II	-	-	-	-	-	1.14 [1 4]
		III	-	-	-	0.16 [1 4]	-	-
	wh do-n S-pl do+neg V (X) [1 3]	II	-	-	-	0.32 [1 3]	-	0.38 [1 3]
	wh do neg S-pl V (X)	III	-	-	-	0.16	-	0.38
	(wh) do neg S-sg V (X) [1]	I.a	-	0.25 [1]	-	-	-	-
		I.b	-	-	0.55 [1]	-	-	-
		II	-	-	0.23 [1]	-	-	-
	(wh) do S-sg V-t (X) [4]	I.a	-	-	0.28 [4]	-	-	-
		I.b	-	-	0.55 [4]	-	-	-
		III	-	-	-	-	-	0.38 [4]
	wh do-n neg S-pl V (X) [1]	II	-	0.23 [1]	-	0.16 [1]	-	-

continued overleaf

type	subtype	task	group					
			1	2	3	4	5	6
(wh) do S V (X) ◆ ■ ● ▲	(wh) do-n neg S-sg V (X)	I.a	-	-	0.28	0.19	-	0.48
		I.b	-	-	-	0.33	-	-
		II	-	-	-	0.16	-	-
	wh do-n+neg S-pl neg V (X) [1 3]	II	-	0.23 [1 3]	-	0.16 [1 3]	-	-
	wh do S-pl mod+neg V (X) [3]	II	-	-	-	0.16 [3]	-	-
	wh do S-pl V-n (X) [1 4]	III	-	-	-	-	-	0.38 [1 4]
	wh do-n S-pl mod+neg V (X) [3]	II	-	0.23 [3]	-	-	-	-
	wh do-n S-sg do-t+neg V (X) [3]	II	-	-	-	0.16 [3]	-	-
	wh do-t neg S-pl V (X)	II	-	-	-	-	-	0.38
	wh do-t S-pl V-n (X) [4]	III	-	-	0.23 [4]	-	-	-
	do-n S-sg do+neg V (X) [3]	I.a	-	0.25 [3]	0.56 [3]	0.19 [3]	-	-
	do S-pl do+neg V (X) [3]	I.a	-	-	-	-	-	0.48 [3]
	do-n S-sg do+neg V-n (X) [3]	I.a	-	-	0.28 [3]	-	-	-
(wh) do S aux V (X)	wh do S-pl aux V-t (X) [2]	II	-	0.47 [2]	-	0.32 [2]	-	-
		III	-	-	0.94 [2]	0.81 [2]	-	-
	wh do-n S-sg aux-n V-t (X) [2]	II	-	0.23 [2]	1.16 [2]	0.32 [2]	-	0.38 [2]
	wh do-n S-sg mod V (X) [2]	II	-	0.47 [2]	0.23 [2]	0.64 [2]	-	-
	wh do-t S-pl aux V-t (X) [2]	II	-	-	0.47 [2]	-	-	-
		III	-	-	0.23 [2]	-	-	-
	wh do-n S-pl aux V-t (X) [1 2]	II	-	-	0.47 [1 2]	0.16 [1 2]	-	-
	wh do S-pl mod V (X) [2]	III	-	-	0.23 [2]	-	-	-
	wh do-n S-sg mod V-n (X) [2]	II	-	-	0.23 [2]	-	-	-
	wh do-n+neg S-sg mod V (X) [3]	III	-	-	-	0.16 [3]	-	-
	wh do-t S-sg aux V-t (X) [2]	III	-	-	0.23 [2]	-	-	-
	do S-pl aux V (X) [2]	I.a	-	-	-	0.19 [2]	-	-
	do-n S-sg aux V (X) [2]	I.a	-	0.25 [2]	-	-	-	-
	do-n S-sg aux-n V (X) [2 4]	I.a	-	-	0.28 [2 4]	-	-	-
(wh) do V S (X)	wh do-n V S-sg (X) [2]	I.a	-	-	0.28 [2]	-	-	-
		I.b	-	0.65 [2]	-	-	-	-
		II	-	0.23 [2]	0.23 [2]	-	-	-
		III	-	-	-	0.16 [2]	-	-
	wh do-n V S-pl (X) [1 2]	II	-	-	0.23 [1 2]	0.16 [1 2]	-	-
		III	-	-	-	0.16 [1 2]	-	-
	wh do-n neg V S-sg (X) [2]	I.a	-	-	-	0.19 [2]	-	-
		II	-	-	-	-	-	0.38 [2]
		III	-	-	-	-	0.53 [2]	-
	wh do neg V S-sg (X) [1 2]	I.b	0.72 [1 2]	-	-	-	-	-
	wh do V S-pl (X) [2]	III	-	-	-	0.16 [2]	-	-
	wh do-n neg V S-pl (X) [1 2]	II	-	-	-	-	0.52 [1 2]	-
	wh do-t neg V S-sg (X) [2]	II	-	-	0.23 [2]	-	-	-
wh do V (X)	wh do-n V (X)	II	-	-	0.47	-	-	-
		III	-	-	0.23	0.65	-	0.38
	wh do-n V-n (X) [4]	III	-	-	0.47 [4]	0.16 [4]	-	-
	wh do V (X) [2]	II	-	-	-	-	-	0.38 [2]
(wh) do S cop (X)	do-n S-sg cop-n (X) [2]	I.a	-	-	0.85 [2]	-	-	-
		I.b	-	-	0.55 [2]	-	-	-
	wh do-n S-pl cop (X) [1 2]	II	-	-	-	0.16 [1 2]	-	-
wh do S O V (X)	wh do-n S-sg O V-n (X) [2 4]	III	-	0.23 [2 4]	-	-	-	-
do S do V (X)	do-n S-sg do-t V-t (X) [2 4]	I.a	-	-	0.28 [2 4]	-	-	-

Table 9.15: superscripted subtypes – no inversion

type	subtype	task	group					
			1	2	3	4	5	6
(wh) S V (X) ◆ ■ ● ▲	(wh) S-sg V-n (X) [(2)]	I.a	0.3	6.35	5.65	7.31	12.2	11.9
		I.b	-	1.94 [2]	1.64 [2]	0.66 [2]	8.7 [2]	0.96 [2]
		II	0.84 [2]	9.53 [2]	2.33 [2]	0.65 [2]	10.42 [2]	3.04 [2]
		III	-	5.63 [2]	0.7 [2]	0.16 [2]	7.89 [2]	4.98 [2]
	(wh) S-pl V (X) [(2)]	I.a	0.61	1.02	0.56	1.92	2.44	3.33
		I.b	-	0.65 [2]	1.09 [2]	1.32 [2]	4.35 [2]	-
		II	1.68 [2]	4.42 [2]	1.4 [2]	0.32 [2]	5.73 [2]	2.28 [2]
		III	0.84 [2]	6.81 [2]	1.64 [2]	0.16 [2]	7.89 [2]	5.75 [2]
	(wh) S-sg V (X) [(1 2)]	I.a	4.85	4.06 [1]	1.13	2.5 [1]	8.78 [1]	2.38 [1]
			4.55 [1]	-	0.85 [1]	-	-	-
		I.b	0.72 [1 2]	1.29 [1 2]	0.55 [1 2]	0.33 [1 2]	4.35 [1 2]	8.65 [1 2]
		II	-	0.93 [1 2]	0.23 [1 2]	0.16 [1 2]	1.56 [1 2]	0.76 [1 2]
		III	-	1.41 [1 2]	-	-	1.05 [1 2]	-
	(wh) S-sg V-t (X) [(2 4)]	I.a	0.3	1.52	0.28	2.69	2.44	1.9
			-	-	-	-	0.49 [4]	-
		I.b	-	3.23 [2]	1.64 [2]	0.33 [2 4]	1.45 [2 4]	-
		II	-	1.63 [2]	0.23 [2]	0.16 [2]	1.04 [2]	1.14 [2]
			-	-	-	-	0.52 [2 4]	0.38 [2 4]
		III	-	0.7 [2]	-	-	0.53 [2]	0.38 [2 4]
	(wh) S-pl V-t (X) [(2 4)]	I.a	0.3	-	0.28	0.38	-	1.43
		I.b	0.72 [2]	0.65 [2]	-	-	-	0.96 [2]
		II	0.42 [2]	0.23 [2]	-	-	1.56 [2]	1.14 [2]
		III	-	0.47 [2]	0.23 [2]	0.16 [2 4]	1.05 [2]	0.77 [2]
	(wh) S-pl do neg V (X) [(2)]	I.a	0.3	-	0.28	0.38	-	-
		II	-	0.47 [2]	0.23 [2]	-	0.52 [2]	-
		III	-	0.23 [2]	-	-	-	-
	S-sg do neg V (X) [(1 2)]	I.a	0.91	0.51	0.28	1.35 [1]	0.98	1.43
		I.b	-	0.65 [1 2]	-	-	1.45 [1 2]	-
	S-sg do-n neg V (X) [(2)]	I.a	0.3	0.25	-	0.96	1.46	0.48
		I.b	-	-	0.55 [2]	-	1.45 [2]	-
	wh S-pl do-t neg V (X) [2]	II	-	-	0.23 [2]	-	-	-
	wh S-pl V-n (X) [1 2]	III	-	-	-	-	-	0.38 [1 2]
	wh S-pl Ving (X) [2 4]	II	-	0.23 [2 4]	-	-	-	-
	(wh) S-sg do-t neg V (X) [(2)]	I.a	-	-	-	0.19	-	-
		II	-	-	-	-	0.52 [2]	-
	wh S-sg VGer (X) [2]	I.b	-	0.65 [2]	-	-	-	-
	wh S-sg V-nt (X) [2 4]	III	-	-	-	-	-	0.38 [2 4]
	S-sg do neg V-n (X) [4]	I.a	-	-	-	0.19 [4]	-	0.48 [4]
	S-sg V-n neg (X)	I.a	0.3	0.25	-	-	-	-
	S-sg Vinf (X) [4]	I.a	0.61 [4]	-	-	-	-	-
	S-pl do-n neg V (X)	I.a	-	-	-	0.19	-	-
(wh) S aux V (X) ◆ ■ ● ▲	(wh) S-sg aux-n V-t (X) [(2)]	I.a	0.91	-	0.85	4.42	12.68	6.67
		I.b	-	-	4.92 [2]	-	1.45 [2]	4.81 [2]
		II	0.42 [2]	5.81 [2]	2.79 [2]	0.48 [2]	6.77 [2]	1.9 [2]
		III	-	6.57 [2]	2.58 [2]	0.32 [2]	2.63 [2]	6.13 [2]
	(wh) S-pl aux V-t (X) [(2)]	I.a	1.21	0.51	1.13	1.73	1.95	1.43
		I.b	-	-	0.55 [2]	2.3 [2]	2.9 [2]	7.69 [2]
		II	-	1.16 [2]	0.93 [2]	0.32 [2]	1.56 [2]	1.14 [2]
		III	-	3.52 [2]	0.47 [2]	-	4.74 [2]	2.3 [2]
	(wh) S-pl mod V (X) [(2)]	I.a	-	0.51	0.28	-	0.49	-
		III	-	1.17 [2]	-	-	0.53 [2]	0.77 [2]
	(wh) S-sg mod V (X) [(2)]	I.a	2.12	1.52	-	0.38	0.49	-
		II	-	0.47 [2]	-	-	0.52 [2]	-
		III	-	0.47 [2]	-	-	-	0.38 [2]
	(wh) S-pl aux V (X) [(2) 4]	I.a	-	-	-	0.19 [4]	-	-
		II	-	0.23 [2 4]	-	-	-	0.76 [2 4]
	wh S-sg aux-n V-n (X) [2 4]	II	-	0.47 [2 4]	-	-	0.52 [2 4]	-
	wh S-sg aux-nt V-t (X) [2]	III	-	0.47 [2]	0.23 [2]	-	-	-
	(wh) S-sg mod neg V (X) [(2)]	I.a	0.61	0.25	0.56	0.38	-	-
		II	-	0.23 [2]	-	-	0.52 [2]	0.38 [2]
	wh S-pl aux mod+neg V (X) [2 3]	II	-	-	0.23 [2 3]	-	-	-
	wh S-sg aux-n VGer (X) [2]	I.b	-	-	-	-	1.45 [2]	-
	wh S-sg mod V-n (X) [2 4]	II	-	-	0.23 [2 4]	-	-	-
	S-pl mod neg V (X)	I.a	0.3	-	-	0.38	0.49	-

continued overleaf

type	subtype	task	group					
			1	2	3	4	5	6
(wh) S aux V (X) ◆ ■ ● ▲	S-pl aux neg V-t (X)	I.a	-	-	-	0.19	-	-
	S-pl aux-t V-t (X)	I.a	-	-	-	0.19	-	-
	S-sg aux V (X) [1 4]	I.a	-	0.25 [1 4]	-	-	-	-
	S-sg aux-n neg V-t (X)	I.a	-	0.25	-	-	-	-
	S-sg aux-n V (X) [4]	I.a	0.3 [4]	-	-	-	-	-
	S-sg aux-n Vinf (X) [4]	I.a	-	-	0.28 [4]	-	-	-
(wh) S cop (X) ◆	(wh) S-pl cop (X) [(2)]	I.a	1.52	1.52	0.56	1.92	2.93	1.9
		I.b	-	3.23 [2]	0.55 [2]	-	4.35 [2]	1.92 [2]
		II	0.42 [2]	1.4 [2]	1.63 [2]	0.48 [2]	2.08 [2]	1.14 [2]
	(wh) S-sg cop-n (X) [(2)]	I.a	5.45	6.6	3.39	8.65	10.73	7.14
		I.b	-	3.23 [2]	1.09 [2]	-	-	1.92 [2]
		II	-	0.23 [2]	0.47 [2]	-	0.52 [2]	0.38 [2]
		III	-	1.88 [2]	0.23 [2]	0.16 [2]	-	1.53 [2]
	(wh) S-sg cop-n neg (X) [(2)]	I.a	0.91	-	0.56	0.38	0.98	0.95
		I.b	-	-	-	0.33 [2]	-	-
	(wh) S-sg cop-nt neg (X) [(2)]	I.a	0.3	-	-	-	-	-
		III	-	0.23 [2]	-	-	-	-
	S-sg cop-nt (X)	I.a	-	-	-	0.38	-	-
	S-pl cop-inf (X) [4]	I.a	0.3 [4]	-	-	-	-	-
	S-pl cop-t (X)	I.a	-	0.25	-	-	-	-
	S-pl cop-t neg (X)	I.a	-	-	0.28	-	-	-
	S-sg cop (X) [1]	I.a	0.3 [1]	-	-	-	-	-
	S-sg cop-inf (X) [4]	I.a	-	-	-	-	0.49 [4]	-
wh O S V (X)	wh O S-pl V (X) [2]	III	0.42 [2]	0.23 [2]	-	-	-	-
	wh O S-sg V (X) [1 2]	II	-	-	-	-	-	0.38 [1 2]
S do V (X)	S-sg do V-n (X) [4]	I.a	-	-	0.28 [4]	-	-	-
	S-sg do-n V (X)	I.a	-	-	-	-	-	0.48
	S-sg do-t V (X)	I.a	-	-	-	0.19	-	-
S aux V wh (X)	S-sg aux-n V-t wh (X) [2]	II	-	0.23 [2]	-	-	-	-
		III	-	0.23 [2]	-	-	-	-
S V wh (X)	S-pl V wh (X) [2]	II	-	0.23 [2]	-	-	-	-
	S-sg V-n wh (X) [2]	III	-	-	0.23 [2]	-	-	-
S aux aux V (X)	S-pl mod neg aux V-t (X)	I.a	0.3	-	-	-	-	-
	S-sg mod aux V (X) [4]	I.a	-	0.25 [4]	-	-	-	-
S cop Sc wh (X)	S-sg cop-n Sc wh (X) [2]	II	-	0.23 [2]	-	-	-	-
S V (X) wh	S-sg V-n (X) wh	I.b	-	-	0.28	-	-	-
O V wh do S V (X)	O Vinf wh do-n S-sg V (X) [2]	III	-	-	-	0.16 [2]	-	-
wh O aux S V (X)	wh O aux Spl V-t (X) [2]	II	-	-	-	-	-	0.38 [2]

Table 9.16: superscripted subtypes – cop inversion

type	subtype	task	group					
			1	2	3	4	5	6
(wh) cop S (X) ◆ ■ ▲	(wh) cop-n S-sg (X)	I.a	28.48	22.84	16.38	15.58	13.17	13.81
		I.b	22.3	15.48	18.58	19.74	21.74	19.23
		II	2.52	1.63	2.09	1.94	1.04	2.66
		III	5.91	4.69	6.1	5.52	6.32	5.75
	(wh) cop S-pl (X)	I.a	5.15	6.6	5.65	2.69	2.44	2.86
		I.b	7.19	1.94	1.09	2.96	1.45	-
		II	2.1	0.47	0.93	1.45	1.04	1.52
		III	0.42	-	-	-	-	0.77
	(wh) cop-nt S-sg (X)	I.a	0.3	0.25	-	0.38	-	-
		I.b	-	-	1.09	0.99	-	1.92
		II	-	-	0.23	-	-	-
		III	-	-	0.23	0.49	-	0.38
	wh cop-nt neg S-sg (X)	III	0.42	0.7	0.23	0.32	1.05	-
	wh cop neg S-pl (X)	I.b	-	0.65	0.55	-	-	-
	(wh) cop S-sg (X) [1]	I.a	0.61 [1]	-	-	-	-	-
		I.b	1.44 [1]	-	-	-	-	-
	wh cop neg S-sg (X) [1]	III	-	0.23 [1]	-	-	-	-
	wh cop-nt+neg cop S-sg (X) [3]	III	-	-	0.23 [3]	-	-	-
	wh cop-t S-pl (X)	II	-	-	-	0.16	-	-
	cop-n S-pl (X) [1]	I.a	0.3 [1]	-	-	-	-	-
wh cop (X)	wh cop-n (X)	I.b	0.72	1.94	0.55	0.33	1.45	1.92
		II	0.84	1.4	1.16	1.29	1.04	0.76
		III	0.42	0.47	-	0.49	0.53	-
	wh cop (X)	III	-	-	-	0.49	0.53	-
cop S cop (X)	cop S-pl cop (X) [2]	I.a	-	0.25 [2]	0.28 [2]	-	-	-
	cop-n S-pl cop (X) [1 2]	I.a	0.3 [1 2]	-	-	-	-	-
wh cop Sc cop (X)	wh cop-n Sc cop-n (X) [2]	II	0.42 [2]	-	0.23 [2]	-	-	-
wh cop Sc S (X)	wh cop-n Sc S (X) [2]	II	-	0.23 [2]	-	-	-	-
wh cop S cop (X)	wh cop-n S-sg cop-n (X) [2]	II	-	-	-	-	0.52 [2]	-

Table 9.17: superscripted subtypes – verb inversion

type	subtype	task	group					
			1	2	3	4	5	6
wh V S (X) ◆ ■ ● ▲	(wh) V-n S-sg (X) (2)	I.a	1.52 [2]	3.05 [2]	-	0.96 [2]	0.98 [2]	1.43 [2]
		I.b	2.88	5.81 [2]	4.92 [2]	2.3	1.45	2.88
			2.16 [2]	-	-	0.99 [2]	-	1.92 [2]
		II	13.87 [2]	9.77 [2]	1.63 [2]	5.65 [2]	9.9 [2]	3.04 [2]
		III	14.77 [2]	8.45 [2]	1.41 [2]	4.38 [2]	7.37 [2]	1.92 [2]
	(wh) V S-sg (X) (1) [2]	I.a	10.61 [2]	4.57 [2]	0.56 [2]	0.96 [2]	5.37 [2]	0.95 [2]
			-	-	0.28 [1 2]	-	-	-
		I.b	26.62 [1 2]	5.16 [1 2]	3.83 [1 2]	1.64 [1 2]	13.04 [1 2]	2.88 [1 2]
		II	4.62 [1 2]	3.26 [1 2]	0.47 [1 2]	0.32 [1 2]	2.6 [1 2]	1.52 [1 2]
		III	2.53 [1 2]	2.35 [1 2]	-	0.16 [1 2]	1.58 [1 2]	0.38 [1 2]
	(wh) V S-pl (X) [2]	I.a	0.61 [2]	0.51 [2]	0.28 [2]	0.19 [2]	-	-
		I.b	2.88 [2]	1.29 [2]	1.09 [2]	-	1.45 [2]	-
		II	5.46 [2]	2.56 [2]	1.16 [2]	2.42 [2]	1.04 [2]	1.9 [2]
		III	10.55 [2]	3.05 [2]	1.41 [2]	0.65 [2]	2.63 [2]	1.15 [2]
	(wh) V-t S-sg (X) (2 4)	I.a	0.91 [2]	0.76 [2]	0.28 [2]	-	-	-
		I.b	2.88	0.65 [2]	0.55	0.33 [2]	-	-
			2.16 [2]	-	-	-	-	-
		II	2.1 [2]	0.93 [2]	1.16 [2]	0.65 [2]	1.04 [2]	-
		III	0.84 [2]	0.47 [2]	-	0.33 [2]	-	-
			-	0.23 [2 4]	-	-	-	-
	(wh) V-t S-pl (X) [2] (4)	I.a	0.3 [2]	0.51 [2]	-	-	0.49 [2]	-
		II	1.26 [2]	0.7 [2]	0.23 [2]	-	-	-
			0.42 [2 4]	-	-	-	-	-
		III	0.84 [2]	0.23 [2]	-	-	-	-
	wh V-n S-pl (X) [1 2]	II	0.42 [1 2]	0.23 [1 2]	-	0.16 [1 2]	-	-
		III	0.42 [1 2]	0.23 [1 2]	0.23 [1 2]	0.16 [1 2]	-	0.38 [1 2]
	(wh) VGer S-sg (X) [2]	I.a	0.3 [2]	0.51 [2]	-	-	-	-
		I.b	0.72 [2]	-	-	-	-	-
wh V (X)	wh V-n (X) (2)	I.b	0.72	1.94 [2]	-	0.66 [2]	1.45	-
		II	1.68 [2]	-	-	0.16 [2]	0.52 [2]	0.38 [2]
	wh V (X) (1) [2]	I.b	1.44 [1 2]	-	-	-	-	-
		II	0.42 [1 2]	0.47 [1 2]	0.23 [1 2]	0.32 [1 2]	-	0.76 [1 2]
			-	-	-	0.16 [2]	-	-
		III	-	-	0.23 [1 2]	-	-	-
	wh V-t (X) (2 4)	I.b	0.72	0.65	-	0.99	-	-
		II	-	-	-	-	0.52 [2 4]	0.38 [2]
V O (X)	V O-pl (X) [2]	I.a	-	-	-	-	0.49 [2]	-
	V-t O-pl (X) [2]	I.a	-	-	-	0.19 [2]	-	-
wh V S aux (X)	wh V-t S-pl aux (X) [2]	II	0.42 [2]	-	-	-	-	-
wh V aux S (X)	wh V aux-n S-sg (X) [2 4]	II	-	-	-	0.16 [2 4]	-	-

Table 9.18: superscripted subtypes – fragment

type	subtype	task	group					
			1	2	3	4	5	6
(wh) S (X)	(wh) S-sg (X) [2 4]	I.a	1.21	1.02	1.41	3.46	4.39	1.43
			-	-	-	0.38 [2]	-	-
		I.b	1.44	-	0.55 [2]	0.33 [2]	1.45	0.96 [2 4]
	S-pl (X)	I.a	0.3	0.51	0.28	0.58	0.49	0.48
	S-pl do neg (X)	I.a	-	0.25	-	-	-	-
(wh) (X)	(X)	I.a	0.3	0.51	0.28	0.96	1.95	0.48
	wh (X)	I.b	3.6	-	0.55	1.64	7.25	1.92
V (X)	Vinf (X) [1 2]	I.a	1.52	-	0.56	0.38	-	-
			0.91 [2]	-	-	-	-	-
			0.3 [1 2]	-	-	-	-	-
	V (X) [1]	I.a	0.3 [1]	-	-	-	-	-
aux S (X)	aux-nt S-sg (X)	I.a	-	-	-	-	0.49	-
do S (X)	do-t S-sg (X)	I.a	-	-	-	0.19	-	-
S aux (X)	S-sg mod (X)	I.a	-	0.25	-	-	-	-

9.3 Materials

9.3.1 Tasks II

9.3.1.1 Elicitation I

Table 9.19: trigger sentences used to elicit oral questions – E I

	feature	**trigger**
1.	aux	The man is taking his dog for a walk.
2.	do	He looked surprised because he saw a dog inline-skating.
3.	do	All passers-by think that they are freaks because Fergus and Mel are not walking like everybody else.
4.	aux	Fergus and Mel are inline-skating.
5.	do	The walking dog shouts 'freaks' repeatedly when he sees Fergus and Mel skating by.
6.	aux	Fergus and Mel are having lots of fun.
7.	aux	Mel and Fergus are locked in perfect synchronization (sync).
8.	do	Whenever they are inline skating, Mel says that he never felt such harmony before.
9.	aux	Mel is asking Fergus how to stop with the skates.
10.	do	The instructions only tell you how to maintain the skates but not how to stop.
11.	do	Mel keeps suggesting that they grab a stop sign in order to stop.
12.	do	Mel and Fergus grabbed the stop sign but did not stop.
13.	do	Mel and Fergus want to grab a lamp post in order to stop.
14.	aux	Fergus is telling Mel that they are skating towards the mall.
15.	cop	They are afraid that they are going straight through the mall.
16.	aux	Mel is drinking a milk shake.
17.	do	Mel always wears a new shirt after skating through the mall.
18.	aux	Fergus is wearing a new hat and carrying several shopping bags.
19.	aux	Mel is also carrying several shopping bags.
20.	do	Every couple of weeks Mel and Fergus enjoy this new kind of shopping experience.
21.	do	Mel asks Fergus a couple of times whether the house over there is their house.
22.	do	Whenever Mel sees their home he calls it their own little slice of heaven.
23.	aux	They have passed their home three times already.
24.	cop	When they finally arrive home they are so tired that they go to bed directly.

9.3.1.2 Elicitation II

Table 9.20: trigger sentences used to elicit oral questions – E II

	feature	trigger
1.	do	Mel and Fergus want to rake the leaves together today.
2.	do	When Mel opens the door a lot of leaves are blown into the house.
3.	aux	Mel is trying to convince himself that their situation isn't that bad.
4.	aux	Mel is showing Fergus where he should start raking leaves but Fergus can't see where he is supposed to go.
5.	do	Suddenly Mel sees a boat which is floating on the leaves.
6.	aux	Fergus is asking Mel about the noise he still hears.
7.	do	As usual, Cuddles tells Mel that it would be a lot easier if they didn't wait so long to rake the leaves.
8.	aux	Cuddles is suggesting that Mel and Fergus should rake some leaves every weekend.
9.	aux	Mel is telling Cuddles that he doesn't want to hear about it.
10.	do	Fergus hates raking leaves.
11.	do	Mel keeps telling Fergus that they have to finish this today.
12.	do	Fergus always weeps when Mel tells him which privileges they are going to lose if they don't rake the leaves today.
13.	aux	Mel is shaking Fergus violently.
14.	cop	Mel is afraid that they won't be allowed to put up their satellite dish.
15.	do	As every year, they manage to rake all the leaves in one day.
16.	aux	Cuddles is asking Mel how they want to bag all leaves.
17.	aux	Mel and Fergus are looking at each other worriedly.
18.	do	Mel tries to ignore Cuddles.
19.	aux	Mel is raking the last leaves into a heap.
20.	do	Fergus remembered that he wanted to try out his new gardening implement.
21.	aux	Mel is looking suspiciously at Fergus and his gardening implement.
22.	do	Fergus tries to start the motor of his gardening implement several times.
23.	do	As usual, Fergus looks pleased when the motor of his gardening implement runs smoothly.
24.	aux	Suddenly Fergus is losing control over his gardening implement and all leaves are blown away.

9.3.1.3 Elicitation III

Table 9.21: trigger sentences used to elicit oral questions – E III

	feature	**trigger**
1.	do	As every day, Fergus waits for Maggie in front of the school.
2.	do	Fergus always waits for Maggie to follow her home.
3.	aux	Maggie is telling Fergus that she is not going home directly.
4.	do	Fergus thinks it's fine if he can follow Maggie to another place.
5.	do	Like every Monday Maggie plans to go to the library.
6.	aux	Maggie is telling Fergus that she is going to the boring library.
7.	do	Maggie hopes that Fergus won't come to the library.
8.	aux	She is telling Fergus that it might take ages before she can go home.
9.	aux	Fergus is informing Maggie that he has no other plans for today.
10.	aux	Maggie is trying to read a magazine.
11.	do	As usual, Fergus folds paper planes.
12.	do	After folding them, Fergus flicks the planes over Maggie's head.
13.	cop	Maggie is annoyed by Fergus' behaviour.
14.	aux	Maggie is trying to concentrate on reading her book.
15.	do	As usual, Fergus soon wants to have something to eat.
16.	aux	He reckons that the library should have a snack bar.
17.	aux	He suggests that the snack bar could be put in the reference section.
18.	do	He imagines chatting over a bagle while listening to some jazz.
19.	do	Fergus believes it is too quiet in the library.
20.	cop	The world history section, according to Fergus, is also unnecessary.
21.	do	Maggie wants to have some peace.
22.	aux	Fergus has found some crisps which he is eating noisily.
23.	aux	The other people are looking angrily at Fergus.
24.	do	Maggie tries very hard to ignore Fergus' crunching.

9.3.2 Tasks III

9.3.2.1 Elicitation I

Table 9.22: trigger sentences used to elicit written questions – E I

	feature	trigger
1.	aux	Mel is watering some flowers when Fergus comes round.
2.	do	Very often Fergus looks for the perfect spot to bury a bone.
3.	cop	Arlo, a friend of Fergus, is carrying the bone Fergus wants to bury.
4.	do	Whenever they bury a bone Fergus tells Arlo that a dog knows the perfect spot where to bury a bone because it's in his nature.
5.	aux	Arlo and Mel are telling Fergus to be careful down there.
6.	do	Fergus constantly tells Mel and Arlo not to worry because he knows what he is up to.
7.	aux	Fergus is shouting 'Whoops' because he has just hit a water pipe.
8.	aux	Arlo and Mel are looking worriedly down the hole Fergus dug.
9.	cop	Fergus tells them that they need not worry because there are things far more dangerous down here than a water pipe.
10.	do	Suddenly there's an explosion and Fergus shouts 'a gas pipe for instance' a couple of times.
11.	do	Whenever Fergus digs a hole he spots something interesting.
12.	do	Each time Arlo and Mel try to see what Fergus has found.
13.	aux	Fergus is trying to show them his discovery.
14.	do	Arlo and Mel still can't see what Fergus is trying to show them when suddenly a skull pops out of the hole.
15.	aux	The skull is shouting 'boo' which frightens Arlo and Mel so much that they jump back.
16.	do	Whenever Fergus places a bone in the hole he gives Mel a piece of paper.
17.	do	After each burial all three stand around the hole.
18.	aux	Mel is reading out what is written on the piece of paper to Fergus and Arlo.
19.	cop	Fergus is sad because he has just buried one of his bones.
20.	do	Mel comforts Fergus each time after he has buried a bone.
21.	aux	Arlo and Fergus are filling up the hole with earth.
22.	do	Arlo and Fergus congratulate each other on another splendid bone burial.
23.	aux	Arlo is looking around for Mel.
24.	do	Fergus notices that once more Mel must be in the hole he has just filled with earth.

9.3.2.2 Elicitation II

Table 9.23: trigger sentences used to elicit written questions – E II

	feature	trigger
1.	do	Mel and Fergus drive to a furniture store every spring.
2.	aux	In this store one can buy lots of things with strange names.
3.	do	The shop-assistant asks everybody if they need help.
4.	aux	Mel is telling the shop assistant that they are looking for a living room set.
5.	aux	The shop assistant is telling them that they can find the living room set next to the kitchen department.
6.	do	Like everybody else Mel and Fergus find it hard to find their way through the store.
7.	do	Mel thinks that the inventor of this furniture store must have a strange sense of humour.
8.	do	As usual Fergus finds what they are looking for.
9.	cop	Mel is pleased because they no longer have to look for the living room set.
10.	aux	Mel is telling Fergus that they have spent enough time trying to find the right way.
11.	do	As usual, while Fergus waits for Mel he inspects his surroundings.
12.	cop	Fergus is bored because Mel takes so much time to find him.
13.	aux	Mel is asking Fergus for directions.
14.	aux	Fergus is crying because he has no idea which way Mel must go.
15.	do	Very often Mel and Fergus celebrate their reunion even if they only have been separated for a few minutes.
16.	do	They always exaggerate facts after having trouble finding their way.
17.	do	Passers-by always assume that Mel and Fergus are too emotional.
18.	aux	They are sitting on a couch they are interested in buying.
19.	do	Whenever Mel and Fergus want to buy new furniture they test them for a couple of hours.
20.	do	Mel and Fergus think that they really would like to buy the living room set.
21.	aux	Mel is picturing how the chair would look in their home.
22.	aux	Fergus is dreaming about placing the couch next to their window.
23.	cop	Mel and Fergus have just found out that the new furniture is far too expensive.
24.	do	As always Mel and Fergus sit on their old couch looking at their latest purchase.

9.3.2.3 Elicitation III

Table 9.24: trigger sentences used to elicit written questions – E III

	featur e	**trigger**
1.	aux	Maggie is looking for her homework.
2.	aux	Maggie is asking Fergus whether he has seen her homework.
3.	do	Whenever Fergus has done something wrong he tries to look innocent.
4.	aux	Fergus is trying hard not to chew.
5.	do	Whenever Fergus behaves like this Maggie looks suspiciously at him.
6.	do	Fergus repeats that he hasn't seen Maggie's homework.
7.	do	Maggie continues to look doubtfully at Fergus.
8.	aux	Fergus is trying to convince Maggie of his loyalty.
9.	Ø	While trying to read a magazine he is asking Maggie what he should want with arithmetic problems.
10.	aux	Maggie has never mentioned that she was looking for her maths homework.
11.	do	Whenever someone finds out that Fergus has done some mischief he starts to sob.
12.	do	Fergus is telling Maggie that dogs always eat unsupervised homework.
13.	do	Whenever Fergus has eaten her homework Maggie weeps.
14.	cop	Fergus is telling her that this homework wasn't that important.
15.	do	Maggie is telling Fergus that everybody uses the 'dog ate my homework' excuse.
16.	aux	Fergus is telling Maggie that he has witnessed the entire thing.
17.	aux	Fergus is willing to testify that he has eaten Maggie's maths homework.
18.	do	Whenever Fergus agrees to do something he shakes hands with the other person.
19.	do	Whenever Fergus testifies as a witness he carries a sign with him.
20.	aux	Maggie is explaining why she failed to hand in her maths homework.
21.	aux	Maggie is asking Fergus whether he has eaten her maths homework assignment.
22.	do	The teachers never believe the 'dog ate my homework' excuse.
23.	aux	Fergus and Arlo are selling 'dog ate my homework' alibis for one biscuit.
24.	do	Fergus and Arlo already sold some 'dog ate my homework' alibis.

9.4 Evaluated Data Sets - Samples

9.4.1 Group 1

9.4.1.1 Task I.a and I.b – Elicitation I – Nell

Sample 9.1: group 1 - cop inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
1	cop-n S-sg (X)	cop S (X)	+	+	*Is this a dog?*
3	cop-n S-sg (X)	cop S (X)	+	+	*Is this the shop from this man?*
5	cop-n S-sg (X)	cop S (X)	+	+	*Is this hund [German → dog] this hund [German → dog]?* [test person pointed first to Fergus and then to Arlo]
7	cop-n S-sg (X)	cop S (X)	+	+	*Is this a dog?*
10	cop-n S-sg (X)	cop S (X)	+	+	*Is this dog angry?*
16	cop-n S-sg (X)	cop S (X)	+	+	*Is this the man from this dog?*
22	cop-n S-sg (X)	cop S (X)	+	+	*Is this a window in this house?*
28	cop-n S-sg (X)	cop S (X)	+	+	*Is this in this dog-shop?*
32	cop-n S-sg (X)	cop S (X)	+	+	*Is this a good seller?*
13	wh cop-n S-sg (X)	wh cop S (X)	+	+	*What's this?*
19	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Who is the man?*
20	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Where is the man?*
24	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Why is this dog so ... surprised?*
26	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Why is the man so surprised?*

Sample 9.2: group 1 - no inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
2	S-sg cop-n (X)	S cop (X)	+	+	*And this is a man?*
8	S-sg cop-n (X)	S cop (X)	+	+	*And this is a dog-shop, a shop for dogs?*
9	S-sg V-t (X)	S V (X)	+	+	*The man sought somebody he can help him?*
17	S-sg mod V (X)	S aux V (X)	+	+	*And the dog can speak with the man?*
21	S-sg cop-n (X)	S cop (X)	+	+	*Also this dog is alone?*
25	S-sg Vinf (X)	S V (X)	+	*	*And in this house passen ... to fit two dogs?* [4]
29	S-sg mod V (X)	S aux V (X)	+	+	*And this dog will buy this house?*
30	S-sg mod V (X)	S aux V (X)	+	+	*Or this dog will buy this house?*
31	S-sg cop-n (X)	S cop (X)	+	+	*And this man is here in the lunch-break?*

Sample 9.3: group 1 - verb inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
4	V S-sg (X)	V S (X)	*	*	*Search this dog a job?* [1 2]
6	V S-sg (X)	V S (X)	*	*	*And search this dog a job, too?* [1 2]
11	V S-sg (X)	V S (X)	*	*	*Search this dog something?* [1 2]
18	V-n S-sg (X)	V S (X)	*	*	*Gives the man this dog the dog-door?* [2]
23	V S-sg (X)	V S (X)	*	*	*Buy this man this house?* [1 2]
12	wh V-t S-sg (X)	wh V S (X)	*	*	*What sought this dog?* [2]
14	wh V-n S-sg (X)	wh V S (X)	*	*	*Why gives this dog this dog a dog-door?* [2]
27	wh V S-sg (X)	wh V S (X)	*	*	*What say this dog?* [1 2]

Sample 9.4: group 1 - aux inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
15	wh mod V S-sg (X)	wh aux V S (X)	*	*	*Why ... what would like this dog from the man?* [2]

9.4.1.2 Task II – Elicitation II – Emma

Sample 9.5: group 1 - expected – cop inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
C	14	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*What is Fergus … what is Mel afraid? … What is Mel … what is Mel afraid that they won't be allowed it to put it up?*

Sample 9.6: group 1 - expected – aux inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	13	wh S-sg aux-n V-t (X)	wh S aux V (X)	*	*	*	*	*How Mel is shaking Fergus?* [2]
A	3	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who try Mel … who is Mel trying to convince that their situation isn't that bad?*
	4	wh mod neg S-sg V (X)	wh aux S V (X)	+	+	+	+	*What can't Fergus see?*
	6	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus asking Mel about?*
	8	wh mod V (X)	wh aux V (X)	+	+	+	+	*Who should suggesting … who should rake some leaves every weekend?*
	9	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel telling Cuddles?*
	16	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What … who is Cuddles asking how they want to bag all leaves?*
	17	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	+	+	*How are Mel and Fergus looking at each other?*
	19	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel raking into a heap?*
	21	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*How is Mel looking at Fergus and his gardening implement?*
	24	wh aux V-t (X)	wh aux V (X)	+	+	+	+	*What is … what are blown away when Fergus suddenly is losing control over his gardening implement?*

Sample 9.7: group 1 - expected – cop inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	15	wh S-pl V (X)	wh S V (X)	*	*	*	*	*What … what as they … what they as every year manage to rake in one day?* [2]
	23	wh S-sg V-n (X)	wh S V (X)	*	*	*	*	*How Fergus looks when the motor of his gardening implement runs smoothly?* [2]
V	1	wh V S-pl (X)	wh V S (X)	*	*	*	*	*What want to rake Mel and Fergus together today?* [2]
	5	wh V S-sg (X)	wh V S (X)	*	*	*	*	*What see Mel suddenly?* [1 2]
	7	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What tells Cuddles Mel?* [2]
	10	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What hates Fergus?* [2]
	11	wh V S-pl (X)	wh V S (X)	*	*	*	*	*When have to finish they this?* [2]
	12	wh V S-sg (X)	wh V S (X)	*	*	*	*	*What do Fergus always when Mel tells him which privileges they are going to lose if they don't rake the leaves today?* [1 2]
	18	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*Who … who tries Mel to ignore?* [2]
	20	wh V S-sg (X)	wh V S (X)	*	*	*	*	*What wanted … what wanted to … what want to try Fergus?* [0 1 2]
A	2	wh aux S-pl V-t (X)	wh aux S V (X)	+	*	+	*	*When Mel opens … what are blown into the house when Mel opens … where are the leaves blown when Mel … where are the leaves blown into the house?* [0]
	22	wh aux-n S-sg V-n (X)	wh aux S V (X)	*	*	*	*	*What is Fergus tries to start several times?* [0 4]

9.4.1.3 Task III – Elicitation III – Vicky

Sample 9.8: group 1 - expected – cop inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
A	14	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus telling her what her homework didn't was?* [0]

Sample 9.9: group 1 - expected – aux inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
A	1	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Maggie looking for?*
	2	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Maggie asking whether he has seen her homework?*
	4	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus trying hard not to do?*
	8	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus trying to convince Maggie?*
	10	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What has Maggie never mentioned what she is looking for?*
	16	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus telling Maggie what he has witnessed?*
	17	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus willing to testify what he has eaten?*
	20	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Maggie explaining?*
	21	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Maggie asking whether he has eaten her math[s] homework assignment?*
	23	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	+	+	*What are Fergus and Arlo doing with the alibis for one biscuit?*

Sample 9.10: group 1 - expected – do-support in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
A	12	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus telling Maggie what dogs always eat when it[']s unsupervised?* [0]
	15	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Maggie telling Fergus what everybody uses?* [0]
	18	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus doing with the other person when he [a]grees to do something?* [0]
	19	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus carrying with him whenever he testifies as a witness?* [0]
D	3	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*How does Fergus tries to look whenever he has done something wrong?* [4]
	5	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*How does Maggie look at him whenever Fergus behaves like this?*
	6	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Fergus repeats?* [4]
	7	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*How does Maggie continues to look at Fergus?* [4]
	11	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does someone do when he finds out that Fergus has done some mischief?*
	13	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does Maggie do whenever Fergus has eaten her homework?*
	22	wh do-n S-pl V (X)	wh do S V (X)	+	+	*	*	*What does the teachers never beli[e]ve?* [1]
	24	wh do-t S-pl V-t (X)	wh do S V (X)	+	+	*	*	*What did Arlo and Fergus already sold?* [4]

9.4.2 Group 2

9.4.2.1 Task I.a and I.b – Elicitation II – Ian

Sample 9.11: group 2 - cop inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
1	cop-n S-sg (X)	cop S (X)	+	+	*Is this a information paper in his arms?*
2	cop-n S-sg (X)	cop S (X)	+	+	*Is this a … is this a lamp post?*
3	cop-n S-sg (X)	cop S (X)	+	+	*Is this a tree?*
4	cop-n S-sg (X)	cop S (X)	+	+	*Is this a electro post?*
13	cop-n S-sg (X)	cop S (X)	+	+	*Is this … is this his … his house?*
19	cop-n S-sg (X)	cop S (X)	+	+	*Is the right Fergus or the left?*
26	cop-n S-sg (X)	cop S (X)	+	+	*Is this a … Parkuhr … is it a parking meter?*
35	cop-n S-sg (X)	cop S (X)	+	+	*Is he sad now?*
50	cop-n S-sg (X)	cop S (X)	+	+	*Is the police officer surprised to hear this from Fergus?*
52	wh cop-n S-sg (X)	wh cop S (X)	+	+	Why is Mel suddenly there?

Sample 9.12: group 2 - no inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
5	S-sg cop-n (X)	S cop (X)	+	+	*And this is a archway … pavement?*
6	S-sg V-n (X)	S V (X)	+	+	*That he goes on?*
8	S-sg V-n (X)	S V (X)	+	+	*And he … and he hangs up the piece of paper on the electro post?*
24	S-pl V (X)	S V (X)	+	+	*And now … and now both of them shout after Fergus … after Mel?*
31	S-sg V-n (X)	S V (X)	+	+	*And Fluffy says no?*
33	S-sg V (X)	S V (X)	+	*	*And he sit on the pavement?* [1]
38	S-sg V-n (X)	S V (X)	+	+	*Or the policeman offers help?*
42	S-sg mod aux V (X)	S aux aux V (X)	*	*	*And now the policewoman should … shall be care of Fergus?* [4]
43	S-sg V-n (X)	S V (X)	+	+	*And Fergus explains the situation?*
47	S-sg V (X)	S V (X)	+	*	*And he write a report about this … about the situation?* [1]
48	S-sg V (X)	S V (X)	+	*	*And he answer his questions?* [1]

Sample 9.13: group 2 - verb inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
9	V S-sg (X)	V S (X)	*	*	*Or make it … make it down* [← calque - to remove]*?* [1 2]
16	V-n S-sg (X)	V S (X)	*	*	*Stands he in front of a house or the wall?* [2]
20	V S-sg (X)	V S (X)	*	*	*Ask Fergus the other dog of his owner?* [1 2]
37	V-n S-sg (X)	V S (X)	*	*	*Asks he the policeman?* [2]
30	wh V-n S-sg (X)	wh V S (X)	*	*	*What says Fergus?* [2]
32	wh V-n S-sg (X)	wh V S (X)	*	*	*What thinks Fergus?* [2]
34	wh V-n S-sg (X)	wh V S (X)	*	*	*What asks … what thinks Fergus now?* [2]
41	wh V-n S-sg (X)	wh V S (X)	*	*	*After what shouts the policeman?* [2]

Sample 9.14: group 2 - aux inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
10	aux-n S-sg V (X)	aux S V (X)	+	*	*Has the lost dog hang the Bild of the other … the picture of the other side on the post … on the electro post?* [4]
27	aux-n S-sg Vinf (X)	aux S V (X)	+	*	*And is he … is he to tie to with a rope or with a chain?* [4]
53	aux-n S-sg V (X)	aux S V (X)	+	*	*Has the policeman phone him or came he by himself?* [4]

Sample 9.15: group 2 - do-support in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
7	do-n S-sg V (X)	do S V (X)	+	+	*Does he put the piece of paper on this electro post?*
11	do-n S-sg V (X)	do S V (X)	+	+	*Does he ... does he shout after his dog?*
12	do-n S-sg V (X)	do S V (X)	+	+	*Does he search his dog?*
14	do-n S-sg V (X)	do S V (X)	+	+	*Does he cry now in this picture?*
15	do-n S-sg V (X)	do S V (X)	+	+	*Does Fergus shout after his ... owner?*
17	do-n S-sg V (X)	do S V (X)	+	+	*Does Fergus cross the road or run on the road?*
18	do-n S-sg V (X)	do S V (X)	+	+	*Does he even shout after his owner?*
25	do-n S-sg V (X)	do S V (X)	+	+	*Does he ask him after Fergus, too ... after Mel, too?*
28	do-n S-sg V (X)	do S V (X)	+	+	*Did ... does Fergus ask him after his owner?*
29	do-n S-sg V (X)	do S V (X)	+	+	*Does the other dog sleep, or?*
49	do-n S-sg V-n (X)	do S V (X)	+	*	*Does he even says how Mel look like?* [4]
51	do-n S-sg V (X)	do S V (X)	+	+	*And does Fergus keep on saying stupid things about his owner?*
21	wh do-t S-sg V (X)	wh do S V (X)	+	+	*And what did the other say?*
22	wh do-n S-sg V (X)	wh do S V (X)	+	+	*What does Fergus say?*
23	wh do-n S-sg V (X)	wh do S V (X)	+	+	*And what does Arlo say?*
36	wh do-n S-sg V (X)	wh do S V (X)	+	+	*And what does he think now?*
39	wh do-n S-sg V-n (X)	wh do S V (X)	+	*	*And what does the policeman says?* [4]
40	wh do-n S-sg V (X)	wh do S V (X)	+	+	*What does Fergus say?*
44	wh do-n S-sg V-n (X)	wh do S V (X)	+	*	*What does Fergus ask ... oder* [German → or] *says?* [4]
45	wh do-n S-sg V (X)	wh do S V (X)	+	+	*And what does he say now?*
46	wh do-n S-sg V (X)	wh do S V (X)	+	+	*And the policewoman ... pat Fergus and what does she say?*

9.4.2.2 Task II – Elicitation III – Lucy

Sample 9.16: group 2 - expected – cop inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
C	13	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*What is Maggie annoyed?*
	20	wh cop-n (X)	wh cop (X)	+	+	+	+	*What is, according to Fergus, unnecessary?*

Sample 9.17: group 2 - expected – aux inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
V	3	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What tells Maggie Fergus?* [0 2]
	23	wh V S-pl (X)	wh V S (X)	*	*	*	*	*How look the other peoples at Fergus?* [0 2]
A	8	wh mod S-sg V (X)	wh aux S V (X)	+	*	+	*	*What can it take before she can go home?* [0]
	9	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Fergus informing that he has no other plans for today?*
	10	wh aux-n S-sg V-t (X)	wh aux S V (X)	*	*	*	*	*What is Maggie to trying?* [4]
	14	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*By what is Maggie trying to concentrate?*
	22	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What has Fergus found which he has eat …eats noisily?*
D	6	wh do-n S-sg V (X)	wh do S V (X)	+	*	+	*	*What … where does Maggie go?* [0]
	16	wh do-n S-sg mod V (X)	wh do S aux V (X)	*	*	*	*	*What does the library should have by his meaning?* [0 2]
	17	wh do-n S-sg V (X)	wh do S V (X)	+	*	+	*	*Where he suggests that the … that … where … what does he suggest that it could be put in the reference section?* [0]

Sample 9.18: group 2 - expected – do-support in oral structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
V	15	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What wants Fergus soon to have?* [2]
	24	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*For what tries Maggie very hard?* [2]
A	1	wh aux-n S-sg V-n (X)	wh aux S V (X)	*	*	*	*	*Where is Fergus waits for Maggie?* [0 4]
	2	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*For whim [whom] is Fergus waiting?* [0]
D	4	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does Fergus think?*
	5	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*Where does Maggie like to go every Monday?*
	7	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Maggie hopes?* [4]
	11	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Fergus folds?* [4]
	12	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does Fergus flick over Maggie's head?*
	18	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does he imagines?* [4]
	19	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Fergus believes?* [4]
	21	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Maggie wants to have?* [4]

9.4.2.3 Task III – Elicitation I – Kevin

Sample 9.19: group 2 -expected – cop inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
C	3	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*Where is Arlo?*
	19	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*Why is Fergus sad?*
V	9	wh S-sg aux-n V-t (X)	wh S aux V (X)	*	*	*	*	*Why Fergus is telling them that they need not worry?* [0 2]

Sample 9.20: group 2 - expected – aux inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	21	wh S-pl aux V-t (X)	wh S aux V (X)	*	*	*	*	*With what Arlo and Fergus are filling up the hole?* [2]
V	13	wh V S-sg (X)	wh V S (X)	*	*	*	*	*What show Fergus them?* [0 1 2]
A	1	wh aux-n V-t S-sg (X)	wh aux V S (X)	+	*	*	*	*What is watering Mel?* [2]
	5	wh aux V-t S-pl (X)	wh aux V S (X)	*	*	*	*	*What are telling Arlo and Mel Fergus?* [2]
	7	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Why is Fergus shouting 'Whoops'?*
	8	wh aux V-t S-pl (X)	wh aux V S (X)	*	*	*	*	*What are looking Arlo and Mel?* [2]
	15	wh aux-n V-t S-sg (X)	wh aux V S (X)	*	*	*	*	*What is shouting the skull?* [2]
	18	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*To who is Mel reading out the piece of paper?*
	23	wh aux-n V-t (X)	wh aux V (X)	+	+	+	+	*Who is looking around for Mel?*

Sample 9.21: group 2 - expected – do-support in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	2	wh S-sg V-n (X)	wh S V (X)	*	*	*	*	*What Fergus very often looks for the perfect spot to bury?* [2]
	17	wh S-pl V (X)	wh S V (X)	*	*	*	*	*Where all they three stand?* [2]
	20	wh S-sg V-n (X)	wh S V (X)	*	*	*	*	*Who Mel comforts?* [2]
	22	wh S-pl V (X)	wh S V (X)	*	*	*	*	*Why they congratulate each other?* [2]
	24	wh S-sg V (X)	wh S V (X)	*	*	*	*	*What Fergus notice?* [1 2]
V	4	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What tells Fergus Arlo?* [2]
	6	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What tells Fergus constantly Mel and Arlo?* [2]
	10	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What shouts Fergus?* [2]
	11	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What spots Fergus whenever he digs a hole?* [2]
	12	wh V S-pl (X)	wh V S (X)	*	*	*	*	*What try Arlo and Mel to see?* [2]
	14	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What pops out of the hole?* [2]
	16	wh V S-sg (X)	wh V S (X)	*	*	*	*	*What give Fergus Mel?* [1 2]

9.4.3 Group 3

9.4.3.1 Task I.a and I.b – Elicitation III – Hazel

Sample 9.22: group 3 - cop inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
1	cop-n S-sg (X)	cop S (X)	+	+	*Is … is this an axe?*
2	cop-n S-sg (X)	cop S (X)	+	+	*Is … is this the axe of this man?*
5	cop-n S-sg (X)	cop S (X)	+	+	*Is this a shop?*
7	cop-n S-sg (X)	cop S (X)	+	+	*Is the pig also there to be sold?*
8	cop-n S-sg (X)	cop S (X)	+	+	*Is this the shop assistant?*
11	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Who's that?*

Sample 9.23: group 3 - no inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
12	wh S-pl cop (X)	wh S cop (X)	*	*	*Why they are at the axe again?* [2]

Sample 9.24: group 3 - aux inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
4	aux-n S-sg V (X)	aux S V (X)	+	*	*Is the man go for searching the handling … handle?* [4]
6	aux S-pl V-t (X)	aux S V (X)	+	+	*Are they sitting in the shop for eating all the things?*
13	wh aux-t V-t (X)	wh aux V (X)	+	+	*Who had got the handle?*

Sample 9.25: group 3 - do-support in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
3	do-n S-sg V (X)	do S V (X)	+	+	*Does he want to show the man something?*
15	do-n S-sg V (X)	do S V (X)	+	+	*Does he believe him?*
16	do-n S-sg V (X)	do S V (X)	+	+	*Does the man want to go to the thieves?*
9	wh do-n S-pl V (X)	wh do S V (X)	+	*	*Why does they drink coffee with the shop assistant?* [1]
10	wh do-n S-sg V (X)	wh do S V (X)	+	+	*Why does he look so bored?*
14	wh do-n S-sg V (X)	wh do S V (X)	+	+	*What does the bird want to show him?*

9.4.3.2 Task II – Elicitation I – Erin

Sample 9.26: group 3 - expected – cop inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA+	EA	EA+	output
C	15	wh cop S-pl (X)	wh cop S (X)	+	+	+	+	*Of what are they afraid?*
D	24	wh do S-pl V (X)	wh do S V (X)	+	*	+	*	*Why do they go to bed directly when they finally arrive at home?* [0]

Sample 9.27: group 3 - expected – aux inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA+	EA	EA+	output
A	1	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is the man taking?*
	4	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	+	+	*What are Fergus and Mel doing?*
	6	wh aux V-t (X)	wh aux V (X)	+	+	+	+	*Who are having lots of fun?*
	7	wh aux V-t (X)	wh aux V (X)	+	+	+	+	*Who are locked in perfect synchronization?*
	9	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel asking Fergus?*
	14	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus … what is Fergus telling Mel where they are skating?*
	16	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel drinking?*
	18	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus carrying?*
	19	wh aux-n V-t (X)	wh aux V (X)	+	+	+	+	*Who is also carrying several shopping bags?*
	23	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	+	+	*How many times have they passed their home already?*

Sample 9.28: group 3 - expected – do-support in oral structured questions

Cat	No.	subtype	type	SEA	SEA+	EA	EA+	output
A	17	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Mel always wearing after skating through the mall?* [0]
D	2	wh do-n S-sg V-t (X)	wh do S V (X)	+	+	*	*	*Why does he looked surprised?* [0 4]
	3	wh do S-pl V (X)	wh do S V (X)	+	+	+	+	*What do all passers-by think?*
	5	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does the walking dog shout repeatedly when he sees Fergus and Mel skating by?*
	8	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Mel says whenever they are inline-skating?* [4]
	10	wh do-n S-pl V (X)	wh do S V (X)	+	+	*	*	*What does the instructions not tell you?* [1]
	11	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Mel keeps suggesting?* [4]
	12	wh do-n S-pl V (X)	wh do S V (X)	+	+	*	*	*What does Mel and Fergus grab but did not stop?* [1]
	13	wh do-n S-pl V (X)	wh do S V (X)	+	+	*	*	*What does Mel and Fergus want to grab in order to stop?* [1]
	20	wh do S-pl V (X)	wh do S V (X)	+	+	+	+	*What do Mel and Fergus enjoy every couple of weeks?*
	21	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Mel asks Fergus a couple of times?* [4]
	22	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Mel calls their home whenever he sees it?* [4]

9.4.3.3 Task III – Elicitation II – Matt

Sample 9.29: group 3 - expected – cop inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
C	9	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*Why is Mel pleased?*
	12	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*Why is Fergus bored?*
A	23	wh aux S-pl V-t (X)	wh aux S V (X)	+	*	+	*	*What have Mel and Fergus just found out about the new furniture?* [0]

Sample 9.30: group 3 - expected – aux inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
N	18	wh S-pl aux V-t (X)	wh S aux V (X)	*	*	*	*	*Where they are sitting on?* [2]
A	2	wh mod S-sg V (X)	wh aux S V (X)	+	+	+	+	*What can one buy in this store?*
	4	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Mel telling that they are looking for a living room set?*
	13	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Mel asking for directions?*
	14	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Why is Fergus crying?*
	21	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel picturing?*
	22	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*About what is Fergus dreaming?*
D	5	wh do-t S-pl V (X)	wh do S V (X)	+	*	+	*	*Where did they find the living room set?* [0]
	10	wh do-t S-sg aux V-t (X)	wh do S aux V (X)	*	*	*	*	*Why did Mel have spent enough time?* [0 2]

Sample 9.31: group 3 - expected – do-support in written structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
D	1	wh do-t S-pl V (X)	wh do S V (X)	+	+	+	*	*When did Mel and Fergus drive to a furniture store?* [0]
	3	wh do-t S-sg V (X)	wh do S V (X)	+	+	+	*	*What did the shop-assistant ask everybody?* [0]
	6	wh do-t S-pl V (X)	wh do S V (X)	+	+	+	*	*What did Mel and Fergus find hard like everybody else?* [0]
	7	wh do-t S-sg V (X)	wh do S V (X)	+	+	+	+	*What did Mel think?*
	8	wh do-t S-sg V (X)	wh do S V (X)	+	+	+	+	*What did Fergus find as usual?*
	11	wh do-t S-sg V (X)	wh do S V (X)	+	+	+	+	*What did Mel inspect?*
	15	wh do-t S-pl V (X)	wh do S V (X)	+	+	+	*	*What did Mel and Fergus very often celebrate even if they only have been separated for a few minutes?* [0]
	16	wh do-t S-pl V (X)	wh do S V (X)	+	+	+	*	*What did they always exaggerate?* [0]
	17	wh do-t S-pl V (X)	wh do S V (X)	+	+	+	*	*What did passers-by always assume?* [0]
	19	wh do-t S-pl V (X)	wh do S V (X)	+	+	+	*	*What did they do whenever they want to buy new furniture?* [0]
	20	wh do-t S-pl V (X)	wh do S V (X)	+	+	+	*	*What did Mel and Fergus think?* [0]
	24	wh do-t S-pl V (X)	wh do S V (X)	+	+	+	*	*Where did Mel and Fergus always sit?* [0]

9.4.4 Group 4

9.4.4.1 Task I.a and I.b – Elicitation I – Brian

Sample 9.32: group 4 - fragment in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
6	S-sg (X)	S (X)	+	+	*And that?*

Sample 9.33: group 4 - cop inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
3	cop-n S-sg (X)	cop S (X)	+	+	*Is the the man angry sometimes in the ... ?*
10	cop-n S-sg (X)	cop S (X)	+	+	*Is the story here at the end ... in the end?*
5	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Which dog is that ... Who is that?*
11	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Who's that?*
12	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Who's the owner of the house?*

Sample 9.34: group 4 - no inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
4	S-sg do neg V (X)	S V (X)	+	*	*So the dog get the job ... don't get the job?* [1]
13	S-sg V (X)	S V (X)	+	*	*And Fergus want to sell him the house?* [1]
17	wh S-sg cop-n neg (X)	wh S cop (X)	*	*	*Why ... why the man is not surprised any more that that a dog want wants a job?* [2]

Sample 9.35: group 4 - verb inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
16	wh V-n S-sg (X)	wh V S (X)	+	+	*Which features has it?*

Sample 9.36: group 4 - do-support in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
1	do S-sg V (X)	do S V (X)	+	*	*Do the dog want to buy something?* [1]
2	do S-sg V (X)	do S V (X)	+	*	*Do the want ... do the dog want to work there?* [1]
7	do S-pl V (X)	do S V (X)	+	+	*Do they discuss about that the owner of the shop don't want dogs in his shop?*
8	wh do S-pl V (X)	wh do S V (X)	+	+	*What do the dogs do there?*
9	wh do S-sg V (X)	wh do S V (X)	+	*	*Why do Arlo go to the shop?* [1]
14	wh do S-sg V (X)	wh do S V (X)	+	*	*And what do the man think about it?* [1]
15	wh do S-sg V (X)	wh do S V (X)	+	*	*What do Arlo think about the house?* [1]

9.4.4.2 Task II – Elicitation II – Ane

Sample 9.37: group 4 - expected – cop inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
C	14	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*What is Mel afraid that they won't be allowed to put up?*

Sample 9.38: group 4 - expected – aux inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
A	3	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*To whom is Mel trying to convince that their situation isn't that bad?*
	4	wh mod neg S-sg V (X)	wh aux S V (X)	+	+	+	+	*What can't Fergus see?*
	6	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus asking Mel about?*
	8	wh mod V (X)	wh aux V (X)	+	+	+	+	*Who should rake some leaves every weekend?*
	9	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel telling Cuddles?*
	13	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*How is Mel shaking Fergus?*
	16	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Cuddles asking how they want to bag all leaves?*
	17	wh aux S-pl aux V-t (X)	wh aux S aux V (X)	*	*	*	*	*How are Mel and Fergus are looking at each other?* [2]
	19	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel raking into a heap?*
	21	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*How is Mel looking at Fergus and his gardening implement?*
	24	wh aux V-t (X)	wh aux V (X)	+	+	+	+	*What are blown away?*

Sample 9.39: group 4 - expected – do-support in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
V	11	wh V S-pl (X)	wh V S (X)	*	*	*	*	*When have … when … when have Mel and Fergus finish this?* [2]
	18	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*Who tries Mel … who tries … who tries … who tries Mel to ignore?* [2]
A	1	wh aux S-pl V (X)	wh aux S V (X)	+	*	*	*	*What are Mel and Fergus want to rake together today?* [0 4]
	2	wh aux-n S-sg V (X)	wh aux S V (X)	+	*	*	*	*What is Mel open?* [0 4]
	5	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Mel seeing?* [0]
	7	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Cuddles telling Mel usually?* [0]
	10	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus hating?* [0]
	12	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus always doing when Mel tells him which privileges they are going to lose if they don't rake the leaves today?* [0]
	15	wh aux S-pl V (X)	wh aux S V (X)	+	*	*	*	*What are they manage to rake in one day?* [0 4]
	20	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus remembering … what is Fergus remembering to want try out?* [0]
	22	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus trying to start several times?* [0]
	23	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*How is Fergus looking when the motor of his gardening implement runs smoothly?* [0]

9.4.4.3 Task III – Elicitation III – Becky

Sample 9.40: group 4 - expected – cop inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA+	EA	EA+	output
A	14	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus telling her about this homework?* [0]

Sample 9.41: group 4 - expected – aux inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA+	EA	EA+	output
A	1	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*For what is Maggie looking?*
	2	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Maggie asking?*
	4	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus trying hard?*
	8	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Of what is Fergus trying to convince Maggie?*
	10	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What has Maggie never mentioned?*
	16	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus telling Maggie?*
	17	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What has he eaten?*
	20	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Maggie explaining?*
	21	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Maggie asking?*
D	23	wh do S-pl V (X)	wh do S V (X)	+	*	+	*	*What do Fergus and Arlo do?* [0]

Sample 9.42: group 4 - expected – do-support in written structured questions

Cat	No.	subtype	type	SEA	SEA+	EA	EA+	output
A	3	wh aux-n S-sg V (X)	wh aux S V (X)	+	*	*	*	*How is Fergus trie [try] to look?* [0 4]
	5	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*How is Maggie looking at him?* [0]
	7	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*How is Maggie looking at Fergus?* [0]
	11	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What has Fergus done whenever someone finds out that he some mischief?* [0]
	15	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Maggie telling Fergus?* [0]
	19	wh aux-n S-sg V (X)	wh aux S V (X)	+	*	*	*	*What is he carry with him?* [0 4]
D	6	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does Fergus repeat?*
	12	wh do S-pl V (X)	wh do S V (X)	+	+	+	+	*What do dogs always eat?*
	13	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does Maggie do whenever Fergus has eaten her homework?*
	18	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does he shake?*
	22	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does the teacher never believe?*
	24	wh do S-pl V-t (X)	wh do S V (X)	+	+	*	*	*What do Fergus and Arlo sold?* [4]

9.4.5 Group 5

9.4.5.1 Task I.a and I.b – Elicitation II – Fay

Sample 9.43: group 5 - cop inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
7	cop-n S-sg (X)	cop S (X)	+	+	*Is this a friend of Fergus?*
9	cop-n S-sg (X)	cop S (X)	+	+	*Is this … is this a passer-by?*
13	cop-n S-sg (X)	cop S (X)	+	+	*Is he traurig* [German → sad]?
16	cop-n S-sg (X)	cop S (X)	+	+	*Who's … is this a picture of Mel?*
17	cop-n S-sg (X)	cop S (X)	+	+	*Is it important how they heißen [German → to be called]?*
15	wh cop-n S-sg (X)	wh cop S (X)	+	+	*Where's that?*

Sample 9.44: group 5 - no inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
1	S-sg cop-n (X)	S cop (X)	+	+	*Fergus is lost?*
3	S-sg V-n (X)	S V (X)	+	+	*And Fergus thinks that Mel is lost?*
5	S-sg V (X)	S V (X)	+	*	*Mel search for Fergus?* [1]
6	S-sg V (X)	S V (X)	+	*	*And Fergus search for Mel, or?* [1]
8	S-pl V (X)	S V (X)	+	+	*And they search for Mel together?*
11	S-sg do neg V (X)	S V (X)	+	*	*And dieser* [German → this] *Bruno don't know where Mel is?*[1]
18	S-pl mod V (X)	S aux V (X)	+	+	*And can they … they can help him, Fergus?*
19	S-pl mod neg V (X)	S aux V (X)	+	+	*First they don't help … they can't help him?*
20	S-sg cop-n (X)	S cop (X)	+	+	*And at the same time … Mel is at the police station and asks for Fergus?*
21	S-sg V (X)	S V (X)	+	*	*And Fergus try to explain the he is … he know where he is and he search for his owner?* [1]
22	S-sg do-n neg V (X)	S V (X)	+	+	*But the police officer don't kappiert … doesn't understand?*
10	wh S-sg V-n (X)	wh S V (X)	*	*	*And why he has a dog or a cat in his mouth?* [2]

Sample 9.45: group 5 - verb inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
4	V-t S-pl (X)	V S (X)	*	*	*Lost they each other?* [2]
12	V S-sg (X)	V S (X)	*	*	*Know the cat where he is?* [1 2]

Sample 9.46: group 5 - aux inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
2	aux-n S-sg V-t (X)	aux S V (X)	+	+	*Is Fergus lost?*

Sample 9.47: group 5 - do-support in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
14	wh do-n S-sg V (X)	wh do S V (X)	+	+	*What does he think, that Mel should come back?*

9.4.5.2 Task II – Elicitation III – Mary

Sample 9.48: group 5 - expected – cop inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
C	13	wh cop-n S-sg cop-n (X)	wh cop S cop (X)	*	*	*	*	*For what is Maggie is annoyed by?* [2]
	20	wh cop-n (X)	wh cop (X)	+	+	+	+	*What is for Fergus according and so also unnecessary?*

Sample 9.49: group 5 - expected – aux inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	8	wh S-sg mod V (X)	wh S aux V (X)	*	*	*	*	*When can she … go home … what is she telling Fergus … when she can … can go home?* [2]
A	3	wh aux-n V-t S-sg (X)	wh aux V S (X)	*	*	*	*	*What is telling Maggie Fergus?* [2]
	6	wh aux-n V-t S-sg (X)	wh aux V S (X)	*	*	*	*	*What is telling Maggie Fergus where is she going?* [2]
	9	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	*	*	*Who is Fergus … who is informing Fergus that he has no other plans for today?* [2]
	10	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is he … is she … what is he trying?*
	14	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Maggie trying to concentrate on?*
	16	wh aux-n S-sg V-n (X)	wh aux S V (X)	*	*	*	*	*What is he reckon … reckons about the library?* [0 4]
	17	wh mod aux-be V-t S-sg (X)	wh aux aux V S (X)	*	*	*	*	*For what could be put Fergus … in the reference section?* [2]
	22	wh aux-n V-t S-sg (X)	wh aux V S (X)	*	*	*	*	*What found … has found Fergus which he is eating noisily?* [2]
	23	wh aux V-t S-pl (X)	wh aux V S (X)	*	*	*	*	*How are looking the other peoples at Fergus?* [2]

Sample 9.50: group 5 - expected – do-support in oral structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	18	wh S-sg aux-n V-n (X)	wh S aux V (X)	*	*	*	*	*What he is imagines?* [2 4]
	24	wh S-sg V-n (X)	wh S V (X)	*	*	*	*	*What Maggie tries very hard?* [2]
V	1	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*Where … waits Fergus for Maggie every day?* [2]
	2	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*Why … for who waits Fergus that he can follow her to home … to her home?* [2]
	4	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What think … thinks Fergus?* [2]
	5	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*Where plans Maggie to go?* [2]
	7	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What hopes Maggie?* [2]
	11	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What folds Fergus as usual?* [2]
	12	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What flicks … Fergus and threw them over Maggie's head after folding them?* [2]
	15	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What wants Fergus to have usually?* [2]
	19	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What believes Fergus?* [2]
	21	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What wants Maggie to have?* [2]

9.4.5.3 Task III – Elicitation I – Karin

Sample 9.51: group 5 - expected – cop inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
C	3	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*Who is Arlo?*
	9	wh cop (X)	wh cop (X)	+	+	+	+	*What things are there?*
	19	wh cop-n S-sg (X)	wh cop S (X)	+	+	+	+	*Why is Fergus sad?*

Sample 9.52: group 5 - expected – aux inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
A	1	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel watering when Fergus comes round?*
	5	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	+	+	*What are Arlo and Mel telling Fergus?*
	7	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Why is Fergus shouting 'Whoops'?*
	8	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	+	+	*How are Arlo and Mel looking down the hole Fergus dug?*
	13	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Fergus trying to show them?*
	15	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is the skull shouting?*
	18	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*Who is Mel reading out what is written on the piece of paper to?*
	21	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	+	+	*What are Arlo and Fergus filling the hole up with?*
	23	wh aux-n V-t (X)	wh aux V (X)	+	+	+	+	*Who is looking around for Mel?*

Sample 9.53: group 5 - expected – do-support in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
V	14	wh V-n S-sg (X)	wh V S (X)	*	*	*	*	*What suddenly pops out of the hole?* [2]
A	6	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus constantly telling Mel and Arlo?* [0]
	10	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus shouting a couple of times?* [0]
	11	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is he spotting whenever Fergus digs a hole?* [0]
	12	wh aux S-pl V-t (X)	wh aux S V (X)	+	*	+	*	*What are Arlo and Mel trying to see?* [0]
	16	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus giving Mel whenever he places a bone in the hole?* [0]
	17	wh aux S-pl V-t (X)	wh aux S V (X)	+	*	+	*	*Where are all three standing after each burial?* [0]
	20	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*Who is Mel comforting each time after he has buried a bone?* [0]
	22	wh aux S-pl V-t (X)	wh aux S V (X)	+	*	+	*	*What are Arlo and Fergus congratulating each other on?* [0]
	24	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Fergus noticing?* [0]
D	2	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does Fergus often look for the perfect spot to bury?*
	4	wh do-n S-sg V (X)	wh do S V (X)	+	+	+	+	*What does a dog know because it is in his nature?*

9.4.6 Group 6

9.4.6.1 Task I.a and I.b – Elicitation III – Ivy

Sample 9.54: group 6 - cop inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
2	cop S-pl (X)	cop S (X)	+	+	*Are the turkeys afraid of the man?*
17	cop S-pl (X)	cop S (X)	+	+	*Are the pets in the supermarket because they … in order to … are the … animals in the supermarket in order to get sold?*
18	cop S-pl (X)	cop S (X)	+	+	*And … are the turkeys proud of it that they are no nuclear turkeys?*
21	cop S-pl (X)	cop S (X)	+	+	*And are the turkeys happy because nobody wants to buy … them?*
30	cop-n S-sg (X)	cop S (X)	+	+	*And now the owner … the farmer is surprised why … is the owner … is the farmer surprised why the handle of the axe is … back again?*
31	cop-n S-sg (X)	cop S (X)	+	+	*Is he angry because he hadn't found it?*
23	wh cop-nt S-sg (X)	wh cop S (X)	+	+	*What was the name of the cat?*

Sample 9.55: group 6 - no inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
6	S-sg aux-n V-t (X)	S aux V (X)	+	+	*And the man is now thinking about a result for his problem?*
9	S-sg aux-n V-t (X)	S aux V (X)	+	+	*But he is trying to?*
16	S-sg V-n (X)	S V (X)	+	+	*And the pig … does the same?*
20	S-sg aux-n V-t (X)	S aux V (X)	+	+	*And the owner is now waiting for a customer who wants to buy the turkeys?*
24	S-sg cop-n (X)	S cop (X)	+	+	*Until here it's before Thanksgiving, and this picture's after Thanksgiving, and this one – after Thanksgiving?*
26	S-pl cop (X)	S cop (X)	+	+	*And because of that they are back on the farm?*
27	S-sg V-t (X)	S V (X)	+	+	*The farmer had … found the handle of the axe?*
28	S-sg V-t (X)	S V (X)	+	+	*Then he had a new axe?*
34	S-pl V (X)	S V (X)	+	+	*So the turkeys … have the opinion that the farmer … that the farmer … so the turkeys think that it's the doubt of the farmer … that the farmer is responsible for … so the turkeys think that the farmer is responsible that the handle of the axe wasn't there before Thanksgiving?*
35	S-pl V (X)	S V (X)	+	+	*And they tell him that it was his … responsible … responsibility?*
36	S-sg cop-n (X)	S cop (X)	+	+	*And the farmer is now angry of the cows or?*
38	S-sg cop-n (X)	S cop (X)	+	+	*And the turkeys are happy that they survived Thanksgiving?*

Sample 9.56: group 6 - verb inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
4	V-n S-sg (X)	V S (X)	*	*	*Has the man a problem with … the … with the axe?* [2]
22	wh V-n S-sg (X)	wh V S (X)	+	+	*What happens on this picture?*

Sample 9.57: group 6 - aux inversion in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
1	aux S-pl V-t (X)	aux S V (X)	+	+	*Are the turkeys laughing because somebody told something … a funny story?*
3	aux S-pl V-t (X)	aux S V (X)	+	+	*Are they … are the turkeys laughing about the man?*
8	mod S-sg V (X)	aux S V (X)	+	+	*And do the turkey … can the turkey answer his question?*
10	aux-n S-sg V-t (X)	aux S V (X)	+	+	*Is the man going away to … to … to … to bring a … handle for his axe?*
12	aux-n S-sg V-t (X)	aux S V (X)	+	+	*Is the man searching for the handle in the … in a supermarket?*
13	aux-n S-sg V-t (X)	aux S V (X)	+	+	*Is he searching in the cellar?*
25	mod S-sg V (X)	aux S V (X)	+	+	*So the turkeys, so the owner of the shop could … couldn't … could the owner of the shop sell the turkeys?*
29	aux S-pl V-t (X)	aux S V (X)	+	+	*Have the turkeys put the handle back on the axe … in the axe … in?*
37	aux-n S-sg V-t (X)	aux S V (X)	+	+	*So he's now going away to kill the cows … is he going away to kill the cows?*
33	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	*But what are the turkeys talking with the farmer?*

Sample 9.58: group 6 - do-support in yes/no and wh-questions

No.	subtype	type	SEA	EA	output
5	do S-pl V (X)	do S V (X)	+	+	*Do the turkeys want to help him, to solve his problem?*
7	do S-sg V-n (X)	do S V (X)	+	*	*Do he has a good idea?* [4]
11	do S-pl V (X)	do S V (X)	+	+	*And do the turkeys know where the old handle is?*
14	do-t S-pl V (X)	do S V (X)	+	+	*Did the turkeys hide in the supermarket?*
15	do S-pl V (X)	do S V (X)	+	+	*Do the turkeys eat all the food of the supermarket?*
32	do-n S-sg V (X)	do S V (X)	+	+	*Does he … does he … does he want to kill the turkeys?*

9.4.6.2 Task II – Elicitation I – Nick

Sample 9.59: group 6 - expected – cop inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
N	15	wh S-pl cop (X)	wh S cop (X)	*	*	*	*	*About that … about what they are frightened oder afright?* [2]
	24	wh S-pl aux V-t (X)	wh S aux V (X)	*	*	*	*	*What they are feeling … because of what they go to bed directly when they arrive … when they finally arrived at home?* [0 2]

Sample 9.60: group 6 - expected – aux inversion in oral structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
N	9	wh S-sg aux-n V-t (X)	wh S aux V (X)	*	*	*	*	*What Mel is asking Fergus?* [2]
	14	wh O aux Spl V-t (X)	wh O aux S V (X)	*	*	*	*	*Towards what Fergus is … towards what … towards what Mel are they skating?* [2]
	18	wh S-sg aux-n V-t (X)	wh S aux V (X)	*	*	*	*	*What is Fergus wearing … Fergus is wearing a new hat and what … what he is carrying?* [2]
	23	wh S-pl aux V-t (X)	wh S aux V (X)	*	*	*	*	*How much times … how much times they have passed their home already?* [2]
V	1	wh V (X)	wh V (X)	*	*	*	*	*Which who … who take the man for a walk?* [0 1 2]
	6	wh V-n (X)	wh V (X)	*	*	*	*	*Who has a lot of fun?* [0 2]
A	4	wh aux S-pl V-t (X)	wh aux S V (X)	+	+	+	+	*What are Fergus and Mel doing?*
	7	wh aux-n V-t (X)	wh aux V (X)	+	+	+	+	*Who is locked in perfect synchronization?*
	16	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	+	+	+	*What is Mel drinking?*
	19	wh aux-n V-t (X)	wh aux V (X)	+	+	+	+	*Who is also carrying several shopping-bags?*

Sample 9.61: group 6 -expected – do-support in oral structured questions

Cat	No.	subtype	type	SEA	SEA$^+$	EA	EA$^+$	output
N	2	wh S-sg V-t (X)	wh S V (X)	*	*	*	*	*Because of what he looked surprised?* [2]
	3	wh S-pl V (X)	wh S V (X)	*	*	*	*	*What they think all passers-by?* [2]
	5	wh S-sg V-t (X)	wh S V (X)	*	*	*	*	*What the walking dog shouted?* [0 2]
	8	wh S-sg V -n (X)	wh S V (X)	*	*	*	*	*What says Mel he had never been before … what Mel says whenever they … he's inline-skating?* [2]
	11	wh O S-sg V (X)	wh O S V (X)	*	*	*	*	*What suggestion Mel grab a stop sign in?* [1 2]
	22	wh S-sg V-n (X)	wh S V (X)	*	*	*	*	*What Mel whenever … What Mel says when he sees their home?* [2]
A	21	wh aux-n S-sg V-t (X)	wh aux S V (X)	+	*	+	*	*What is Mel asking Fergus a couple of times?* [0]
D	10	wh do-n S-pl V-n (X)	wh do S V (X)	+	+	*	*	*What does the instructions tells without how to maintain the skates?* [1 4]
	12	wh do-n S-pl V-t (X)	wh do S V (X)	+	+	*	*	*What does Mel and Fergus grabbed but did not stop?* [1 4]
	13	wh do-n S-pl V-t (X)	wh do S V (X)	+	+	*	*	*What does Mel and Fergus wanted to grab?* [1 4]
	17	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Mel wears after … after skating through the mall?* [4]
	20	wh do-n S-pl V (X)	wh do S V (X)	+	+	*	*	*What does Mel and Fergus enjoy every couple of weeks?* [1]

9.4.6.3 Task III – Elicitation II – Paul

Sample 9.62: group 6 - expected – cop inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	9	wh S-sg cop-n (X)	wh S cop (X)	*	*	*	*	*Why Mel is pleased?* [2]
	12	wh S-sg cop-n (X)	wh S cop (X)	*	*	*	*	*Why Fergus is bored?* [2]
	23	wh S-pl V-t (X)	wh S V (X)	*	*	*	*	*What Mel and Fergus found out?* [0 2]

Sample 9.63: group 6 - expected – aux inversion in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	2	wh S-sg mod V (X)	wh S aux V (X)	*	*	*	*	*What you can buy in this store?* [2]
	4	wh S-sg aux-n V-t (X)	wh S aux V (X)	*	*	*	*	*At who Mel is telling that they are looking for a living room set?* [2]
	5	wh S-pl mod V (X)	wh S aux V (X)	*	*	*	*	*Where they can find the living room set?* [2]
	10	wh S-pl V-t (X)	wh S V (X)	*	*	*	*	*At what Mel and Fergus spent enough time?* [2]
	13	wh S-sg aux-n V-t (X)	wh S aux V (X)	*	*	*	*	*Who Mel is asking for directions?* [2]
	14	wh S-sg cop-n (X)	wh S cop (X)	*	*	*	*	*Why Fergus is crying?* [2]
	18	wh S-pl aux V-t (X)	wh S aux V (X)	*	*	*	*	*Where they are sitting on?* [2]
	21	wh S-sg aux-n V-t (X)	wh S aux V (X)	*	*	*	*	*What Mel is picturing?* [2]
	22	wh S-sg aux-n V-t (X)	wh S aux V (X)	*	*	*	*	*What Fergus is dreaming about?* [2]

Sample 9.64: group 6 - expected – do-support in written structured questions

Cat	No.	subtype	type	SEA	SEA^{+}	EA	EA^{+}	output
N	1	wh S-pl V (X)	wh S V (X)	*	*	*	*	*When Mel and Fergus drive to a furniture store?* [2]
	6	wh S-pl V (X)	wh S V (X)	*	*	*	*	*What Mel and Fergus find hard like everybody else?* [2]
	8	wh S-sg V-n (X)	wh S V (X)	*	*	*	*	*What Fergus finds as usual?* [2]
	11	wh S-sg V-n (X)	wh S V (X)	*	*	*	*	*What Fergus inspects, while he waits for Mel?* [2]
	15	wh S-pl V (X)	wh S V (X)	*	*	*	*	*What Mel and Fergus celebrate even if they only have been separated for a few minutes?* [2]
	16	wh S-pl V (X)	wh S V (X)	*	*	*	*	*What they always exaggerate after having trouble finding their way?* [2]
	17	wh S-pl V (X)	wh S V (X)	*	*	*	*	*What passers-by always assume?* [2]
	19	wh S-pl V (X)	wh S V (X)	*	*	*	*	*What Mel and Fergus do if they want to buy new furniture?* [2]
	20	wh S-pl V (X)	wh S V (X)	*	*	*	*	*What Mel and Fergus think?* [2]
	24	wh S-pl V (X)	wh S V (X)	*	*	*	*	*Where Mel and Fergus sit on?* [2]
V	3	wh V S-sg (X)	wh V S (X)	*	*	*	*	*What ask the shop-assistant everybody?* [1 2]
D	7	wh do-n S-sg V-n (X)	wh do S V (X)	+	+	*	*	*What does Mel thinks?* [4]

10. Lists of Tables, Diagrams, and Data Samples

10.1 Tables

10.2 Diagrams

10.3 Data Samples

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Versicherung

Ich erkläre hiermit, dass ich die vorliegende Arbeit ohne Hilfe Dritter und ohne Benutzung anderer als der angegebenen Hilfsmittel angefertigt habe; die aus fremden Quellen (einschließlich des Internets) direkt oder indirekt übernommenen Gedanken sind als solche kenntlich gemacht.
Die Arbeit wurde bisher in gleicher oder ähnlicher Form keiner anderen Prüfungsbehörde vorgelegt.

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